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Executive Summary:
Casualty shows its value as a diversifier

Reinsurers reported solid earnings in Q1 2021, with Aon’s Reinsurance Aggregate ending the period with an estimated combined ratio at 96.6 percent, benefiting from previous rate increases. Global reinsurance capital remained flat compared to Q4 2020 at USD650 billion. Alternative capital filled the USD2 billion dollar decline in traditional capital to end the quarter at USD96 billion and USD554 billion, respectively.

June and July renewals saw momentum slow compared to January renewals, especially for non loss-impacted placements. Capital inflow to the segment led to a more level position between buyers and sellers for the renewal reason. Contract terms continue to be a strong focus given the market’s evolving response related to communicable disease exposures since the start of the pandemic.

In general, casualty is proving its value as a good diversifier for reinsurers, especially given positive primary rate movement in recent years. Casualty placements achieved more aggressive insurer language as a result of relatively ample capacity.

As the world emerges from the COVID-19 pandemic, several key longer-term regulatory issues are likely to regain relevance in re/insurer appetite and rating models. Prominent among these issues is Environmental, Social and Governance - a requirement of growing importance to central banks, rating agencies, regulators and shareholders alike with clear policy signals that disclosure and compliance requirements for reinsurers are likely to increase.

Q2 global property catastrophe losses totaled USD36 billion, slightly above the median and below the average of the last decade driven substantially by the US winter freeze events causing an estimated USD14 billion of loss alone.

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: Stability continues from Q1

Stability in Q1 2021

Aon estimates that global reinsurer capital totaled USD650 billion at March 31, 2021, unchanged relative to the end of 2020, as growth in alternative capital offset a small reduction in traditional capital. This calculation remains a broad measure of the capital available for insurers to trade risk.

Exhibit 1: Global Reinsurer Capital

![Chart showing global reinsurer capital from 2011 to Q1 2021.]

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

Traditional Capital

Reinsurers reported solid earnings in Q1 2021, despite the impact of the Texas winter storms and the booking of additional losses relating to COVID-19 (mainly relating to life business). Aon estimates the sector combined ratio at 96.6 percent, with the benefit of previous rate increases now coming through. The annualized return on equity is estimated at 10.4 percent, with investment returns benefiting from strong stock market performance, but showing the effects of a significant rise in worldwide risk-free rates, linked to fears around the re-emergence of inflation.

Reported capital positions were impacted by additional unrealized losses on bonds taken directly to equity, the return of capital to investors and by appreciation of the US dollar, which was up by 5 percent against the Euro. Consequently, Aon estimates that traditional capital declined marginally to USD554 billion at March 31, 2021.
Exhibit 2: Reinsurer Results*

Source: Company financial statements / Aon’s Business Intelligence

* Based on Aon’s Reinsurance Aggregate
Individual Company Performance in Q1 2021

The reported net combined ratios of selected companies in Q1 2021 are shown in Exhibit 3. The data relates to performance across the entire non-life portfolios (with the exception of Munich Re, where ERGO is excluded).

**Exhibit 3: Q1 2021 Net Combined Ratios**

![Bar chart showing Q1 2021 net combined ratios for various companies.](chart)

**Source:** Company financial statements, Aon's Business Intelligence

The annualized return on equity of selected companies in Q1 2021 is shown in Exhibit 4. RenaissanceRe and PartnerRe both reported overall losses for the period, driven principally by unrealized losses on their bond portfolios.

**Exhibit 4: Q1 2021 Annualized Return on Equity**

![Bar chart showing Q1 2021 annualized return on equity for various companies.](chart)

**Source:** Company financial statements, Aon's Business Intelligence
The growth in equity of selected companies during Q1 2021 is shown in Exhibit 5. Unrealized losses on bonds were a significant driver of the reductions seen on the right-hand side of the chart.

**Exhibit 5: Q1 2021 Growth in Equity (Original Reporting Currencies)**

Note: The increase at SiriusPoint was 67%, reflecting completion of the acquisition of Sirius Group on February 26, 2021
Source: Company financial statements, Aon’s Business Intelligence

The combined stock market value of the 20 listed companies in Aon’s Reinsurance Aggregate* has largely recovered from the sharp decline in February and March last year but remains around 13 percent below the level seen at the beginning of 2020.

