

Issuance levels solid as market once again performs in a time of crisis

ARTEMIS

Focused on insurance-linked securities (ILS), catastrophe bonds, alternative reinsurance capital and related risk transfer markets.

Chasing Storms for Uncorrelated Returns Insurance Linked Strategies (ILS) For further information please visit www.credit-suisse.com

This poster was produced by Credit Suisso Insurance Linked Strategies Ltd. (together with its affiliates "CS") with the greatest of care. It is not investment advice, nor does it constitute an offer or invatation to enter in than type of financial transaction. It may not be distributed in the U.S. or to a U.S. person or in any other jurisdiction where distribution would contravene local laws or regulations. This material may not be reproduced, neither in part nor in full, without the written permission of CS.

Copyright © 2017 Credit Suisse Group AG and/or its affiliates. All rights reserved.

INTRO

This report reviews the catastrophe bond and insurance-linked securities (ILS) market at the end of the second-quarter of 2020, looking at new risk capital issued and the composition of transactions completed during the quarter.

In 2020, second-quarter catastrophe bond and ILS issuance surpassed \$3.5 billion for the fifth time in the last decade. As shown by the Artemis Deal Directory, the \$3.76 billion of new risk capital issued in the quarter came from 18 transactions consisting of 26 tranches of notes.

Year-on-year, catastrophe bond and ILS issuance increased by roughly \$149 million in Q2 2020, but fell by more than \$1.3 billion from the level seen in Q2 2018.

The Artemis Deal Directory shows that primary issuance was more muted at the start of the quarter as a result of COVID-19-induced financial market volatility and uncertainty. However, deals that were pulled, largely returned and completed, and combined with solid investor and sponsor appetite, issuance remained in-line with the ten-year average for the period.

Second-quarter issuance was dominated by repeat sponsors, with Fidelis Insurance being the only new sponsor to enter the market in the period. Once again, second-quarter issuance was supported by mortgage ILS notes, which accounted for 12% of new risk capital issued in the period.

Artemis is the leading, freely accessible source of timely, relevant and authoritative news, analysis, insight and data on the insurance-linked securities, catastrophe bond, alternative reinsurance capital and related risk transfer markets. The Artemis Deal Directory is the leading source of information, data and analysis on issued catastrophe bond and insurance-linked securitization transactions.

Transaction Recap

A \$125 million deal offering protection against U.S. named storm and earthquake risks was issued for Fidelis Insurance in Q2, the only new sponsor to feature.

The large majority of issuance came from repeat sponsors including Swiss Re, who sponsored its third deal of the year in Q2, bringing \$215 million of U.S. named storms risks to market.

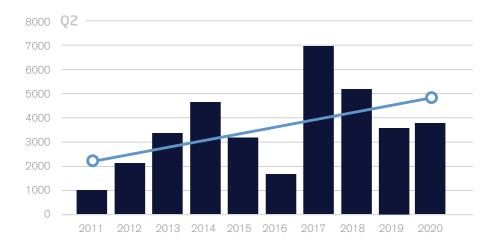
U.S. named storm protection also came from Allianz, while state-specific wind deals came from Louisiana Citizens, TWIA, Allstate, Florida Citizens, and Avatar. The CEA returned with some Cali quake protection, while State Farm also brought U.S. quake risks to market. SCOR returned with an international multi-peril deal, USAA also returned with its familiar U.S. multi-peril deal, and the NYC MTA brought New York storm surge and quake risks to market. Zurich returned in Q2 with some more operational risks, and Achmea issued another slice of European windstorm risk.

Two unknown sponsors brought a combined \$36.5 million of unknown property catastrophe risks to market, while Arch returned with \$450 million of mortgage insurance risks.

