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# Solvency II Practical Review Working Party

Impact of COVID-19

GIRO 2020



# Working party members (2020)

- Amrita Pattni (Chair)
- Amerjit Grewal (Workstream lead)
- Nina Ndebele (Workstream lead)
- Madhuri Kumar (Survey lead)
- Yuming Mei (Survey team)
- Francisco Sebastian
- Avtar Singh
- Shanawaz Hirani
- Valerie Teo



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# Introduction





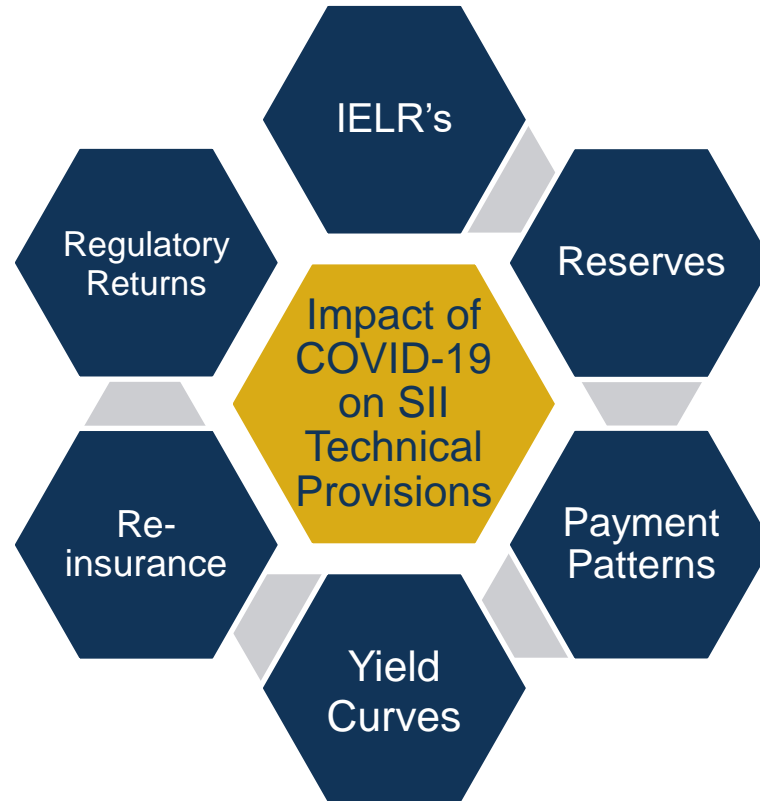
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# Impact of COVID-19 on SII Technical Provisions

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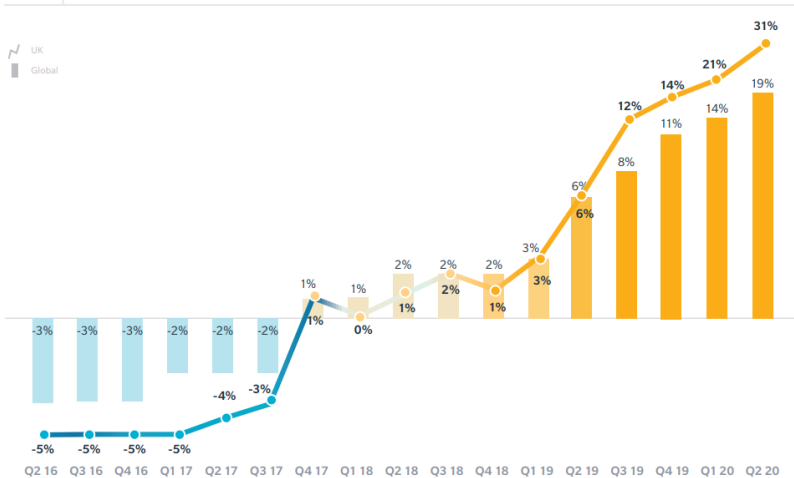
# Impact of COVID 19 on SII Technical Provisions



# Impact on IELR assumptions (1)



FIGURE 6 UK Composite Insurance Pricing Change  
SOURCE: MARSH GLOBAL ANALYTICS



Source: Marsh

UK insurance market was already seeing a hardening in pricing before the pandemic.

The pandemic means some classes are becoming even more expensive to purchase coverage (eg Contingency) as there is less appetite for insurers to write the business in the current environment.

This would feed into the 2021 business planning and then SII TP assumptions for unaccepted business, risk margin, future RI spend.



