

Reinsurance Market Outlook

June/July 2020



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Executive Summary: Insurers Face Headwinds on Mid-Year Renewals

Despite a rough start to the quarter, capacity was generally available for June and July renewals, albeit with a range of outcomes for insurers driven by timing, structure, and peak zone capacity constraints. Demand remained relatively stable as many governmental-related covers were pulled from the market offset by some insurers electing to secure additional capital to reduce volatility heading into a predicted, above-average hurricane season. Despite different market dynamics than in many past renewals, insurers were able to secure needed limit in the face of already reported COVID-19 related claims, future uncertainty regarding macroeconomic trends and premium volume impact from COVID-19 for the longer term.

Q1 total global reinsurance capital stood at USD590 billion, a decrease over 2019 of USD35 billion, or 6 percent. This result was comprised of a 6 percent drop in traditional reinsurance and a 4 percent drop in alternative capital ending the quarter at USD499 billion and USD91 billion, respectively. While traditional reinsurers saw impacts of COVID-19 that affected capital results at the end of Q1, alternative capital remains impact by approximately USD15 billion in trapped capital.

Prior to the onset of COVID-19 in the US, primary rates were trending towards the highest increases in many lines of business seen in years. By the end of Q1, auto, property, and umbrella lines of business were looking at rate increase above 10 percent for the quarter. Premium levels for the remainder of the year remain uncertain as multiple factors impact outcomes from prolonged lower usage of cars to reduced patronage in retail stores and unfilled airline seats. These dynamics will in turn fuel different needs from insurers for reinsurance protection throughout the remainder of the year.

Property catastrophe losses through the first half of 2020 maintained near median levels of activity with approximately USD26 billion in losses accumulated to date. That said, above normal forecasts for the Atlantic Hurricane are predicted by National Oceanic and Atmospheric Administration, Colorado State University, and Tropical Storm Risk, which would be further complicated by issues related to COVID-19 in both avoidance by citizens and any clean up and repair.

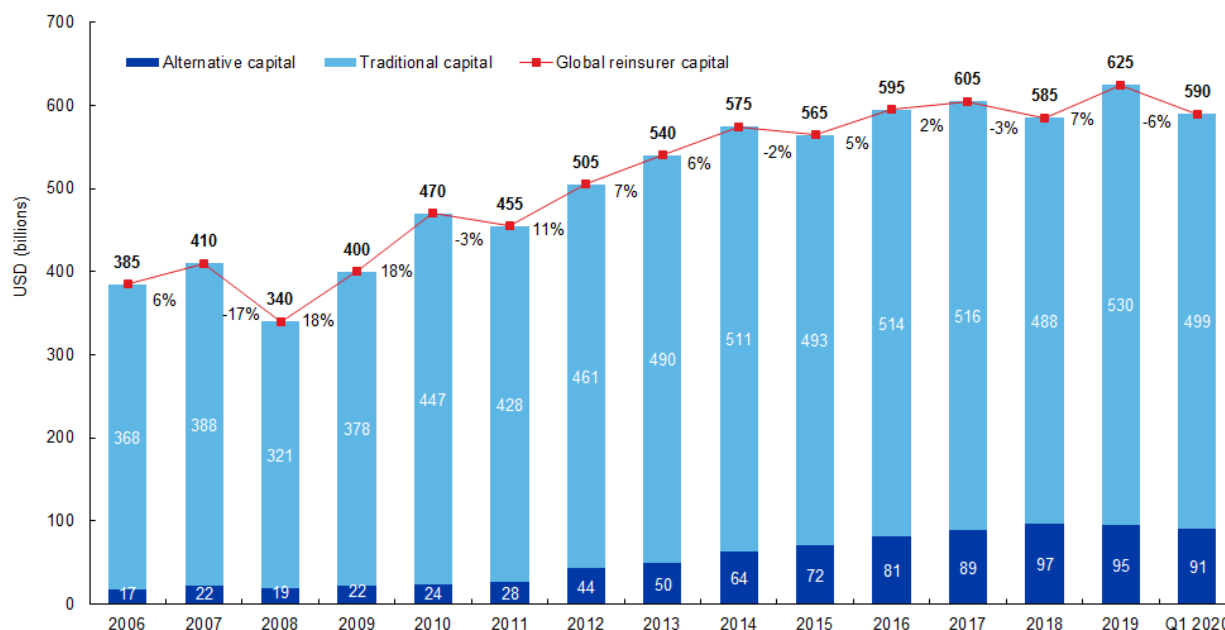
Note: This reinsurance market outlook report should be read in conjunction with our firm's views on rate on line, capacity and retention changes for each cedent's market. Our professionals are prepared to discuss variations from our market sector outlook that apply to individual programs due to established trading relationships, capacity needs, loss experience, exposure management, data quality, model fitness, expiring margins and other factors that may cause variations from our reinsurance market outlook.

Global Reinsurer Capital

COVID-19 Drives Capital Reduction in Q1 2020

Aon estimates that global reinsurer capital fell by 6 percent to USD590 billion over the three months to March 31, 2020. This calculation is a broad measure of the capital available for insurers to trade risk with.

Exhibit 1: Global Reinsurer Capital



Sources: Company financial statements / Aon Business Intelligence / Aon Securities Inc.

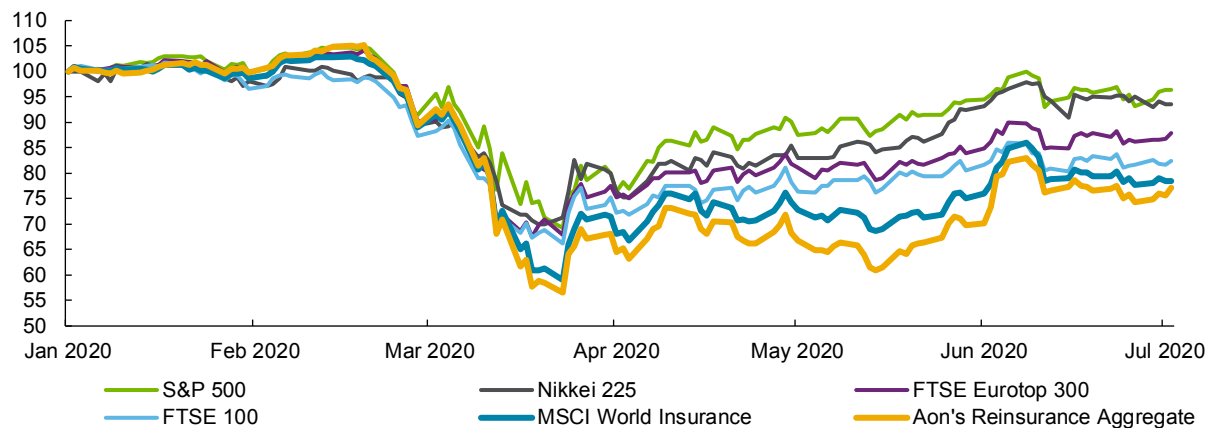
Traditional equity capital fell by 6 percent, or USD31 billion, to USD499 billion, reflecting the impact of COVID-19 on both sides of the balance sheet. Risk-based capital adequacy has declined, but solvency ratios generally remain strong across the reinsurance sector. Partial recovery of the asset side losses is expected in the second quarter, while claims relating to the pandemic are expected to ramp-up.