ISSUER/TRANCHE	SPONSOR	PERILS	\$M	DATE
Bellemeade Re 2020-1 Ltd.	Arch Capital Group Ltd.	Mortgage insurance risks	450	Jun
Windmill II Re DAC (2020)	Achmea Reinsurance Company N.V.	European windstorm	113	Jun
Blue Halo Re Ltd. (Series 2020-1)	Allianz Risk Transfer	U.S. named storms	175	Jun
Isosceles Insurance Ltd. (Series 2020-A1)	Unknown	Unknown property cat risks	16.5	Jun
Herbie Re Ltd. (Series 2020-1)	Fidelis Insurance	U.S. multi-peril	125	Jun
Alamo Re II Pte. Ltd. (Series 2020-1)	Texas Windstorm Insurance Association	Texas multi-peril	400	Jun
Casablanca Re Pte. Ltd. (Series 2020-1)	Avatar P&C Insurance	Florida named storm	65	Jun
Residential Re 2020 (Series 2020-1)	USAA	U.S. multi-peril	100	May
Sanders Re II Ltd. (Series 2020-2)	Allstate	Florida multi-peril	200	May
Sutter Re Ltd. (Series 2020-1 & 2020-2)	California Earthquake Authority	California earthquake	700	May
Everglades Re II Ltd. (Series 2020-2)	Citizens Property Insurance	Florida named storms	110	May
MetroCat Re Ltd. (Series 2020-1)	First Mutual Transportation Assurance Co	New York multi-peril	100	May
Catahoula Re Pte. Ltd. (Series 2020-1)	Louisiana Citizens	Louisiana multi-peril	60	May
Matterhorn Re Ltd. (Series 2020-3)	Swiss Re	U.S. named storm	215	May
Atlas Capital Re 2020 DAC (Series 2020-1)	SCOR SE	International multi-peril	200	Apr
Merna Re II Ltd. (Series 2020-1)	State Farm	U.S. earthquake	250	Apr
Eclipse Re Ltd. (Series 2020-02A)	Unknown	Unknown property cat risks	20	Apr
Operational Re III Ltd.	Zurich Insurance Co. Ltd.	Operational risks	461.22	Apr

Q2 ILS issuance by year (\$M)

Catastrophe bond and ILS issuance in Q2 2020 increased by roughly 4% when compared with the same period in 2019, and at \$3.76 billion, exceeded the average of the last ten years. When compared with 2017, the largest Q2 on record, issuance fell by roughly 46% in 2020.



ILS average transaction size & number of transactions by year (\$M)

As in the second-quarter of last year, 18 deals came to market in Q2 2020, which is slightly above the average number of deals issued in the period over the last decade. The average transaction size of Q2 2020 issuance totalled \$209 million, which is above the level seen last year and also higher than the ten-year average of \$204 million.



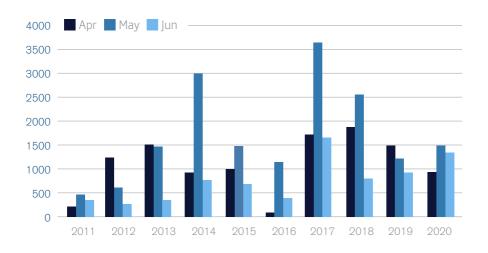
Number of transactions and volume issued by month (\$M)

Were it not for a slight dip in activity in April, catastrophe bond and ILS issuance would have exceeded \$1 billion in each individual month of H1 2020. April issuance came in just below the ten-year average for the month at \$931 million, while May issuance also fell short of the average despite remaining solid at \$1.5 billion. At \$1.34 billion, June issuance exceeded \$1 billion for only the second time in the last decade.



Q2 issuance by month & year (\$M)

April was also the month that witnessed the least activity in terms of the number of deals issued, with just four coming to market. In both May and June seven deals were issued in 2020, as shown by the Artemis Deal Directory.





Our Insurance & Reinsurance practice involves advising on the establishment, regulatory compliance and business operations of re/insurance companies (life and non-life), as well as re/insurance managers and brokers in international jurisdictions.

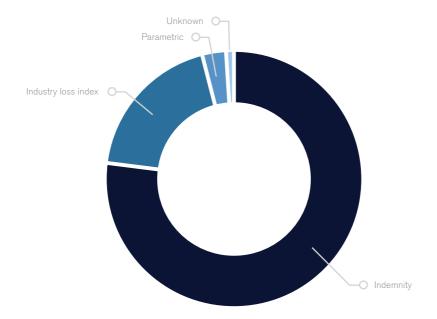
Our market-leading practice in Bermuda is renowned for its expertise in all aspects of re/insurance, including catastrophe bonds, SPIs, sidecars and other insurance-linked securities, in addition to capital raising, M&A and insurtech.

Visit applebyglobal.com to learn more.



Q2 2020 ILS issuance by trigger type

In terms of trigger structure, second-quarter 2020 catastrophe bond and ILS issuance was dominated by indemnity deals, which accounted for approximately 77%, or roughly \$2.9 billion of total issuance.