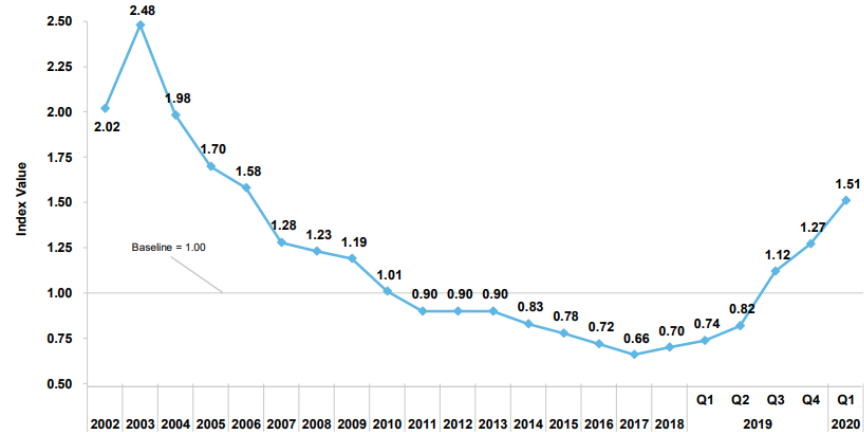
# Impact on IELR assumptions (2)



D&O has experienced over nine consecutive quarters of year on year rate increases.

This has continued into Q2 2020 and has meant that even pre-COVID policyholders were finding it harder to get coverage without significant price hikes.

Price increases have only been further escalated due to the pandemic, as D&O coverage is becoming increasingly difficult to find due to reduced appetite for insurers to provide capacity in the midst of increased demand from companies wanting the coverage.



Source of chart: AON Q1 2020 D&O Pricing Index

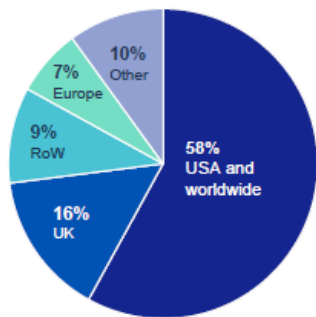




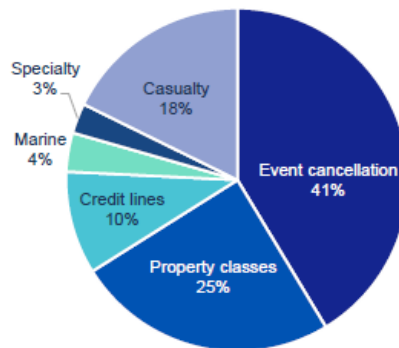
# Reserves used in Technical Provisions



Geography



Classes



These graphs are from the recent Q2 2020 Lloyd's update.

We can see that the majority of losses currently sit within:

- Event Cancellation
- Property
- Casualty
- Credit Lines

\*Worldwide – customers that have global risk programmes

\*Other – Australia, Canada and Asia

\*RoW – all other countries and territories not specifically listed Lloyd's customer pay-out range is net of reinsurance

Source: Lloyd's

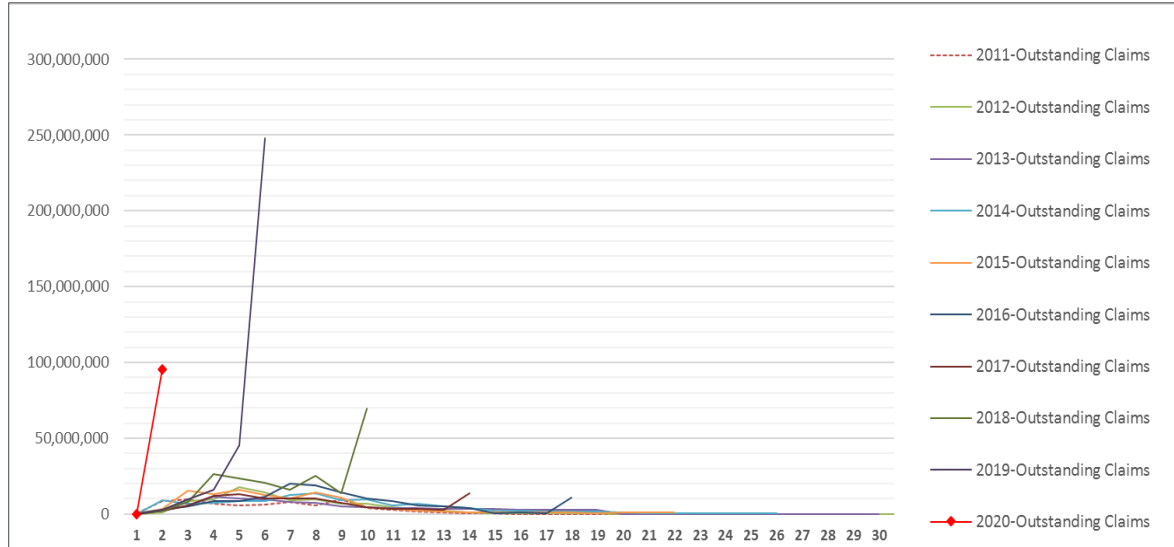


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# Claims Payment Patterns



## Contingency – Paid Claims Development



SII TP's apply payment patterns to determine future cashflows.