Headline assets under management in the alternative capital sector are estimated to have fallen by 4 percent, or USD4 billion, to USD91 billion. At least USD15 billion of collateral is believed to be trapped as a result of recent major losses, now including COVID-19. The reduction in the amount of capacity actually available for deployment continues to affect the retrocession market in particular.

Macro Impact of COVID-19

COVID-19 has had a very significant impact on the global economy, creating what is likely to be the most severe recessionary environment since the 1930s. Both the International Monetary Fund (IMF) and the World Bank expect global gross domestic product (GDP) to contract by around 5 percent in 2020. Global stock markets fell by around a third between February 19 and March 23, as investors came to terms with the economic consequences of extended lockdown periods. An unprecedented policy response, combining sharp reductions in interest rates, direct private sector support and massive injections of liquidity, prompted stabilization and partial recovery of stock markets in the second quarter. However, the insurance and reinsurance sectors have been lagging, as shown in Exhibit 2, reflecting uncertainty around the ultimate extent, timing and distribution of COVID-19 related losses.

Exhibit 2: Indexed Stock Market Performance in 2020

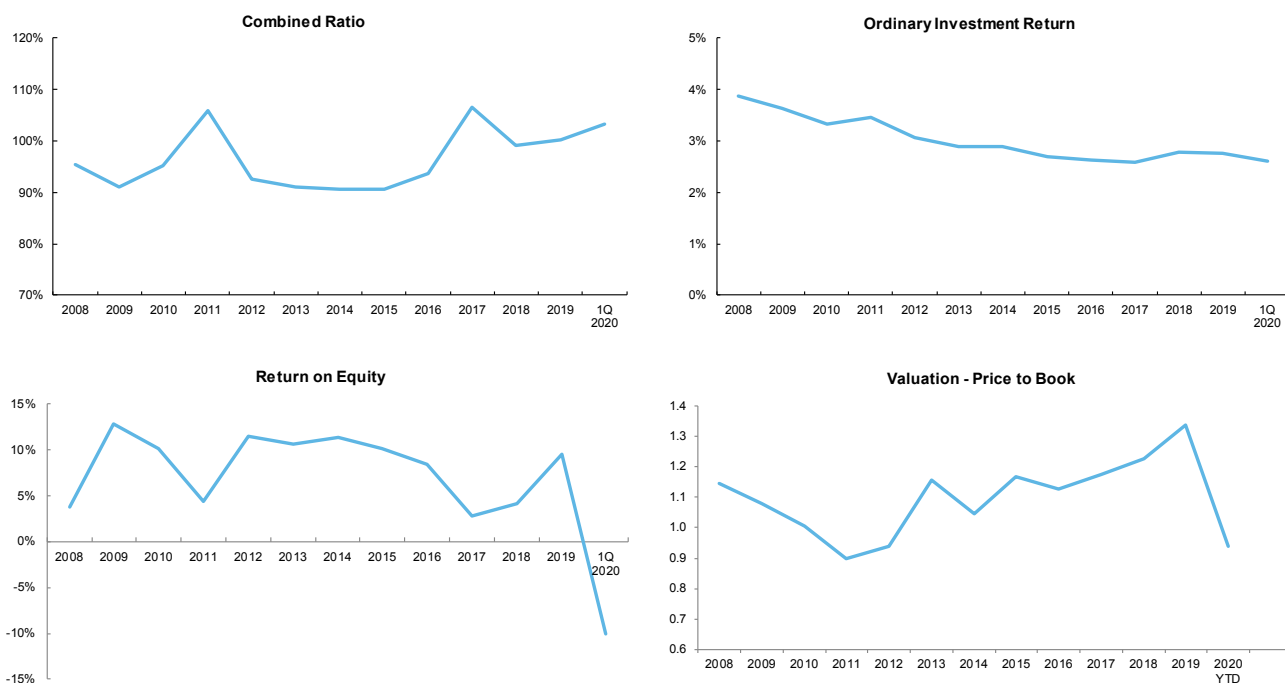


Sources: Bloomberg and Aon Business Intelligence; all data at July 2, 2020.

Traditional capital

COVID-19 has already undermined earnings for 2020. Many reinsurers reported losses for the first quarter, driven by asset write-downs and the first installment of claims associated with the effects of the pandemic. The combined pre-tax loss for the 18 constituents of Aon's Reinsurance Aggregate ('the ARA') that reported was USD3.8 billion. The average combined ratio was 103.2 percent, with USD3 billion of COVID-19 related losses recognized.

Exhibit 2: Traditional Sector Performance*



Source: Company financial statements / Aon's Business Intelligence team

* Based on Aon's Reinsurance Aggregate

Losses resulted in reported capital positions coming under downward pressure. From a strong position at the beginning of the year, leading reinsurers in Europe saw average reductions in their regulatory solvency ratios of around 20 percentage points at March 31. However, they continue to trade well within their target ranges.

Incumbents raised significant volumes of new capital in the second quarter to counteract the impacts of COVID-19 and position themselves for potentially better market opportunities ahead. Equity issuance in the specialty markets totaled around USD7 billion. In addition, there have been reports of several potential capital expansion plans and/or new company formations.

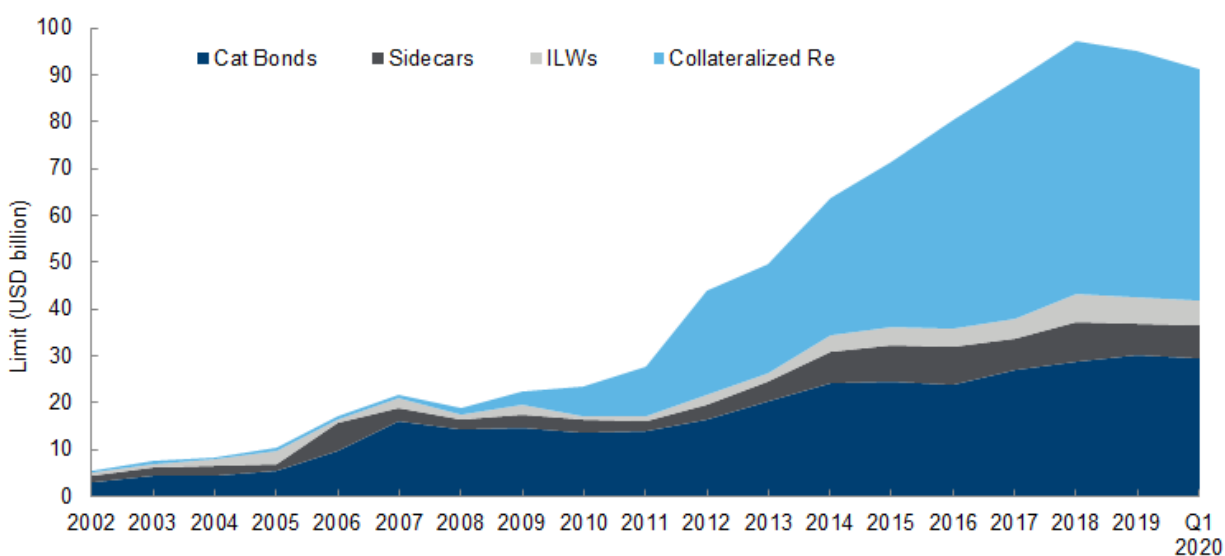
Alternative capital

Recent years have represented a significant test of investor appetite for insurance risk. Many supporters of sidecars and collateralized reinsurance transactions have experienced significant losses, with returns further diluted by the trapping of collateral. Concerns around model credibility, loss creep and climate change have caused some to leave and others to pause, resulting in an overall reduction in assets under management.