**Exhibit 6: ARA Market Capitalization Index**

*Alleghany, Arch, Argo, AXIS, Beazley, Everest Re, Fairfax, Hannover Re, Hiscox, Lancashire, Mapfre, Markel, Munich Re, QBE, Qatar Insurance, RenRe, SCOR, SiriusPoint, Swiss Re and W.R. Berkley.
Source: Bloomberg, as of June 30, 2021
The share price performance of individual ARA companies since the beginning of 2020 is shown in Exhibit 7.

Exhibit 7: Share Price Performance Since January 1, 2020

Source: Bloomberg, as of June 30, 2021
Alternative capital

Aon estimates that assets under management in the alternative capital sector totaled USD96 billion at March 31, 2021, representing growth of around USD4 billion over the last three quarters. These strong inflows helped the ILS market close out a very strong first half of 2021. The market demonstrated strength on strength, combining near record issuance volume with spread reductions of 10 to 15 percent compared to mid-year 2020. First half issuance this year totaled USD8.39 billion, just shy of the record set in 2017. In addition, this positive capacity and pricing environment has led to impressive breadth across the ILS market. A diverse set of Sponsors, including corporates, insurers, reinsurers and government entities have found value in the ILS market across a broad range of perils, geographies, trigger types and expected loss levels. The positive market momentum, combined with over USD3.5 billion maturing in the second half of 2021, could lead to record issuance volume for the full year.

Exhibit 8: Alternative Capital Deployment

![Alternative Capital Deployment Chart]

Source: Aon Securities Inc.
Demand – A New Equilibrium

Property

June and July are significant property reinsurance renewal dates globally, with property pro rata and catastrophe excess of loss contracts renewing in the US, large catastrophe programs in Australia, and renewals in Europe, the UK, Latin America and the Middle East.

Renewals saw overall pricing momentum slow in non loss-impacted portfolios, a continuing trend from April as capital inflows remained strong, leading to orderly renewals. Contract terms continue to be a strong focus, particularly for those that renewed prior to the height of the COVID-related contract negotiations in 2020.

The following provides a summary of themes experienced on many property renewals as well as those more specifically targeted to Florida’s peak zone renewal.

Common Themes

<table>
<thead>
<tr>
<th>Topic</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Capacity</td>
<td>- New capacity from both new entrants and existing markets continued in June and July across clients’ catastrophe, risk and pro rata placements. While new entrants provided support across treaties, capacity deployment remained largely focused on catastrophe occurrence and more opportunistically on pro rata and per risk.</td>
</tr>
<tr>
<td>Exclusions</td>
<td>- Communicable disease exclusions remain widespread across property treaties. Scrutiny of coverage language continued for evolving risks such as cyber.</td>
</tr>
<tr>
<td>Upper Layers</td>
<td>- Programs in many regions saw a shift in interest to middle and upper layers following the frequency of recent years. While capacity remained available for lower layers, pricing dynamics adjusted accordingly with capacity available.</td>
</tr>
<tr>
<td>Quota Share</td>
<td>- Given continued client interest in earnings protection and the relative cost and availability of aggregate capacity, clients expressed an increased interest in pro rata coverage. The increased demand in pro rata was met with sufficient supply as reinsurers look to benefit from underlying rate improvement.</td>
</tr>
<tr>
<td>Aggregates</td>
<td>- Despite increased frequency of catastrophe events in recent years, aggregate programs were able to renew. Aggregate programs experienced pressure on deductibles and attachment points, but overall capacity was available. The market was more difficult for loss impacted programs and those looking for additional capacity or new coverage.</td>
</tr>
<tr>
<td>Cost of Materials</td>
<td>- As the cost of lumber and other building materials increased, both insurers and reinsurers considered the impact on replacement costs for renewals. Some clients considered purchasing additional capacity, but this rise in materials costs generally had limited impact on overall tail risk purchasing considerations.</td>
</tr>
</tbody>
</table>
Per Risk Placements

- Per Risk placements continued to see some pricing pressure as a result of recent industry performance, with the most pressure on layers with meaningful catastrophe coverage.