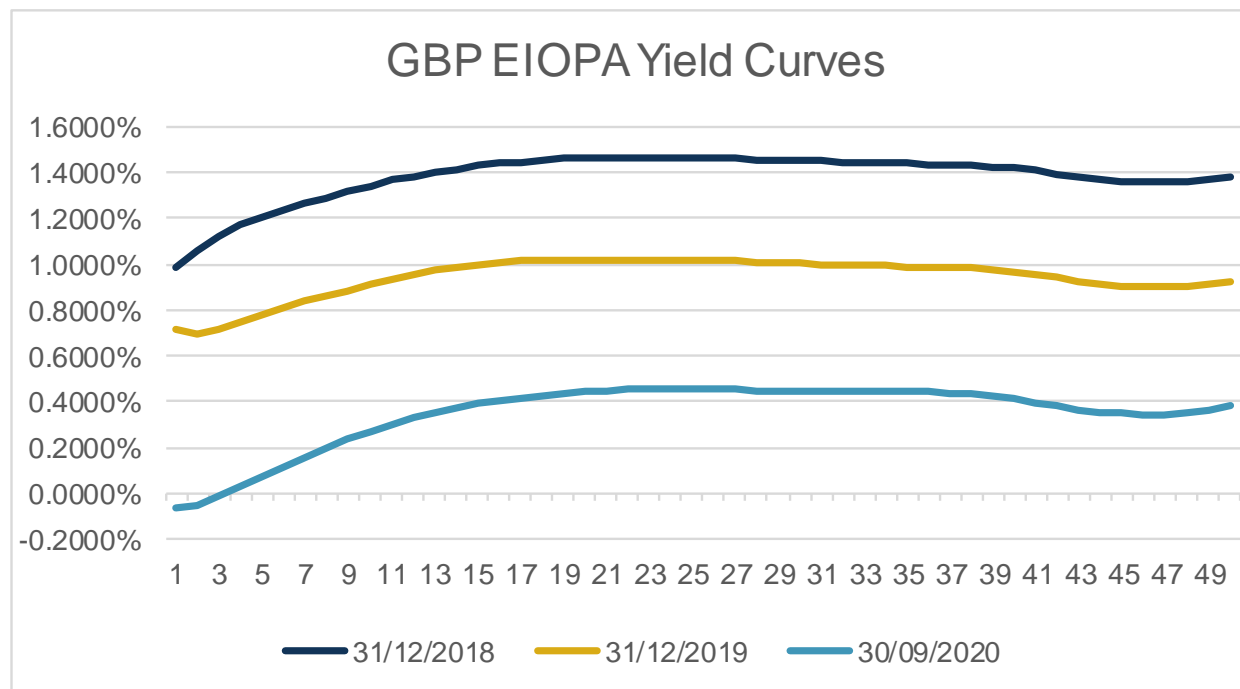
However, these assumptions are likely to change due to COVID-19 and impacts will vary by class.

Source: LMA



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# Yield Curves



Source: data from EIOPA



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# Reinsurance assumptions within Solvency II Technical Provisions



- Impact on reinsurance recoveries
- Change in ceded patterns
- Increased disputes .... causing increased reinsurance bad debt
- Change in reinsurance spend



# Impact on wider regulatory reporting



## ORSA

- Redesign of scenarios to allow for COVID-19
- Change in short-term vs long term projections

## TP Projections

- Additional returns eg LCR require TP projections
- Therefore even 6 month outlook on impact of COVID-19 will need to be considered

## SFCR

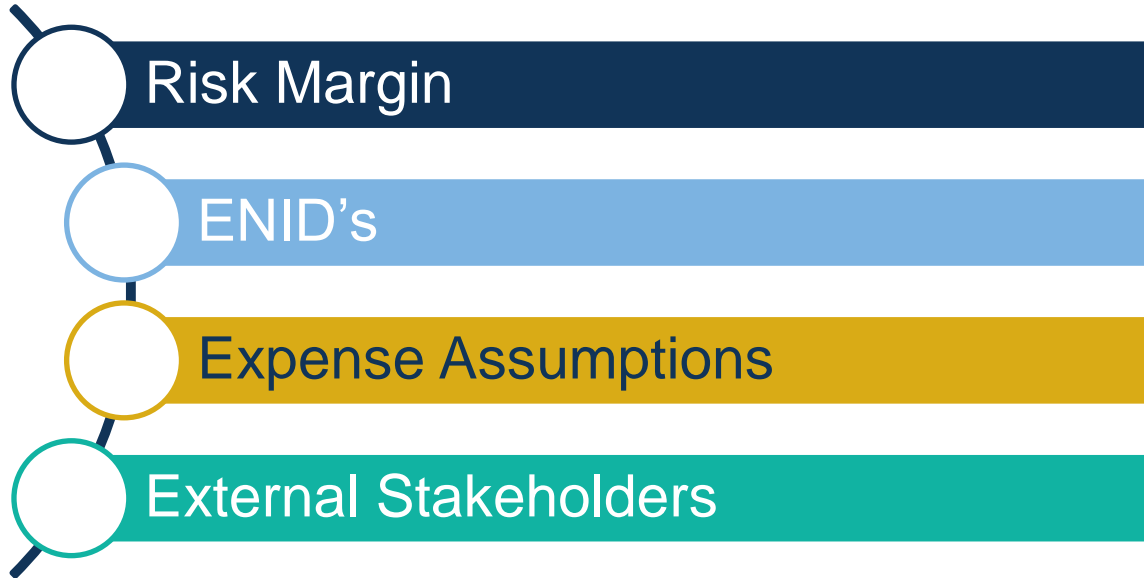
- Public report but will still expect to see quantification of the impact of COVID-19 on reserves
- Disclosures on TP changes to allow for COVID-19