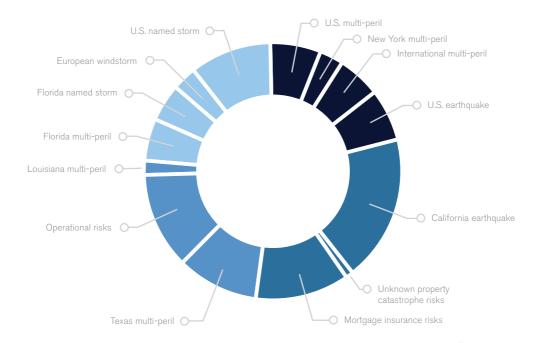


Just under a fifth, or \$715 million of second-quarter issuance utilised an industry loss trigger. Almost 3%, or \$100 million of issuance provided some structure diversification in the period for investors, in the form of a parametric trigger. We do not have the trigger information for two tranches of notes issued in the quarter, accounting for 1% of issuance.

Q2 2020 ILS issuance by peril

Continuing the trend set by the first-quarter of the year, catastrophe risk focused deals dominated second-quarter issuance, accounting for more than \$2.8\$ billion of the new risk capital issued.

Combined, the CEA and State Farm brought almost \$1 billion of U.S. quake risk to market in the period, while Fidelis' U.S. multi-peril deal also featured some quake risk, as did SCOR's latest Atlas Capital transaction, which also offered protection against Canada quakes and U.S. named storms.



Investors welcomed additional U.S. named storm deals from Swiss Re and Allianz Risk Transfer, as TWIA, Avatar, Citizens Property, and Louisiana Citizens sponsored deals focused on Texas, Florida, and Louisiana. NYC MTA returned with another MetroCat deal, providing investors with some New York storm surge and quake diversification, while Allstate returned with a deal covering multiple perils in Florida. USAA issued another ResRe deal focused on multiple U.S. perils, and Achmea sponsored a deal covering European windstorm exposures. Two deals from unknown sponsors brought a combined \$36.5 million of unknown property cat risks to market.

Zurich sponsored a \$461 million transaction providing it with operational risk insurance, while Arch sponsored another \$450 million mortgage ILS transaction.



The Charm and Challenge of Sustainable Investing for the ILS Market

"We all know that as we are beneficent towards Nature, it becomes beneficent toward us" - Xenophon. Already the ancient Greeks realized the importance of sustainability and the E in ESG. Sustainable investing has gained a lot of traction in the financial world recently. What does this mean specifically for the ILS market, and how can an ILS investment be made in line with ESG considerations?

Sustainable investing (SI) is defined as integrating non-financial factors, such as ESG criteria, into the investment process based on ethical values. According to the Global Sustainable Investing Alliance, between 2014 and 2018, the global volume of sustainable investments grew by 40% to USD 30.7 trillion. Nearly half of this is managed in Europe, where sustainable investments grew by 20% between 2014 and 2018 despite increasingly strict standards and definitions for sustainable investing. Contributing to this growing trend are both market forces and internal drivers. Regulatory development, reputational risk, competition, and a larger investor universe are possible external drivers of efforts to integrate ESG into the

investment process. Internal drivers range from altruism to risk management and the attractive cost of capital.

ILS is unique in that it introduces investment opportunities in which the underlying assets have inherent ESG qualities. The disaster relief capital provided by the ILS industry increases resilience and amounts to direct and indirect support for multiple UN Sustainable Development Goals. It's not surprising that ILS players are interested in understanding how to incorporate SI as part of their value proposition.

ILS players that want to build SI capabilities should do it holistically to achieve their desired business outcome. We suggest an SI framework consisting of four components. 1) First you create a foundation for the SI framework in the form of an SI strategy on the basis of which you determine the relevant culture, principles, governance, and compliance rules. 2) This foundation allows you to define ESG products and assess the operational ESG footprint. 3) On this basis, you then have to define ESG data integration and analysis, technology management, and the target operating model. 4) Finally, you should define reporting capabilities, align internal and external communications, and train all the relevant personnel.

Here we'd like to focus on a key step within the SI framework: defining and launching an ESG product. To incorporate ESG into the investment process of an ILS fund requires due diligence along the whole risk transfer chain. This means that policy holders, intermediate risk transfer entities, service providers, collateral investments, fund structures, fund managers, and the use of freed-up capital should be analyzed to see how they align with ESG criteria.