Some new inflows of alternative capital have been seen, but they have tended to favor established managers with strong track records. The perceived lack of correlation with broader capital markets remains the main driver, with the expectation of higher returns now added to the mix. However, this rationale may be challenged if investors see additional collateral becoming trapped as a result of COVID-19.

One bright spot is the property catastrophe bond market, where the liquidity of the product and the peril-specific nature of the coverage continues to attract strong interest. Around USD6.5 billion of limit was placed in the first half of 2020, nearly matching the maturities. In addition, a lot of activity has been seen in the industry lost warranty (ILW) market, given the more limited availability of ultimate net loss coverage.

Exhibit 3: Alternative Capital Deployment



Source: Aon Securities Inc.

Capacity outlook

COVID-19 has exacerbated many of the pressures that were already in the market and added a whole new layer of uncertainty. There are still many variables between now and the year-end, not least the ultimate timing, scale and distribution of pandemic-related losses, the reaction of the capital markets to any further major waves of the virus and the extent of any additional major loss activity.

In this environment, the “modest but progressive” tightening of reinsurance capacity that we forecasted at the beginning of the year has been accelerated. It remains to be seen whether the volume of new capital that enters the market between now and the year-end is sufficient to influence these dynamics.

Demand Renewed Relatively Flat Amongst New Market Dynamics

As the financial impacts of COVID-19 on insurers and reinsurers unfold, a number of new dynamics emerged in the reinsurance market throughout June and July 2020 renewals that added to changes already experienced in the market during January renewals. Overall, demand was largely stable with increases by some insurers to mitigate volatility in a known market to offset potential increases in asset, underwriting, premium and capital volatility impacts that may continue throughout the life of the pandemic. The following provides a quick summary of a few of the key terms and conditions experienced in both property and casualty lines.

Property

Stable conditions persisted in much of the global market with more significant impacts on peak zone capacity. Many common themes were experienced as reinsurers looked to include communicable disease exclusions and curtail some of the coverage expansion that had been achieved year on year over recent renewals. The following provides a quick summary of themes that existed on many global renewals as well as those more specifically targeted to Florida’s peak zone renewal.

Common Themes

Topic	Commentary
Communicable Disease Exclusions	<ul style="list-style-type: none"> The most prevalent discussion for all major renewals was the inclusion of communicable disease language on property catastrophe contracts. A variety of language ended up being adopted with some insurers electing to write their own verbiage. That said, ultimately LMA 5503 gained traction in many renewals guarding against other versions that looked to further contract coverage for other perils.
Cyber Coverage Clarification	<ul style="list-style-type: none"> Driven largely by the Lloyd’s market for treaties incepting on or after July 1, multiple LMA articles were used throughout the marketplace at the request of the London market to provide greater clarity into the coverage provided within property catastrophe contracts.
Increased Cost of Capital for Reinsurers	<ul style="list-style-type: none"> Multiple factors including loss development in previous treaty years, fears over potential COVID-19 exposures, the low interest rate environment, and concerns over additional trapped capital impacting overall supply have created higher economic hurdles for reinsurers than in recent renewals.
Peak Peril Sensitivity	<ul style="list-style-type: none"> Loss development in peak zones like Florida and Japan continue to drive terms, conditions, and pricing of reinsurers retro programs. While the zones have always been amongst the largest consumers of reinsurers capital, the experience from the regions in recent years has created an environment of heightened sensitivity, as reinsurers build strategies to develop partnerships and deploy their capital.

ILW Purchasing Increase	<ul style="list-style-type: none"> • Material increase year-on-year for USA 50 States Wind / Named Perils cover at the USD50 billion Industry level and higher. Demand from cedants for both occurrence and aggregate structures at these levels • Broad spectrum in terms of timing to market but a number of clients entered particularly early compared to prior year – firm order terms received beginning of April for select June placements • Florida first event trading focused much lower down the curve (USD20 billion and below), with a spike in demand post following June renewals for subsequent event cover
Riot	<ul style="list-style-type: none"> • The widespread riot activity across the US in response to the tragic passing of George Floyd has caused reinsurers to look to loss occurrence definitions within the contracts offered to clients. While widespread changes in coverage has not happened, conversations on coverage interpretation and intent are become more frequent.
Demand driven by Market Volatility	<ul style="list-style-type: none"> • As a result of equity market volatility, a number of insurers have elected to purchase additional reinsurance coverage for property catastrophe events, especially as we enter the Atlantic Hurricane season.
Client Differentiation	<ul style="list-style-type: none"> • Despite the macro market conditions, there was a general willingness of markets to continue to differentiate clients during renewals. This resulted in a mixed response on tightening of terms that seemed less prevalent than in peak zone Florida placements.
Active US severe convective storm season	<ul style="list-style-type: none"> • Some reinsurers expressed concern for the more active 2020 SCS season in the US, expecting that retained loss for clients that would be subject to aggregate retentions has continued to erode and become more likely in recent years.

Florida Specific Themes

Topic	Commentary
FHCF and Citizens	<ul style="list-style-type: none"> • The non-renewal of the FHCF limit (USD920 million) and downsizing of Citizens purchase (reduction of USD560 million) helped to mitigate some rate increases for Florida peak zone peril coverage, albeit later in the renewal season.
Hardening Reinstatement Premium Protection Market	<ul style="list-style-type: none"> • Capacity is affected by both the fact that underlying layers experienced rate increases (resulting in higher limits) and potentially higher loads. While the market saw some reinsurers move capacity to concentrate on certain layers, new reinsurers were able to fill in the gaps, if needed.
Tighter Historical Market Capacity / New Entrants	<ul style="list-style-type: none"> • Mid-year 2020 renewals saw fewer reinsurers looking to grow lines in the Florida market despite improving conditions. Even with the reduction demand from the FHCF and Citizens, lines were more difficult to replace. That said, certain reinsurers that had pulled out of the Florida market during prior

	renewals re-entered. In addition, there was a general gravitation of reinsurer appetite to upper layers of programs.
Terms and Conditions Tightening	<ul style="list-style-type: none"> Coverage expansion for some insurers that was achieved in prior renewals including cascading layers and multi-year protections retracted during 2020 renewals as insurers elected to mitigate cost increases.
Range of Client outcomes	<ul style="list-style-type: none"> Ranges widened in outcomes due to market timing, coverage terms, loss results, prior-year price, exposures, and the amount of limit renewed.

Casualty

The Casualty reinsurance market in 2020 continues to show signs of stress and offsetting opportunity. Reinsurance outcomes vary widely depending on cedent experience and exposures. Rate improvement now carries into nearly every casualty insurance line as cedants adjust deployed capacity and attachments and business mix bobbing and weaving in an exciting marketplace. Demand for reinsurance remains strong as risks emerge and COVID-19 uncertainties loom. Despite yield curve headwinds, reinsurance capacity remains abundant and diverse in most segments of the Casualty business. Differentiation and strong analytics advocacy are more critical than ever to successful reinsurance outcomes. Below are common discussion themes impacting reinsurance moving through July 1 and into 2021.