## AFHR

- Report is seen by the Board and will need clear considerations for COVID-19



# Further considerations





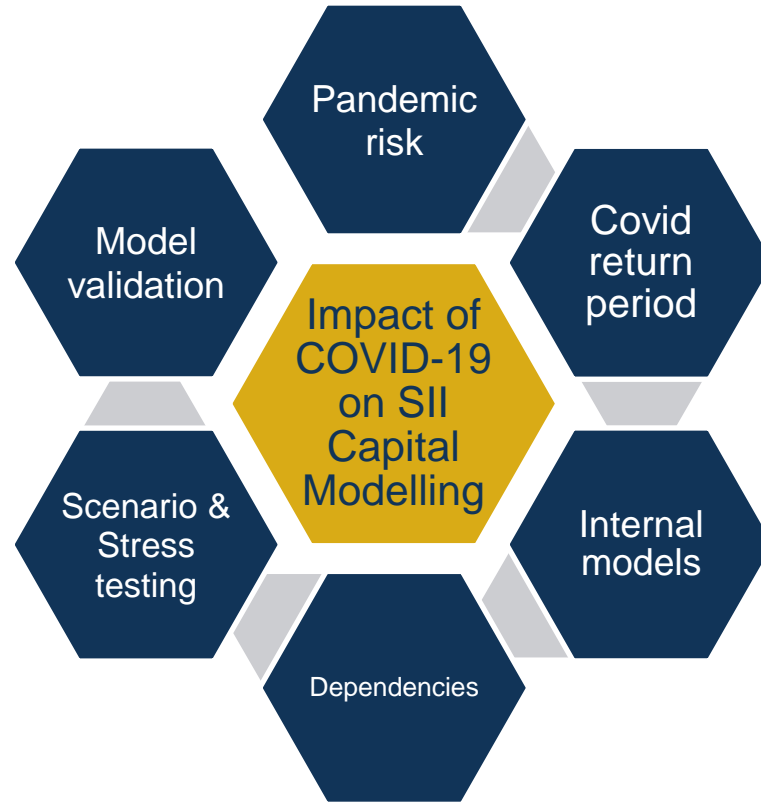
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# Impact of COVID-19 on SII Capital Modelling

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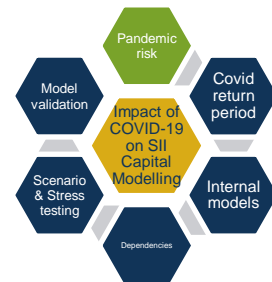
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# Impact of COVID 19 on SII Capital Modelling



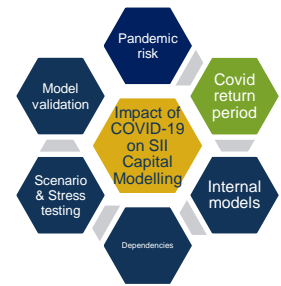


# Pandemic Risk



- Pandemic risk can no longer be ignored by GI firms.
- The frequency risk and severity risk of pandemics has increased rapidly in recent years, due to a variety of factors:
  1. Greater interface between humans and animals, increasing the chance of the first jump of a virus from animal to human
  2. Globalisation increasing the chance of a local outbreak becoming global
- Considering the severity risk, our ability to co-ordinate a response is key
  - Mitigation techniques such as masks, testing, quarantining
  - The next pandemic will be different from this one

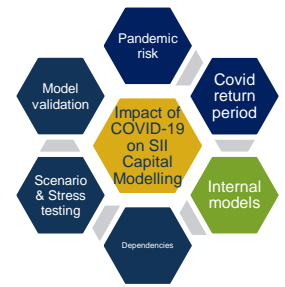
# Return period of Covid-19



- There were 5 near misses for a pandemic in the last twenty years:
  - SARS (2003)
  - H5N1 (2006)
  - H1N1 (2009)
  - Ebola (2013)
  - MERS (2015)
- Analysis of these near misses suggests the return period for Covid-19 is between a 1-in-10 and a 1-in-20 year event.
- Average of survey respondents: 1-in-50 to 1-in-100.