We currently see four ways for an ILS fund to make sure an investment fulfils recognized ESG criteria (the extent to which they are adopted depends on the fund's own SI strategy and the ILS instrument): 1) The ILS investment receives a third-party accreditation,

Business outcome Strategic and tactical decisions based on SI framework Training Communications Reporting (Non)financial client facing, Portfolio managers, underwriters, sales Internal comm. supports organisational personnel, etc. need to be trained in SI change and external comm. brings management and regulatory reporting, data analytics solutions & data transparency and accountability visualisation Technology management ESG Data & analysis Target operating model Many of the TOM and business processes Scoring, rating and analysis tools, Internal and external data sources, 3 rating methodologies, data capturing, quant. & qual. analysis, data are impacted by an SI strategy. Hence the TOM needs to be adjusted accordingly interfaces to data providers, incorporation of ESG aspects and legacy tool landscape management **ESG** products **ESG** footprint Services and products that are in-line with SI strategy ESG footprint of own operations and sustainability of business model SI Principles SI Governance / Compliance A set of values, norms and behaviors that govern the way SI is applied A set of fundamental guidance principles that govern the overall framework 1 SI Strategy A set of coherent high-level decisions to integrate SI into the organisation, processes and products to support the overall business strategy and company values

for instance the upcoming EU Green Bond Standard. 2) The cedant or sponsor uses an existing or proprietary ESG approach without external verification. 3) Contractual language excludes certain risks from being ceded or defines the use of ILS proceeds. 4) Sponsors, cedants, or other sources, such as brokers or third-party data providers, create transparency on the ESG characteristics of underlying risks and operations of the cedants through the disclosure of relevant information. While the latter two ways describe current practice, the former two are yet to mature.

Whatever the motivation for introducing an SI strategy, its implementation should always follow a structured approach to drive a sustainable future for business.



³ Global Sustainable Investment Alliance (GSIA) (2017): 2016 Global Sustainable Investment Review, p. 7; GSIA (2019): 2018 Global Sustainable Investment Review, p. 8f

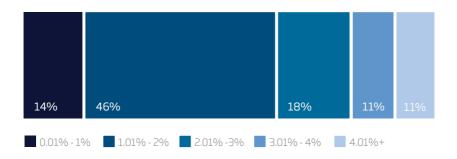


Patrick Roder
Associate Partner, ILS Practice Lead patrick.roder@synpulse.com



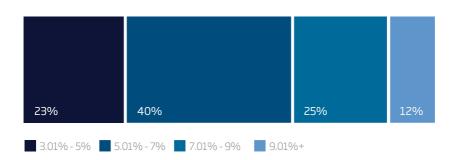
Q2 2020 ILS issuance by expected loss

For the \$2.56 billion of new risk capital issued in Q2 that we have expected loss data for, roughly 60% had an expected loss of below 2%, with the majority of this having an expected loss of between 1.01% and 2%. \$748 million, or 29% of Q2 issuance had an expected loss of between 2.01% and 4%, while more than 10% had an expected loss of more than 4%. The Sanders Re II notes from Allstate had the lowest expected loss of 0.61%, while the Class B tranche of Blue Halo Re notes from Allianz had the highest, of 5.5%.



Q2 2020 ILS issuance by coupon pricing

We have pricing data for \$2.56 billion of second-quarter issuance. Of this, roughly 63% or \$1.6 billion offered a coupon of between 3.01% and 7%, with most of this having a coupon of more than 5%. \$650 million, or 25% of Q2 2020 issuance paid investors a coupon of between 7.01% and 9%, while 12%, or \$305 million offered a coupon of more than 9% in the period. The lowest coupon on offer during the period came from the tranche of Catahoula Re notes at 3.5%. At 16%, the Class B tranche of Blue Halo Re notes paid investors the highest coupon of the quarter.



OCORIAN

Promoting and protecting investment worldwide

Ocorian is a global leader in corporate and fiduciary services, fund administration and capital markets.

Our global network delivers customised, scalable solutions providing the support our clients need: how and where they need it.

- Expert teams
- Trusted partner with flexible solutions
- Committed to your success

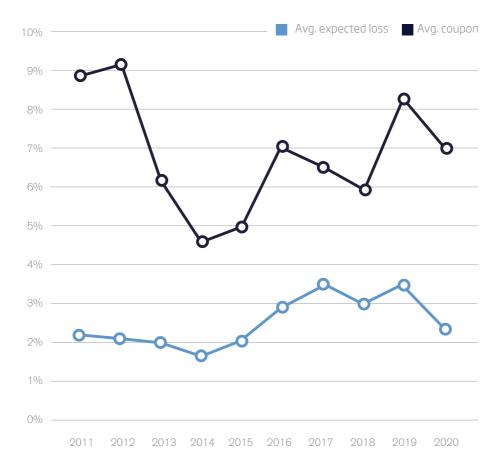
For more information on our services go to www.ocorian.com

Bermuda | BVI | Cayman Islands | Guernsey | Hong Kong | Ireland | Isle of Man | Jersey | Luxembourg | Malta Mauritius | Netherlands | Singapore | UAE | UK

Average expected loss & coupon by year

As shown by the chart below, both expected losses and coupons of catastrophe bond and ILS issuance so far in 2020 are down when compared with 2019.