Topic	Notes
Social Inflation	<ul style="list-style-type: none"> COVID-19 court closures are expected to reduce settlement amounts in the near-to-mid-term as lawyers and plaintiffs seek cash flow. While exposures have been reduced for many segments due to COVID-19, others have newly emerged and the overall loss picture due to it remains uncertain for Casualty lines. Employers Liability has emerged as a potential liability stream for COVID-19 payouts and is be closely watched by insurers. While the exposure to these influences may be difficult to predict, the trends are not expected to abate in the long term (especially for high-profile and/or large insureds). Insurers continue to study the trends and many have adjusted pricing models to account for observed industry frequency and severity. Creating additional volatility for insurers, especially given the large verdicts, demand for reinsurance remains strong. Pro rata reinsurance purchases today and in the past help protect insurers against outsized outcomes.
Opioids	<ul style="list-style-type: none"> Current court closures have slowed plaintiffs’ progress significantly. Several landmark cases are scheduled for the second half of 2020, though COVID-19 may continue to cause delays. Casualty policies are typically bodily injury and property damage triggered; the opioid issues are heavily economic damages loss. Uncertainty remains regarding whether policies will hold up as intended.

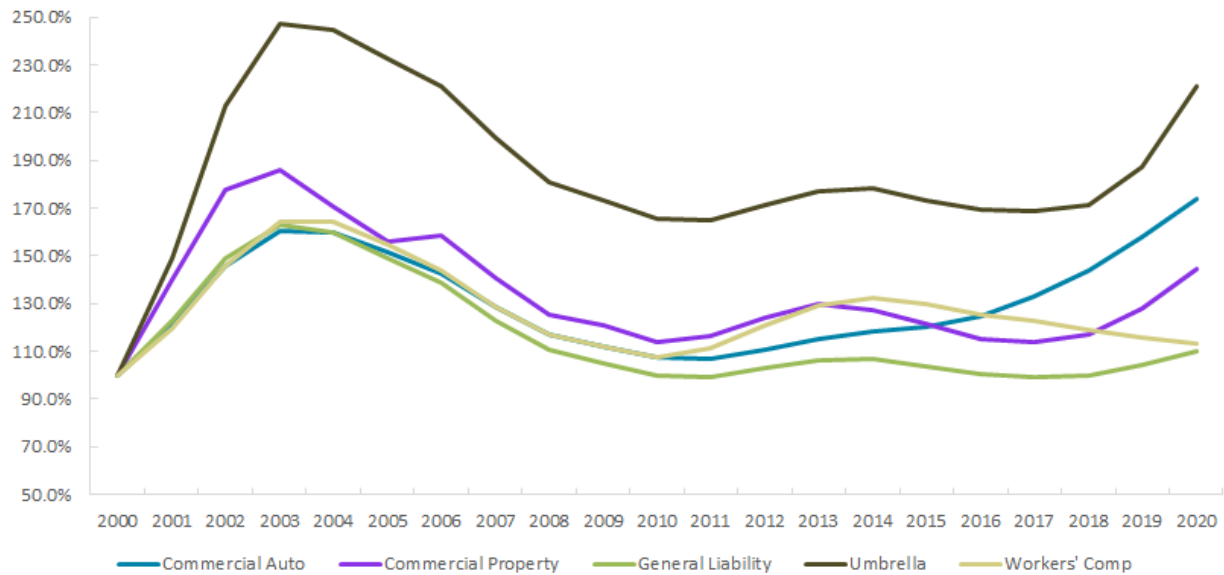
	<ul style="list-style-type: none"> • Key issues are the exposure of multiple years of coverage, large class size for dead and injured, large class of children/families of dead/injured parties. Medical malpractice exposure is meaningful for doctors and hospital professional liability. Awareness of overfilling of orders has been an issue in the professional liability space and drug manufacturers and distributors are also targets.
Cannabis	<ul style="list-style-type: none"> • Many insurers and reinsurers continue to approach cautiously given federal rules around Cannabis; however, state specific legalization is promoting rapid industry growth. To date, the reinsurance market has been underpenetrated given state/federal legal differences and will need further development to address cedant needs. • Concerns remain around casualty coverages including the lack of regulation for products and vaping injuries (with new science linking to cannabis-based products) as well as the physical safety challenges with a heavily cash business. In addition, risk continues regarding professional liability from theft exposure and directors and officers related to potential IPOs.
Cyber Ransomware	<ul style="list-style-type: none"> • Loss activity is seeing an acceleration of frequency and severity. The current work-from-home environment is exacerbating these trends for many companies. SME insureds are more exposed given lack of IT proficiency and business interruption exposure. The ability of “bad actors” to “monetize” faster than breach events where stolen intellectual property takes longer to turn around and sell on black market.
State of the LPT/ADC Market	<ul style="list-style-type: none"> • Demand has increased from cedants pursuing ADC’s for capital relief and reduction in earnings volatility especially as economic uncertainty remains due to COVID-19. Capacity for ADCs exists though reinsurers struggle to quantify the reserve risk associated with social inflation and will factor this into pricing and structure. Markets that typically only participated in the runoff LPT space have entered the ADC market providing additional capacity. • Demand has increased and capacity remains high for runoff transactions that include the transfer of claims handling control. In Q2, we saw capacity further increase as one new market entered the space; one increased capacity through a capital raise; and a third set up a class 3-A reinsurer in Bermuda to position themselves for growth in the US market. • Additionally, The Carlyle Group and T&D Holdings completed the acquisition of a majority interest in Fortitude Group Holdings from AIG, bringing a significant new balance sheet into the retroactive space
Reserving / Old Year Issues	<ul style="list-style-type: none"> • Commercial liability reserves are generally deficient, and some deterioration was observed in the latest evaluation. Pre-COVID-19 reserve levels are flat for the industry (varies widely by carrier and class). For Commercial Auto Liability

	<p>there appears to be continuing reserve deficiencies, despite significant cumulative increases to IBNR over the last seven years.</p>
Sexual Abuse / Molestation Legislation Changes	<ul style="list-style-type: none"> In general, reinsurance has remained available despite the broadening of the reporting window in several large states and more changes in 2020. Attention to the potential for multiple years / multiple claimants losses, variation amongst industry coverages, and the fact exposure goes beyond educational institutions and churches is key to demonstrating proper risk management and maintaining reinsurance capacity. Many insurance companies are tightening their underwriting approach, regardless of available reinsurance.
Wildfire Liability	<ul style="list-style-type: none"> California-exposed industries continue to experience significant pricing and coverage pressure, and wildfire exposures in other venues are also seeing capacity reductions. Bespoke wildfire solutions are available in the reinsurance market and have been effective at helping to manage risk for cedants.
Yield Curve Issues	<ul style="list-style-type: none"> The expectation of a very low interest rate environment in the U.S. and globally for the long-term is making nominal underwriting profit even more central to discussions at July 1, 2020 on reinsurance and likely further fuels original rate increases for most long-tail lines.
Coal	<ul style="list-style-type: none"> Several (re)insurance companies have stated positions to reduce coal-related exposures in their portfolios resulting in significant tightening of capacity for this exposure.
Clash / Contingent / Systemic	<ul style="list-style-type: none"> Clash and contingency covers have been effective in supporting cedents through large ECO / XPL losses, especially in auto liability. Earnings protection is critical element, typically. A variety of structure and coverage options remain available in the global reinsurance market as cedent needs vary widely.
Insurance Rate Increases	<ul style="list-style-type: none"> In the US, original rate increases and rate adequacy are helping to stabilize reinsurance terms in Professional Lines and to mitigate downward ceding commission pressure on Excess Casualty. Original rates are expected to remain strong through 2021, despite macroeconomic challenges. Question remains whether the current massive rate increases on original business will be enough to manage severity inflation and to allow carriers to build meaningful redundancy.