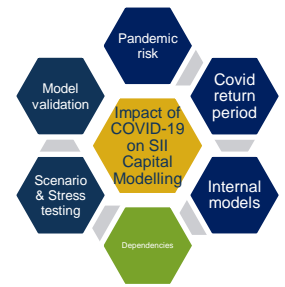
# Internal model implications



- Underestimation of the frequency and severity of pandemic events
- Underestimation of tail dependency
- Dependency between market risk and premium risk
  1. In terms of asset prices (specific asset spreads)
  2. In terms of interest rates
- Dependency within premium risk (between seemingly unconnected lines)



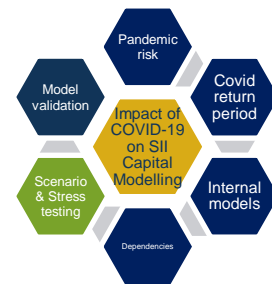
# Dependencies



- Covid-19 challenges us to revisit how dependencies are modelled
- Difficulty of modelling dependencies on a forward-looking basis can no longer be an excuse for not adequately allowing for dependency in the tail of the distribution. Possible solutions:
  - Capital model “ENIDs” – consistency with TPs
  - Benchmark to historic “surprises” -> the proportion of losses generated by known vs. unknown events should at least match historic proportion of surprises
  - Greater use of scenario testing
  - Greater focus on emerging risks, analysis of near misses

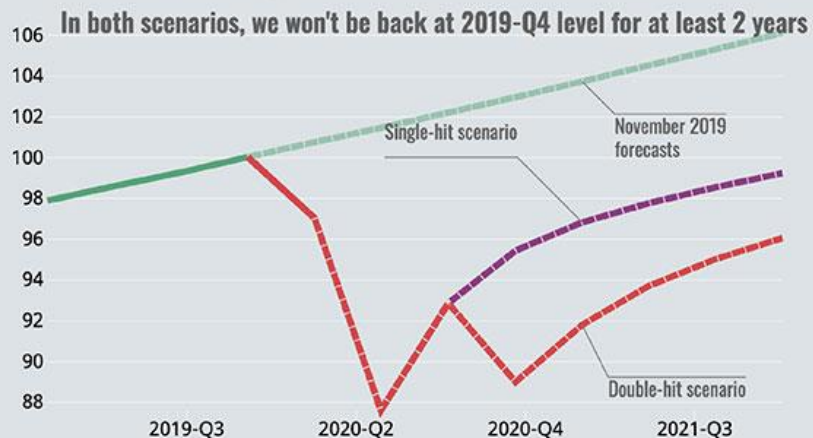


# Scenario Testing – economic outlook, vaccines



## A collapse in output followed by a slow recovery

World GDP, index 2019-Q4=100



Source: OECD (2020), "OECD Economic Outlook No. 107 (Edition 2020/1)", OECD Economic Outlook: Statistics and Projections (database).

Scenario testing should consider the economic impact of COVID-19 but also the potential of a second peak meaning there is an even slower recovery.

Other considerations:

- Will there be a vaccine in 2021 and to what extent will it be successful?
- Premium rate changes (hardening of some classes but lack of demand for other policies eg commercial property, travel)
- Additional impact of natural catastrophes – 2020 is already showing increased activity – does your current validation allow for combined COVID-19 and other catastrophe losses?

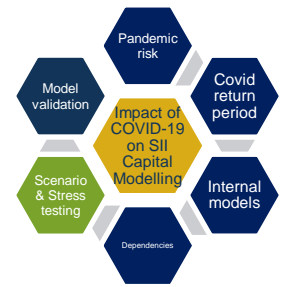
Source: OECD



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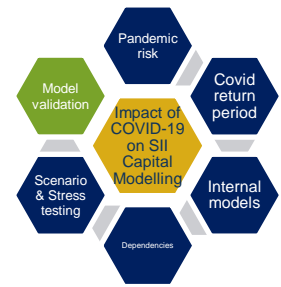
# Stress Testing

- Impact on investment returns
- Impact on investment volatility
- Reserve deterioration on COVID-19 affected classes
- Increased RI default
- Reduction in recoveries
- Stress test CoVs
- Operational risks / COVID-19 risks in risk register ‘near miss’



# Internal model validation

Regulators will expect detailed analysis on how COVID-19 has been tested within your capital models.