Historical Experience

- In territories where catastrophe modeling output has historically driven pricing discussions in prior years, reinsurers increased their focus on actual loss experience. As a result, programs with poor experience relative to modeled loss were under more price pressure than programs that have performed at or better than modeled expected loss.

ILS

- Cat bonds remain attractive to insurers with some traditional limit being swapped for ILS capacity during June/July renewals due largely to competitive pricing.

Florida-Specific Common Themes

<table>
<thead>
<tr>
<th>Topic</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss Experience Dependent</td>
<td>Non-loss impacted programs had a markedly different renewal outcome than those that ceded losses. Portfolios with exposure outside Florida that were significantly impacted by losses during the 2020 hurricane season impacted for some insurers during 2021 renewals.</td>
</tr>
<tr>
<td>Financial Stability / Management Team</td>
<td>Insurer financial performance, balance sheet strength and management team expertise and experience was a key differentiator in terms and conditions for 2021 renewals.</td>
</tr>
<tr>
<td>Upper Layers</td>
<td>Given increased frequency of both hurricane and non-hurricane PCS and non-PCS events in recent years, the placement of lower layers was more challenged due to some reinsurers choosing to focus their support on layers attaching above the Florida Hurricane Catastrophe Fund.</td>
</tr>
<tr>
<td>ILS</td>
<td>Despite the increase in cat bond capacity secured and some new market entrants, ILS markets affected by non-hurricane losses in more recent years proved more hesitant than historically, particularly in the lower end of programs.</td>
</tr>
<tr>
<td>Irma Loss Development</td>
<td>Irma “creep” was less of a factor in 2021 renewal negotiations and placements for insurers. Despite development for traditional reinsurance being limited by protection from the FHCF for many carriers and credibility in loss projections remaining a key factor for reinsurers, many reinsurers already considered it in their pricing models.</td>
</tr>
<tr>
<td>New Demand / New Capacity</td>
<td>For the overall market, additional limit secured by a few insurers this season was offset by many insurers purchasing less limit due to de-risking efforts, and to some degree, the FHCF electing to forgo reinsurance protection again for 2021. That said, its likely capacity remains available, even in the peak region, especially on the upper end of programs. On an individual client basis, Florida insurers looking to decrease capacity purchased for their individual programs.</td>
</tr>
</tbody>
</table>
did see capacity come together a bit more orderly than those looking to secure additional limit.

| Cascading Protection | • Despite being less readily available than in years past, several placements that had cascading protection on their outgoing program were able to retain coverage on a cascading basis as part of their program at renewal. |

Casualty

In general, there is a renewed view that casualty is proving its value as a good diversifier for reinsurers given challenged property experience in recent years, robust primary casualty rate levels and thoughtful original limits management. Underlying economic pressures persist and the market has largely been distracted from social inflation concerns with the positive rate momentum. Not surprisingly, the casualty market saw a marked split between quota share and excess of loss for July renewals.

The following provides a summary of themes that existed on many casualty renewals at July 2021:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>• The general casualty quota share market has been reinvigorated with new capacity as well as many long standing casualty reinsurers targeting growth given the current market conditions. However, despite continuing to support casualty quota shares in a meaningful way, some historically larger writers have taken a more cautious view on underlying trends and have limited desire for significant growth.</td>
</tr>
<tr>
<td></td>
<td>• In contrast, capacity for excess of loss programs is dependent on the performance of the program and not as readily available as support for proportional placements.</td>
</tr>
<tr>
<td></td>
<td>• Environmental capacity for pro rata remains strong, despite comparatively lower original rate increases than some other casualty lines. Excess of loss capacity is largely pricing dependent and less diversified.</td>
</tr>
<tr>
<td></td>
<td>• Professional liability has also seen a healthy increase in capacity available in the market. Improved ceding commissions and multi-year capacity are being achieved at renewals.</td>
</tr>
<tr>
<td></td>
<td>• Capacity exists for pro rata and excess of loss medical programs, though reinsurers remain cautious.</td>
</tr>
<tr>
<td>Cedent Demand</td>
<td>• Insurers are taking more of their pro rata placements net, bolstered by strong rate increases on the underlying business and greater comfort with reduced gross limits in their portfolio. As we look to future renewals, continued demand for excess of loss and hybrid placements is likely.</td>
</tr>
<tr>
<td>Lower Layer Excess of Loss</td>
<td>• Reinsurers continue to refine pricing methodology for lower layer excess of loss programs. Volatility in performance among programs has created more scrutiny on individual placements at these levels.</td>
</tr>
</tbody>
</table>
| Contract Wording | • One-off terms unique to reinsurers were able to be standardized in some cases given the capacity available in many casualty lines.  
• Contagious disease is no longer the dominating discussion point with most markets.  
• The London market is navigating the PRA (UK Regulator) requirement to all re/insurance companies - both Lloyd's and non-Lloyd's - to have contractual clarity on cyber coverage/exclusion at July 1. |
| Social Inflation / Re-opening | • Social inflation remains a topic of concern for the reinsurance market potentially compounded with concerns over legal case backlog-related pressures. Landmark casualty cases to resume working through the legal system and will test policy language. Given speculation around liability acceleration in a "post-COVID-19" environment where economic disparities seem to have increased, reinsurance remains a strong source of capital for insurers. |
| Clash Coverage & Emerging(ed) Risks | • Evaluating liability accumulations and continuing to monitor these is an increasing focus for insurers.  
• There are numerous emerging(ed) risks on the radar; however, opioids and PFAS continue to dominate discussions with wildfire remaining a central concern.  
• Clash coverage remains available, despite a challenging year for some programs. New buyers are investigating traditional coverage and exploring non-traditional program design. |
Primary Rate Change