Primary Rate Change

While workers' compensation continued to see small reductions in rate change through Q1, other major lines are continuing with some of the largest increases they've seen in years. Commercial auto rates rose by approximately 10 percent again on the back of similar rate increases throughout 2019. Commercial property continues to see strong rate increases with an estimated 12.8 percent. This comes after a steady increase throughout each quarter in 2019. General liability policy renewals saw approximately 5.8 percent rate increases following similar results in the latter half of 2019. Umbrella rates increased substantially in Q1 with an estimated 18.1 percent. This follows a sharp rise and rates seen throughout 2019 of approximately 3.5 percent in Q1 to just over 14 percent by Q4. Workers' compensation continued to decline slightly with quarterly rate change results down 1.7 percent.

Exhibit 4: U.S. Rate Change by Line of Business

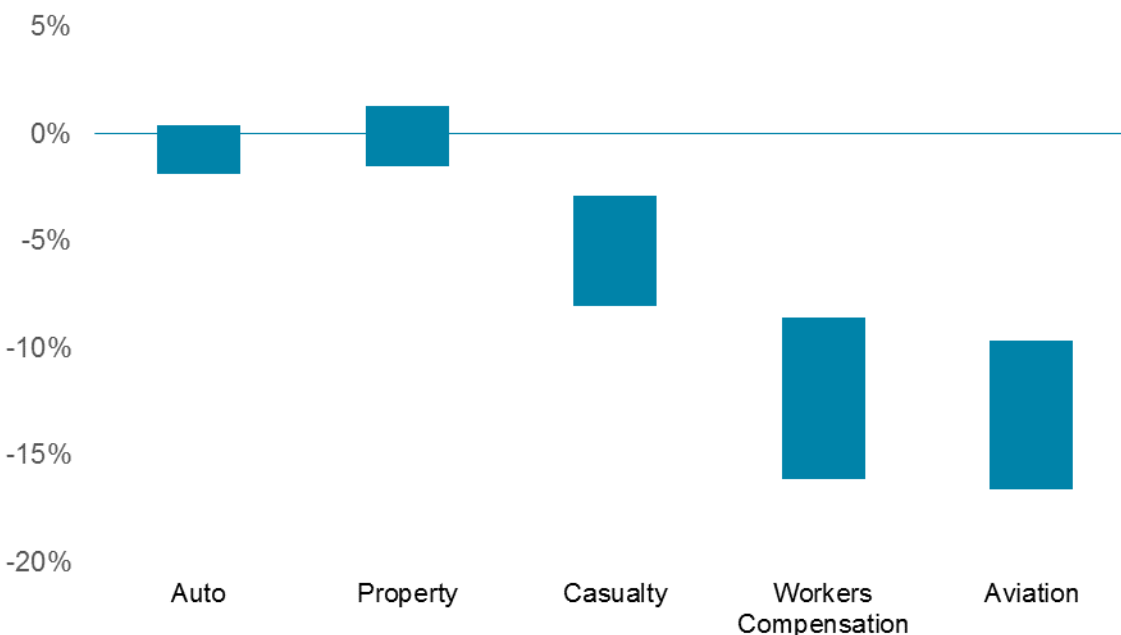


Source: Council of Insurance Agents and Brokers

Potential Impact of COVID on US Premiums for 2020

Following from the above results largely experienced before COVID-19, the market premiums in total are expected to decline to varying degrees through 2020.

Exhibit 5: US 2020 Total Premium Estimated Impact By Line of Business



Source: Aon Reinsurance Analytics supported by Moody's

The following provides additional by line of business detail that helped derive the estimates above.

Auto

Following expected reductions in miles driven, the headline impact on auto premiums is refunds given by insurers. While these premium reductions were significant for the period (15-25 percent) the macro national annual impact is mitigated at this point. Following nearly double-digit growth over the last two years, flat top line represents a relative reduction. Note that with e-commerce markets remaining strong in this environment, commercial auto segments associated with long-haul and point-to-point delivery are likely up on an exposure rated basis. This helps offset the commercial and private passenger auto segments that are projected down due to reduced miles traveled.

Property

Risk in this segment remains largely unchanged. As noted earlier, property rate has been growing due to exposure and rate (across commercial and personal property) coming into 2020. The main threat to premium volume in this line (and adding to others) is customer ability to pay. Obviously, for commercial property, the larger question really remains centered on business interruption claims coverage. Also, the economic impact is variable by size of business. Insurers focusing on heavily impacted segments (small businesses) may experience larger reductions while those focusing on personal property or large/complex commercial may be relatively unimpacted on the top line.

Casualty

Albeit a broad category, casualty lines were largely hardening coming into 2020. Offsetting, the economic shutdown has been limiting exposure in several ways. Comments on a few notable sectors include:

- Leisure and hospitality economic sector down approximately 5 to 10 percent for 2020, reducing general liability at the properties.
- Retail economic sector down 5 to 10 percent for 2020 coupled with more online and curbside sales will result in less general liability risk from shoppers in stores.
- Selected product liability segments (agriculture, manufacturing, and trade) are forecast down 0 to 10 percent, depending upon sub-segment.
- Other specialized coverages, like D&O, E&O, and professional liability are hardening (in some cases significantly) due to social inflation. Some of these (e.g. medical malpractice) will be down if further gaps in procedures exists throughout 2020, but others (e.g. D&O) will continue to see a hardening market and the only threat to top line premium volume is the accounts receivables issue mentioned under property.
- At least one small business insurer announced premium reductions for businesses closed during the period with no loss exposure, supporting modest top line reduction estimates.

Workers Compensation

Projected low double digit decreases in premiums vs. last year due to economic shutdowns generally. The main driver of these results being the closing of non-essential businesses and resulting historical unemployment levels (reaching circa 40 million for the US). Several higher risk classes like manufacturing and construction are particularly hard hit economic segments that have significant contribution to insurance premiums.

Aviation

Not surprisingly, total premiums for the industry will likely be down significantly on the back of reductions in ticket volume of potentially more than 50 percent for the year based on IATA estimates.

For more nuanced review of line of business, segment and regional premium impacts, please reach out to your Aon representative.

Rating Agency and Regulatory Updates

Rating Agency Response to COVID-19

Life & Health Sector: Life insurers have been the most impacted by the COVID-19 pandemic. The pandemic causing an increase in claims is seen as a secondary issue to the broader economic impact of declining interest rates and equity valuation. The life insurance industry sector outlooks were revised from stable to negative from many rating agencies and global regions. S&P is the only major agency that has maintained a stable outlook for the North American Life and EMEA Life sectors since mid-March, while their ANPAC life sector was revised to negative. The U.S. health segment maintained a stable outlook for all rating agencies, except for Fitch which revised their outlook to negative in March.

Non-life & Reinsurance Sector: P&C business has been moderately impacted by the COVID-19 pandemic mainly due to increased business interruption, travel and event cancellation claims. Overall premium volume is expected to decrease as the economy shrinks throughout 2020. These same trends are likely to impact reinsurance companies, although many of large global reinsurers would be more negatively impacted by a global economic downturn. Rating agencies commented on various P&C and reinsurance sectors globally over the past three months. Fitch revised their outlook to negative on all global P&C and reinsurance sectors in March. AM Best maintained a stable outlook on the global reinsurance sector, US personal lines and non-life sectors for Canada, France, Guatemala, Italy, Peru, Spain and Vietnam. AM Best revised their outlook to negative for the US commercial lines and non-life sectors for Mexico, Brazil, Panama, Columbia, India, South Korea and the Gulf Cooperation Council. S&P revised their outlook on the global reinsurance sector to negative in May but maintained a stable outlook for the global insurance industry. Moody's has not commented specifically on their outlook for non-life & reinsurance sectors.