Component	COVID-19 Impact
Reserve Risk	Impact on each line of business and CoV's
Premium Risk	Although there is a hardening market and rates are increasing, affected classes will have inherent uncertainty and so change in IELRs and CoV's
Claims inflation	Increased claims costs, surge in demand since lockdown will increase claims inflation.
Market risk	Dependent upon asset strategy but given impending recession, volatile investment returns, potentially illiquid risks this will increase overall risks
Credit risk	Increased likelihood of RI default, reduced LGD
Operational risks	COVID-19 is now appearing on the risk register but will need to review the fqy/svty assumptions
Pandemic drivers	Considerations for how a large loss will affect multiple classes covering COVID-19





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# Financial Impact of COVID-19

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# Investment return and asset values

## Financial markets volatility & impact

- Asset side impact on (Re)Insurers capital positions have recovered from -30% at the March low point
  - MSCI ACWI is now +3% YTD, the impact is not consistent across geographies and markets
  - Government Bond yields have reduced significantly
  - Credit spreads narrowed since the March low point
- Impact:
  - Reduced yields and reinvestment rates
  - Requirement to improve underwriting performance to achieve returns in line with or greater than cost of capital
  - Ongoing uncertainty and outlook in the investment market – how is this reflected in capital projections?

## MSCI ACWI index – YTD %change\*

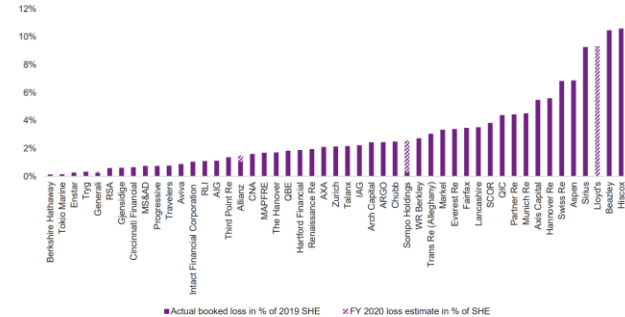


# Impact on solvency ratios

## Key Themes

- Solvency ratio decline (210% to 195% reported average)\*
  - Lower interest rates and credit spread are the drivers
  - COVID-19 related P&C losses – global market estimate \$30-\$100bn largely IBNR
- Capital actions prominent– equity raises, debt issue and reinsurance purchase
  - Lloyd's – 250% from 238% driven by accelerated capital raises
  - Hiscox – Significant capital raise following large BI and contingency loss exposure
  - Beazley – Significant capital raise following loss exposure across a number of classes
- Capital Actions include: Reinsurance traditional and structured, Debt issue and equity raises
- Knock on impacts to consider:
  - Capital Actions sustainable?
  - Policy exclusions
  - Underwriting guidelines

## Reported COVID-19 loss estimate\*



Source: Willis Re





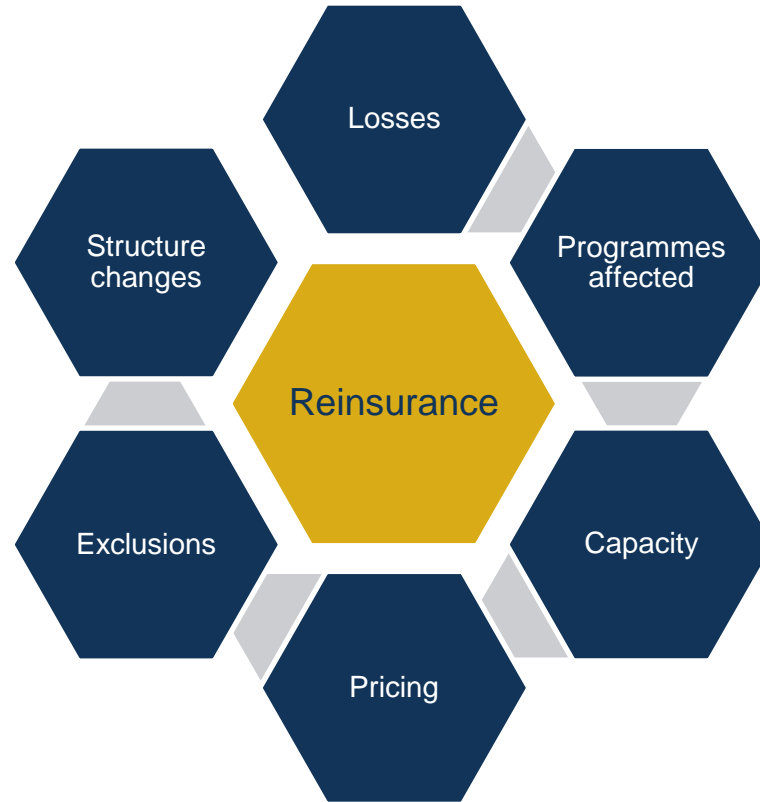
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# Impact of COVID-19 on Reinsurance