Workers’ compensation seems to have leveled off in 2020 with a weighted average rate change near 0.5 percent increase over the year and 2021 starting with a slight increase in Q1 at 1.1 percent. General liability and commercial auto started off 2021 with rate increases at 7.0 and 7.9 percent respectively. Commercial property saw consistent rate increase in the mid-teens in 2020 and Q1 2021. Umbrella continues to show the most significant increase with Q1 2021 at 21.8 percent on a weighted average basis on top of the high teens to mid 20s increases witnessed throughout 2020.

U.S. Rate Change by Line of Business

Source: Council of Insurance Agents and Brokers
ESG Under the Spotlight

As the world emerges from the COVID-19 pandemic, several key longer-term issues are likely to regain relevance in re/insurer appetite and rating models.

Prominent among these issues is Environmental, Social and Governance (ESG) - a requirement of growing importance to central banks, rating agencies, regulators and shareholders alike. ESG risks include climate change, stress test failures, liability risks such as product liability, social inflation, data privacy and corporate governance - and the consideration of ESG factors alongside financial factors in the investment and underwriting decision-making processes.

A key and very broad ESG challenge is climate change risk, and there was focus on this element across the re/insurance sector at mid-year renewal. A request for comment (RFC) was issued from the New York Department of Financial Services (DFS) on its proposed guidance for New York insurers on managing the financial risks from climate change.

DFS stated that over time a quantitative approach will be expected - sophisticated modeling that includes broader factors including credit, legal, liquidity, market, operational, pricing and underwriting, reputational, and strategic risks.

The DFS’s proposed guidance comes on the back of strong signals from ratings agencies and regulators over growing expectations for insurers to evaluate, learn and understand the potential implications of climate change on their book of business and in their assets.

S&P Global Ratings issued in May a RFC on proposed criteria for ESG Principles In Credit Ratings, while February’s RFC from Moody’s sought feedback on its proposal to introduce ESG insurer profile scores and credit impact scores. In addition, both S&P and Moody’s have added climate change related questions to their annual surveys sent to the rated companies.

In March, AM Best’s Review & Preview conference included an outline of its approach to evaluate ESG risk in the ratings process for both underwriting and investment activities. Additionally, AM Best released a survey on ESG to rated US carriers with both questions on companies’ general opinions on ESG within the insurance industry and more specific questions on the impact to the respondent’s underwriting and investing processes.

AM Best noted key ESG elements leading to credit rating action:

- Natural catastrophe or weather-related events (including the stress testing capabilities)
- Other environmental risks (including transitional and liability risks)
- Change in product or investment composition and/or performance due to integration of environmental or social factors
- Reputational risks stemming from environmental, social or governance factors
- Governance and ERM factors
With these strong rating agency and regulator signals in mind, it is expected that climate change disclosure regimes will feature more heavily in reinsurers’ reporting. Aon’s 2020 Catastrophe Risk Tolerance Study showed that the number of disclosures from insurance companies for the Carbon Disclosure Project (CDP) and the Task Force on Climate-related Financial Disclosures (TCFD) were increasing. Of the 88 reinsurers who took part, 61 filed climate change disclosures in 2020, compared to 50 in 2018.