Stress Test Results: Rating agencies developed COVID-19 stress tests as early as March to test how Life & Health, P&C and Reinsurance companies' balance sheets may handle the pandemic. AM Best developed a stress test that featured common adjustments to asset risk across sectors, and specialized underwriting and corresponding capital adjustments by sector. Below are the adjustments made by AM Best;

- Asset risk:

- Common equities, real estate and alternative assets lowered by 35 percent

- Mortgage loans value lowered by 10 percent

- Bond credit quality lowered by one notch (e.g., "aa" to "aa-") with a larger decrease for below investment grade; no adjustment to underlying value

- Underwriting risk:

- Annuities – Lengthened duration mismatch of 1 year between assets and liabilities

- Health – Increase of 5 percent on loss ratio, excluding vision, dental and supplemental health

- Mortality – Increase in mortality rates of an additional two deaths per 1,000 insured

Property/casualty – Increase of 5 percent on loss ratio for commercial lines excluding auto and warranty

- Capital & Surplus:

Reduced by decline in asset values and increase in UW losses noted above, net of tax

20 percent haircut on capital credit from value in force / embedded value

After evaluating the impact of this stress test, companies most at risk included life/health insurers with high asset and mortality risk, insurers with material exposure to mortgage loans, carriers operating in domiciles with higher country-risk tiers and companies with a smaller capital base. Most regions/sectors saw BCAR scores at the VaR 99.6 drop modestly with no change in BCAR assessment due to the stress test. Only 2 percent of US & Canadian P&C saw a drop in BCAR assessment of 2 or more levels; however, the same was true for 32 percent of US & Canadian life & health insurers. AM Best concluded that the pandemic will likely be a 2020 earnings event, rather than erode insurer's risk-adjusted capitalization.

Fitch also developed a pandemic stress test for all insurers. The impact on insurers was moderate with about 30 percent of rated companies having a negative rating action (21 percent with negative outlook, 8 percent downgrade (mainly by one notch) and 1 percent Rating Watch-Negative). These negative outcomes impacted life insurers at a 35 percent rate compared to a 21 percent on the non-life sector. The pandemic stress test included the following defined assumptions;

- Decline in key stock market indices by 35 percent relative to Jan. 1, 2020
- Increase in two-year cumulative high yield bond default rate to 16 percent in the US and 13 percent in Europe; default rate assumptions will be applied to non-investment grade and a portion of BBB assets
- Both upward and downward pressure on interest rates, with spreads widening (including high yield by 400 basis points) coupled with notable declines in government rates
- Capital markets access is limited for issuers at senior debt levels of 'BBB' and below
- A COVID-19 infection rate of 5 percent and a mortality rate (as a percent of infected) of 1 percent
- For the non-life and reinsurance sectors, a negative impact on accident year loss ratio at 3.5 percentage points, partially offset by a favorable impact from auto of 1.5 percentage points

S&P evaluated life & health insurers using a moderate and severe pandemic stress test based on the 1957 Asian flu and 1918 Spanish flu respectively. The moderate scenario assumed a 2 percent reduction in industry capital for North American life insurers, while the severe scenario assumed a 12 percent reduction. S&P determined that solid capital buffers and liquidity positions allow life insurers to be well-positioned to handle the immediate impact of bond downgrades. S&P evaluated health insurers by increasing medical loss ratios from an 85 percent baseline up to 88-89 percent in the moderate scenario and 95-97 percent in the severe scenario. S&P concluded that health insurers' extremely strong capital position can withstand the stress test. S&P also ran an investment stress test for non-life and reinsurance companies which resulted in few companies being impacted due to strong capitalization. The investment stress test included the following assumptions:

- BBB assets decline by 11 percent
- Non-investment grade assets decline between 14-36.8 percent
- Equities decline by 30 percent
- Alternatives decline between 30-45 percent
- Share repurchases are suspended for 2020-2021
- Reduced capital credit for time value of money on reserves

Demotech affirms ratings following challenging Florida renewal

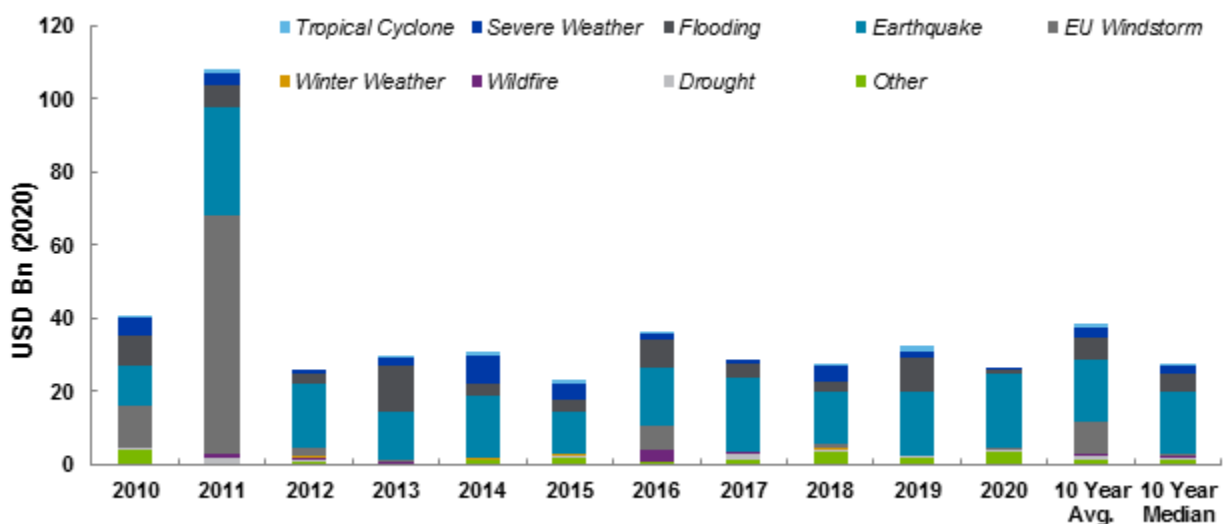
The Florida renewal proved to be a difficult one with rate increases in the 20 to 30 percent range throughout the market. Demotech began the year highlighting the many challenges that Florida carriers experienced in recent years including the sustained adverse development on Irma and Michael, AOB issues and rising reinsurance costs. As the renewal approached, many markets diminished their capacity for Florida business and limited special features such as cascading layers that were common in recent years. Demotech maintained their reinsurance requirements for rated carriers to buy to the 130-year return period. Many carriers avoided a downgrade through M&A activity, non-renewal of certain books and various capital solutions. The majority of companies Demotech rates in Florida have been affirmed as of June 30 indicating that they met all reinsurance requirements despite the challenging market.

Convective storms drive Q1/Q2 losses as peak tropical cyclone season looms

Preliminary insured catastrophe losses were close to the recent decadal median during the first half of 2020. Most of the losses during Q1/Q2 were incurred in the United States from the severe convective storm (thunderstorm) peril. As of this writing, the combination of payouts by public and private insurance entities was tentatively listed at USD26 billion. At present, this is the lowest six-month insured loss tally since 2015, though this is expected to be upwardly revised as multiple notable second-quarter events are likely to result in prolonged loss development as more data is compiled. The current COVID-19 environment has led to changes in how some insurers are conducting damage assessments, with some companies choosing to use electronic processing or utilizing drone technology.