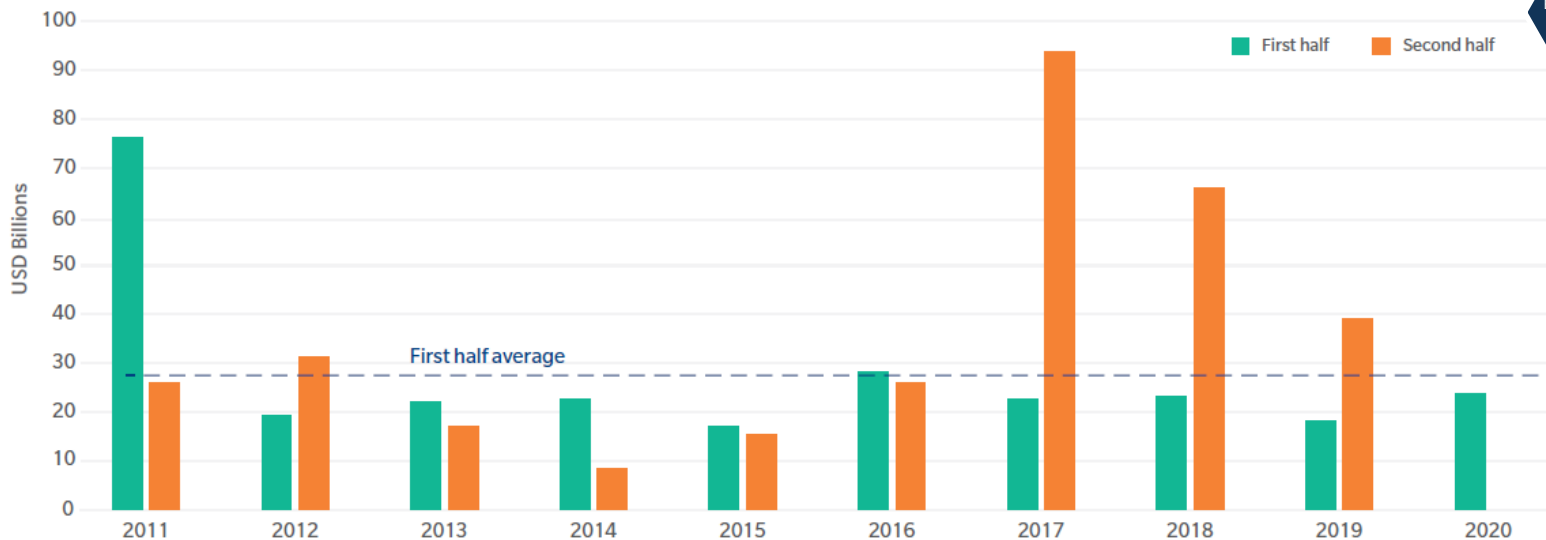
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# Impact of COVID-19 on Reinsurance