Florida

Despite the need to factor in climate change to modeling and pricing becoming part of the re/insurer mentality, it will be a challenge to introduce pricing increases related to climate change globally, not least in the Florida insurance market.

In March, Demotech warned that nine domestic carriers need to report “markedly improved operating results in 2021” to sustain their current rating level. Top up requirements are also being requested for lower level reinsurance buyers. In June, Demotech withdrew the Financial Stability Rating of Gulfstream’s insurance companies, who were subsequently placed under regulatory supervision, due to poor underwriting results leading to declining surplus and a potential new investor did not emerge.

June saw Fitch Ratings highlight continued performance deterioration and a decline in capitalization levels among Florida homeowners insurance specialists.

This is despite the most severe losses from the record 2020 hurricane season occurring outside of the Florida market, although they noted that losses from winter storms in Q1 2021 have caused a modest decline in surplus.

According to Fitch, Florida homeowners specialists generally remain vulnerable to large catastrophic events that generate losses in excess of reinsurance limits and a reduction of private reinsurance market capacity for any reason.

However, the two major state-sponsored re/insurance entities in Florida, Citizens Property Insurance Corporation (AA) and the Florida Hurricane Catastrophe Fund (FHCF, AA), are considered to be adequately positioned for the 2021 hurricane season, according to Fitch.

In June, Aon released its new Impact Forecasting Florida hurricane model, which incorporates the latest research and technology to provide insurers with an additional view of risk when submitting Florida rate filings. The Florida Commission on Hurricane Loss Projection Methodology has approved the model for ratemaking in the state.

There is a need to democratize access to catastrophe data by wider adoption of open data formats. Insurers must be enabled to gain access to alternative views on their risks, without being restricted to just one catastrophe model.
Stress Testing - Evolving Criteria

Rating agencies typically stress test capital adequacy with catastrophe loss scenarios to ensure sustainability. This process of stress testing is a trend that is only going to evolve as companies consider including scenarios related to pandemics, macroeconomic downturns, asset declines, climate change, cyber risk and combination scenarios. Cyber risk is coming under a growing spotlight from rating agencies, regulators and shareholders, and remains a moving target.

The requirements for stress testing P&Ls against climate change factors, cyber loss scenarios and catastrophe losses are likely to continue to grow to support a deeper understanding of modeled and non-modeled loss drivers.
Natural Catastrophe Losses: Record Winter Weather Losses Drive Active Q1/Q2

Preliminary insured catastrophe losses (USD36 billion) were above the median (USD33 billion) and below the average (USD41 billion) for the last decade during the first half of 2021, and most of the industry’s losses during this period were incurred in the US due to winter weather and severe convective storm events.

At present, this is the fourth-highest insured loss tally since 2011. The total, however, is subject to change as continued loss development is anticipated to persist through at least the rest of the calendar year. The lingering effects of the COVID-19 environment, in addition to heightened replacement / supply chain costs due to limited and more expensive materials and labor shortages, are contributing factors to extended loss development occurrence.

**Exhibit 10: Q1/Q2 Insured Losses by Year (2011-2021)**

The first half of the year was highlighted by six individual catastrophe events that caused more than USD1.0 billion in insured payouts, with four of the six events occurring in the US.

The costliest event was the February stretch of prolonged cold temperatures and wintry weather that engulfed much of the country. The latest insured loss estimate is now USD14 billion. The three other US events were due to severe convective storms. The remaining two events that cost insurers at least USD1.0 billion included: February 13 earthquake near Fukushima, Japan (USD2+ billion) and a late June severe weather outbreak in Central Europe (USD2+ billion).

Nearly three-quarters (74 percent) of first-half insured losses were sustained in the US; or approximately USD27 billion. Of the 12 events which resulted in at least USD500 million in insurance payouts, nine of those were in the US.
As mentioned previously, the costliest was the February stretch of extended sub-freezing temperatures due to the Polar Vortex that led to extensive damage – primarily in the state of Texas.