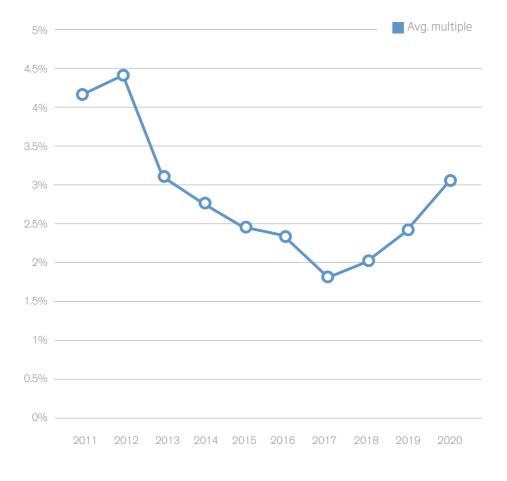
As at the end of H1 2020, the average coupon stood at 7.02%, which is in-line with the year-end average for 2016, and above the 6.86% annual average over the last ten years. The average expected loss as at the end of H1 reached 2.31%, which is only slightly above the 2015 year-end average and actually down on the 2.51% annual average over the last decade.



Average multiple (expected loss to coupon) by year

As at the end of June 2020, the average multiple (price coupon divided by expected loss) of catastrophe bond and ILS issuance stood at 3.04. The average multiple is back at levels seen in 2013 and is a reflection of rising pricing.

Heightened risk perception in light of consecutive loss years and the impacts of the pandemic has increased investor return expectations, with ILS funds noting a rise in the cost of capital. As the chart below shows, the average multiple is increasing as returns are improving compared to the risk assumed.

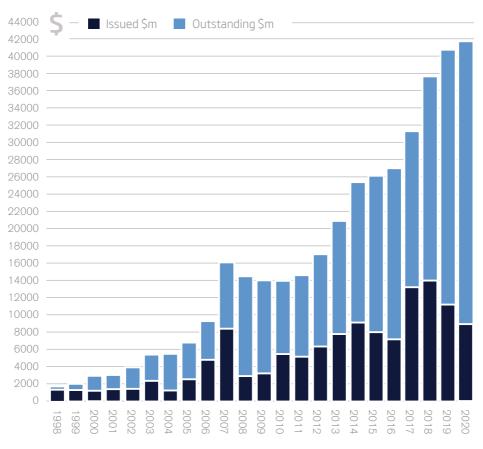


Issued / Outstanding

In light of the impacts of the COVID-19 pandemic, \$3.76 billion of issuance in the second-quarter of 2020 is robust and above with the ten-year average for the period. Combined with the huge level of issuance witnessed in Q1, catastrophe bond and ILS issuance in the first-half of the year has reached \$8.81 billion, the third highest H1 on record, as shown by the Artemis Deal Directory.

At the end of the second-quarter of 2020, the outstanding catastrophe bond and ILS market size stood at \$41.5 billion, meaning the market actually shrank by around \$900 million in size from the end of Q1, as the volume of new deals failed to outpace the number of maturities in the quarter.

The uncertainty caused by the pandemic clearly had an impact on issuance levels, while a lower level of mortgage ILS notes (also a factor of the pandemic) also contributed to reduced activity. However, catastrophe risk focused deals continued to come to market and the fact the ILS asset class again performed well during a time of crisis, should drive more investors to look at the space as it moves through the remainder of the year.



If you want to see full details of every catastrophe bond and ILS transaction included in the data in this report please visit www.artemis.bm/deal_directory/

OCORIAN

Promoting and protecting investment worldwide

Ocorian is a global leader in corporate and fiduciary services, fund administration and capital markets.

Our global network delivers customised, scalable solutions providing the support our clients need: how and where they need it.

- Expert teams
- Trusted partner with flexible solutions
- Committed to your success

For more information on our services go to www.ocorian.com

Bermuda | BVI | Cayman Islands | Guernsey | Hong Kong | Ireland | Isle of Man | Jersey | Luxembourg | Malta Mauritius | Netherlands | Singapore | UAE | UK





All catastrophe bond and ILS issuance data sourced from the Artemis Deal Directory.

Opportunities exist to work with Artemis to increase your profile to this segment of the global reinsurance and risk transfer market. Advertising opportunities, sponsorship, content development and partnership opportunities are available. Contact us to discuss.

CONTACT ARTEMIS:

Steve Evans, Owner/Editor steve@artemis.bm +44 (0) 7711 244697

To download a media pack visit: www.artemis.bm/advertise/

Copyright 2014 Artemis.bm, owned by Steve Evans Ltd