The USD26 billion total is 31 percent below the recent 10-year average of USD38 billion and 13 percent lower on a median basis of USD30 billion. Using a median analysis helps provide a more accurate depiction of losses and eliminates any potential skew of outlier years.

Exhibit 6: Q1/Q2 Insured Losses by Year (2010-2020)



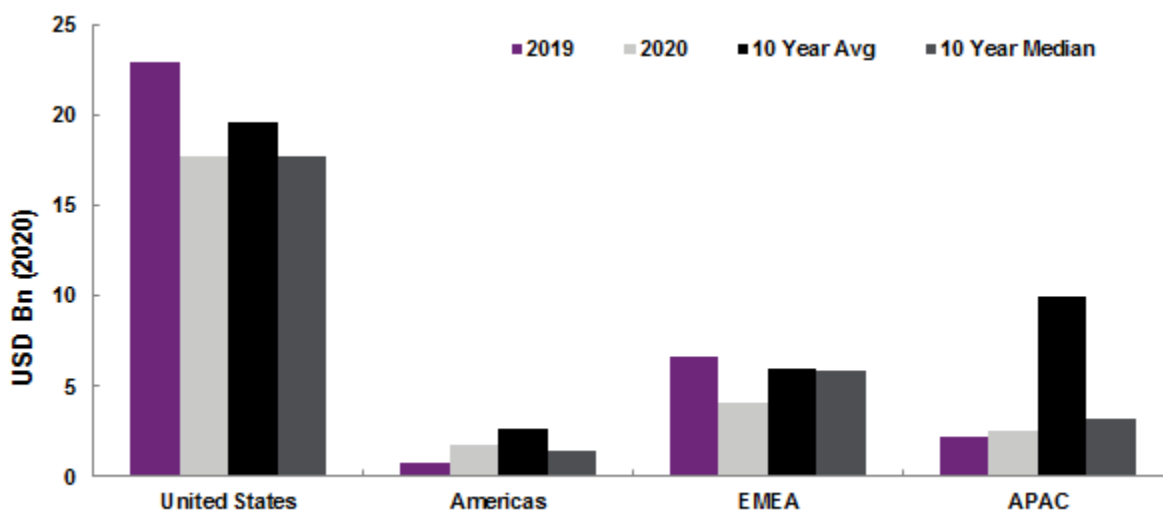
Source: Aon's Reinsurance Solutions

The first half of the year was highlighted by no fewer than eight individual catastrophe events which caused more than USD1.0 billion in insured payouts. Preliminary data showed that six of the eight events occurred inside the United States. All six U.S. events resulted from severe convective storms (losses driven by tornadoes, hail or straight-line winds). The combined cost of the six billion-dollar U.S. insured events was tentatively estimated at nearly USD12 billion; the costliest of which was a major, multi-day tornado outbreak in mid-April that prompted USD2.4 billion in payouts. The other two events that cost insurers at least USD1.0 billion included: Windstorm Sabine (also known as Ciara) which caused nearly USD2.0 billion in payouts in February; and a series of major January hailstorms that affected multiple large metropolitan areas in Australia (Canberra, Sydney, and Melbourne).

More than two-thirds (68 percent) of first-half insured losses were sustained in the United States; or approximately USD18 billion. Most of the losses were attributed to the severe convective storm (SCS) peril as a very active early start to tornado season and several major hailstorm events were recorded in central and eastern parts of the country. At least 22 out of nearly 550 unofficially confirmed twisters were rated EF3 or EF4. The costliest of which was a high-end EF3 which caused extensive damage in the greater Nashville metropolitan region during the early morning hours of March 3. No fewer than 13 events in the United States caused at least USD500 million in insured losses; all of which were largely driven by severe weather. There were six additional non-U.S. events that passed the half-billion-dollar (USD) threshold. These included Windstorm Sabine (Europe), Windstorm Dennis (Europe), Australia hailstorm (January), Australia East Coast Low (February), Cyclone Amphan (India), and a major June hailstorm in metro Calgary, Canada.

Please note that the Australia bushfire losses are bucketed as 2019 payouts for this analysis as the fires originally ignited in November 2019 and lingered into January 2020. Those fires have now resulted in more than USD1.5 billion in insurance payouts – the highest cost for a bushfire outbreak on record based on a nominal and inflation-adjusted level for the country.

Exhibit 7: 2020 YTD Insured Losses Compared to Recent Annual Averages by Region



Source: Aon's Reinsurance Solutions

As previously noted, the largest portion of the USD26 billion in global insured losses was attributed to the severe convective storm peril. The nearly USD20 billion in losses accounted for 76 percent of the overall Q1/Q2 total. The only other perils to account for more than 10 percent of the first-half total was European Windstorm (12 percent). The only additional peril above five percent was flooding (6 percent).

The trend of natural catastrophe losses in recent years has shown the third quarter as the most expensive for insurers. This has been directly correlated to a series of significant landfalling tropical cyclones in the United States, Japan, and the Caribbean, plus record wildfires in the United States. The second quarter is often the second-costliest given increasingly costly severe convective storm payouts.

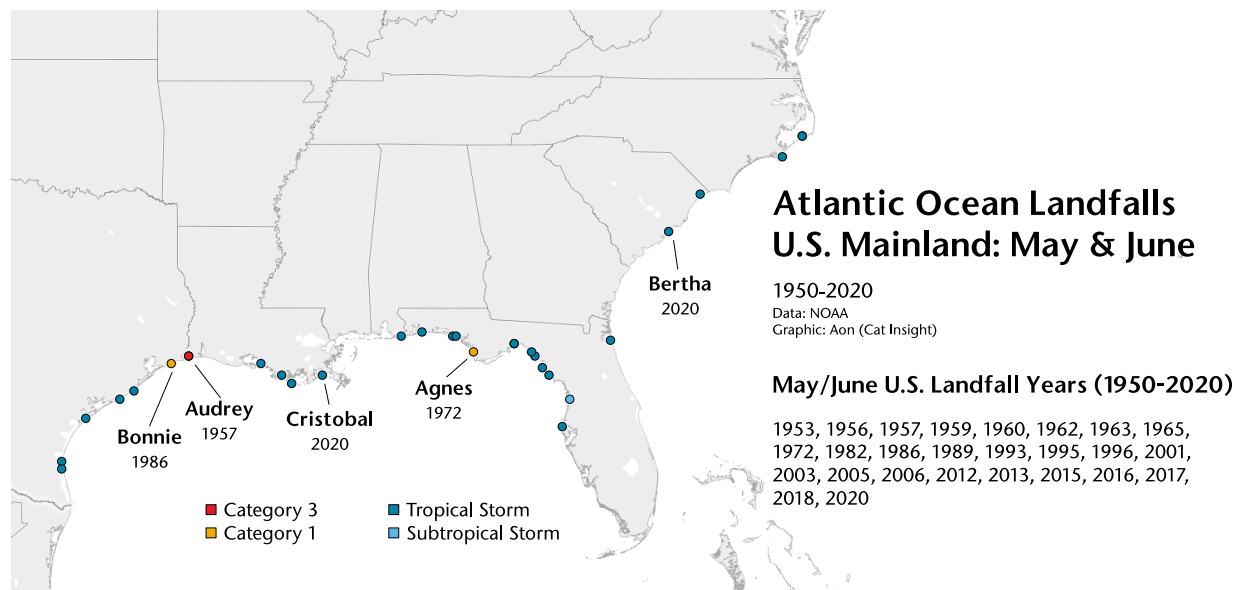
This preliminary data comes via Aon's Catastrophe Insight group, which is part of Impact Forecasting. To view the most up-to-date catastrophe loss data, please visit: <http://catastropheinsight.aon.com>

Atlantic Hurricane Season off to early start; what does it mean for insurers?