The prolonged cold led to substantial strain to the local infrastructure grid and caused considerable freezing and bursting of indoor piping that subsequently led to water damage. February 2021 was the coldest in the continental US since 1989. Despite a slightly lower than normal start to tornado season and number of hail / straight-line wind reports, there were eight thunderstorm outbreaks that caused major damage. Most events were in the Rockies, Plains, Midwest and Southeast.

**Exhibit 11: 2020 YTD Insured Losses Compared to Recent Annual Averages by Region**

![Graph showing insured losses by region for 2020 and 2021.](#)

Source: Aon’s Reinsurance Solutions

The largest portion of the USD36 billion in global insured losses is attributed to the winter weather peril. The nearly USD16 billion in losses accounted for 44 percent of the overall Q1/Q2 total. It also represented the highest first-half total for the peril on record. Contributing perils for the remainder of loss are severe convective storm (40 percent), earthquake (7 percent) and flood (5 percent).

This 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](http://catastropheinsight.aon.com).
Atlantic Hurricane Season off to another early start; above average activity likely

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 five storms that already occurred as of July 1 – Ana, Bill, Claudette, Danny and Elsa. Ana formed on May 22 and marked the seventh consecutive year that a pre-June 1 named storm was declared in the Atlantic Basin. Historically June 1 is viewed as the “official” start to the Atlantic Hurricane Season, though due to earlier formations of storms, NOAA discussed the possibility of shifting the start to May 15.

Elsa became the earliest fifth-named storm on record dating to 1851 (July 1). This put the season on a pace ahead of the record year of 2020. It should be strongly stressed, however, that it remains highly uncertain as to whether the Atlantic Ocean will see overall storm totals nearing those observed in 2020. Only three seasons in the official Atlantic records had at least 20 named storms: 1933 (20), 2005 (28) and 2020 (30). The primary driver(s) of the elevated forecasts in 2021 include above average sea surface temperatures and less wind shear in the Tropical Atlantic’s Main Development Region (MDR). These conditions exist despite a transition to ENSO-neutral conditions from more favorable La Niña conditions in early 2021.

Exhibit 12: First Name Storm Formation in the Atlantic Ocean (1965-2021)

The main question, as always, is where the storms that develop will ultimately track. Despite a record number of US landfalls in 2020 (11), which included 6 hurricanes, the resultant public and private insurance losses were substantially lower (USD24 billion) than seen in high-loss years in 2005 (USD116 billion) and 2017 (USD59 billion). This confirms that an active meteorological season (meaning a higher number of storms) does not always correlate to higher financial and human impacts on land.

As of July 1, the US recorded one landfall: Danny on June 28 (local time) in South Carolina as a minimal tropical storm. Damage was negligible.
The latest 2021 Atlantic Hurricane Season forecasts are noted below. It is worth mentioning that forecast skill by each of these agencies improves by August. This is due to a more accurate reading of anticipated oceanic and environmental conditions during the peak of the season.

<table>
<thead>
<tr>
<th></th>
<th>Named Storms</th>
<th>Hurricanes</th>
<th>Major Hurricanes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TSR (May 27, 2021)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011-2020 Average</td>
<td>17</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>2021</td>
<td>18</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td><strong>CSU (June 3, 2021)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991-2020 Average</td>
<td>14</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>2021</td>
<td>18</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td><strong>NOAA (May 20, 2021)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991-2020 Average</td>
<td>14</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>2021</td>
<td>13-20</td>
<td>6-10</td>
<td>3-5</td>
</tr>
</tbody>
</table>

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

The Atlantic Ocean remains a primary focus for global insurers given the considerable loss risk that the basin and tropical cyclone peril pose for the industry. The graphic below highlights annual economic and insured losses for the tropical cyclone peril dating to 1990 and separates the Atlantic Basin from the other basins. It becomes clear that peak loss years in the Atlantic surpass those elsewhere. This includes back-to-back record insured typhoon loss years in Japan (2017 and 2018), which rank lower than seven other Atlantic seasons in the past 30 years.

**Exhibit 13: Tropical Cyclone Economic and Insured Losses (1990-2020)**

Source: Aon’s Cat Insight
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