The 2020 Atlantic Hurricane Season is off to an early start. As of July 1, there had already been four named storms – equal to one-quarter of a typical seasonal average (12) – before beginning to reach the historical seasonal peak in August, September, and October. Forecasters continue to signal the likelihood of an active season. Two of these storms (Bertha and Cristobal) made landfall in the United States as tropical storms. Damage was not particularly robust for either event, with total combined insured losses likely to settle below USD200 million, but brought focus to the peril for the insurance industry a bit earlier than anticipated.

The question then becomes: What do similarly active early seasons tell us about what to expect for the rest of the 2020 in the Atlantic Ocean? Exhibit 8 highlights May and June landfall locations from 1950 to 2020. 2020 joins 1957 (Unnamed and Audrey), 1959 (Arlene and Unnamed), 2015 (Ana and Bill) and 2012 (Beryl and Debbie) as the only seasons since 1950 to record at least two landfalls prior to July 1. All but three of the May and June landfalls were tropical storms; the exceptions being Audrey (1957, Category 3), Bonnie (1986, Category 1), and Agnes (1972, Category 1).

Exhibit 8: Early Season U.S. Mainland Landfalls (1950-2020)



Based on data from NOAA's Atlantic Hurricane Database (HURDAT2), there were 26 seasons (or 37 percent) from 1950 to 2019 which had U.S. landfalls of either a subtropical storm, tropical storm, or hurricane during the months of May or June. Among those seasons in recent history include 2005, 2012, 2017, and 2018 – four years which collectively caused USD224 billion (2020 USD) in inflation-adjusted insurance payouts from 20 landfalling storms. However, other years such as 2006 and 2015, resulted in more negligible impacts with less than USD400 million in combined payouts. This suggests that there is not any historical data-driven consistency or direct correlation of early season storms guaranteeing higher industry costs.

Exhibit 9 below provides a comparative view of the 26 seasons which had a May or June landfall in the mainland U.S. compared with the entire seasonal record since 1950. The years with earlier season activity do not show a significant difference in activity levels – in terms of more storms or landfalls – and only marginally higher Accumulated Cyclone Energy (ACE) values (a measure of storm “energy” in a season). The biggest difference is with the average annual insured loss payout, where early season storms historically result in higher seasonal losses. This follows the assumption that the track and intensity of landfalling storms is a more important metric for insurers than the frequency of developed over-water events.

Exhibit 9: Atlantic Hurricane Seasons (1950-2019)

Type	Named Storms (NS)	Hurricanes (HU)	Major Hurricanes (MHU)	Accumulated Cyclone Energy (ACE)
May / June Landfall Season Avg.	12.5	6.3	2.4	106.0
1950 – 2019 Season Avg.	12.0	6.3	2.5	103.4

Type	U.S. NS Landfalls	U.S. HU Landfalls	U.S. MHU Landfalls	U.S. Insured Loss Avg. (2020 USD)
May / June Landfall Season Avg.	3.4	1.4	0.6	\$11 billion
1950 – 2019 Season Avg.	3.1	2.0	1.3	\$5.6 billion

The biggest potential question mark lies with what phase of ENSO will be present during the peak months of August, September, and October. Historical data since 1950 shows that basin-wide Atlantic hurricane activity is reduced during El Niño, but there is above normal activity (using the climatological 1981-2010 baseline of 12 named storms, 6 hurricanes, and 3 major hurricanes) during ENSO-neutral and La Niña. However, La Niña phases tend to result in stronger storms given higher average ACE values. In terms of U.S. landfalls, as seen in Exhibit 10 below, ENSO phase does play a role in regional shifts in historical annual landfall trends. Costlier economic damage has occurred during La Niña, but insurers have paid slightly higher payouts during ENSO-neutral.

Exhibit 10: Atlantic Hurricane Season Averages by ENSO Phase in the Satellite Era (1950-2019)¹

ENSO Phase	Named Storms (NS)	Hurricanes (HU)	Major Hurricanes (MHU)	Accumulated Cyclone Energy (ACE)
El Niño (24 Seasons)	9.6	5.0	1.9	76.4
Neutral (26 Seasons)	13.3	7.1	2.7	116.1
La Niña (20 Seasons)	13.0	7.0	3.1	119.4

Type	U.S. HU Landfalls	U.S. MHU Landfalls	ATL Economic Loss Avg. (2020 USD)	ATL Insured Loss Avg. (2020 USD)
El Niño (24 Seasons)	1.7	1.3	\$10 billion	\$3.6 billion
Neutral (26 Seasons)	2.1	1.3	\$22 billion	\$8.7 billion
La Niña (20 Seasons)	2.1	1.4	\$27 billion	\$7.8 billion

Type	Gulf Coast Landfalls; No FL (HU / MHU)	Florida Landfalls (HU / MHU)	East Coast; No FL (HU / MHU)
El Niño (24 Seasons)	0.29 / 0.13	0.20 / 0.04	0.21 / 0.00
Neutral (26 Seasons)	0.65 / 0.31	0.38 / 0.23	0.54 / 0.08
La Niña (20 Seasons)	0.80 / 0.20	0.60 / 0.25	0.50 / 0.15

¹ Landfall data includes the first or strongest landfall point on the U.S. mainland.

Forecasters: 'Above Normal' 2020 Atlantic Hurricane Season

The three main hurricane season prognosticators (National Oceanic and Atmospheric Administration (NOAA), Colorado State University (CSU) and Tropical Storm Risk (TSR)) have each forecast above-normal hurricane activity for the Atlantic Hurricane Season. This includes the four storms which have already occurred – Arthur, Bertha, Cristobal, and Dolly. The date which Dolly formed (June 23) cemented 2020 as just the third season in the official record dating to 1851 to have four named storms by that date. The primary driver of the elevated forecasts surrounds the increasing likelihood of a transition from ENSO-neutral conditions to weak La Niña conditions by the peak development months of August, September, and October. La Niña conditions are typically marked by warmer sea surface temperatures and less inhibiting wind shear in the Tropical Atlantic's Main Development Region (MDR).

The larger question, as always, is where the storms that develop will ultimately track. An active meteorological season (meaning a higher number of storms) does not always correlate to higher financial and human impacts on land. It only takes one significant landfalling storm to entirely alter the perception of a season. Thus far, 2020 has already recorded two landfalls by systems of tropical storm-strength: Bertha (South Carolina) and Cristobal (Mexico and Louisiana).

	Named Storms	Hurricanes	Major Hurricanes
TSR (May 2020)			
2010-2019 Average	16	7	3
2020	17	8	3
CSU (June 2020)			
1981-2010 Average	12	6	3
2020	19	9	4
NOAA (May 2020)			
1981-2010 Average	12	6	3
2020	13-19	6-10	3-6

Sources: Tropical Storm Risk (TSR), Colorado State University (CSU), NOAA

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