# Global CAT Loss Activity 2011 to 1st Half 2020



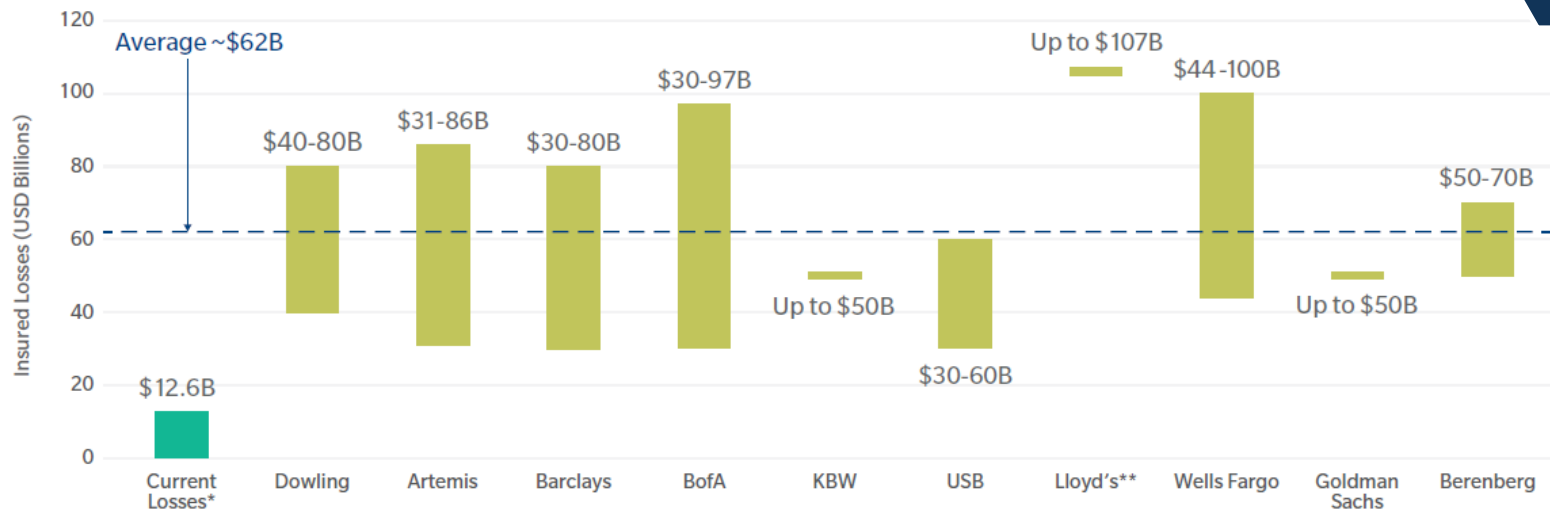
Source: Guy Carpenter

*Insured catastrophe loss activity was close to the 10-year average for the first-half of the year (excluding any CV-19 loss)*



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# COVID-19 Announced Losses vs. Industry Estimates



\*Represents consolidated CV-19 losses following Q1 2020 earnings, as of June 30, 2020.

\*\*Lloyd's estimate is for underwriting losses from CV-19. This includes claims as well as anticipated lower profits due to lower premiums.

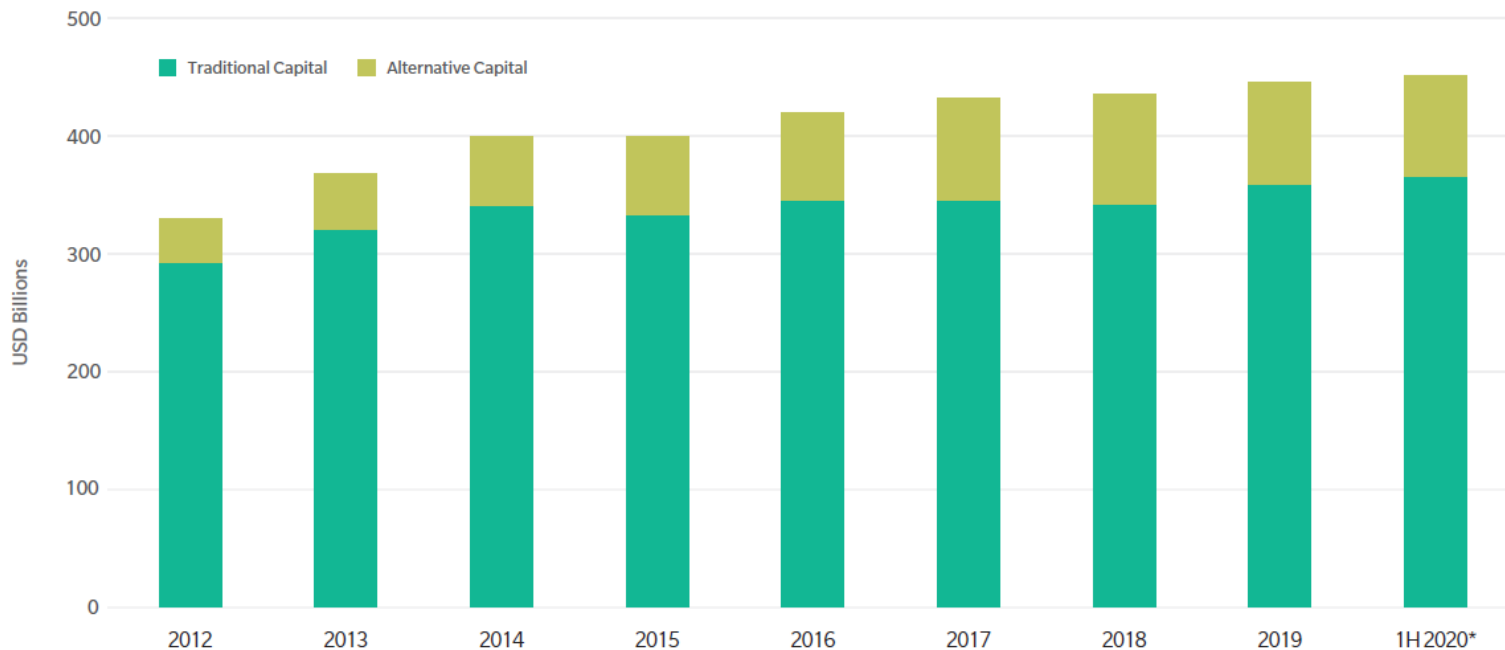
Source: Guy Carpenter, Various

*There is considerable uncertainty embedded in each COVID-19 loss estimate released to date. The current average of all reported ranges is ~USD 60 billion  
Recoveries depend on the design of the reinsurance programme*



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## Dedicated Reinsurance Capital



\*Estimated.

Source: Guy Carpenter, A.M. Best

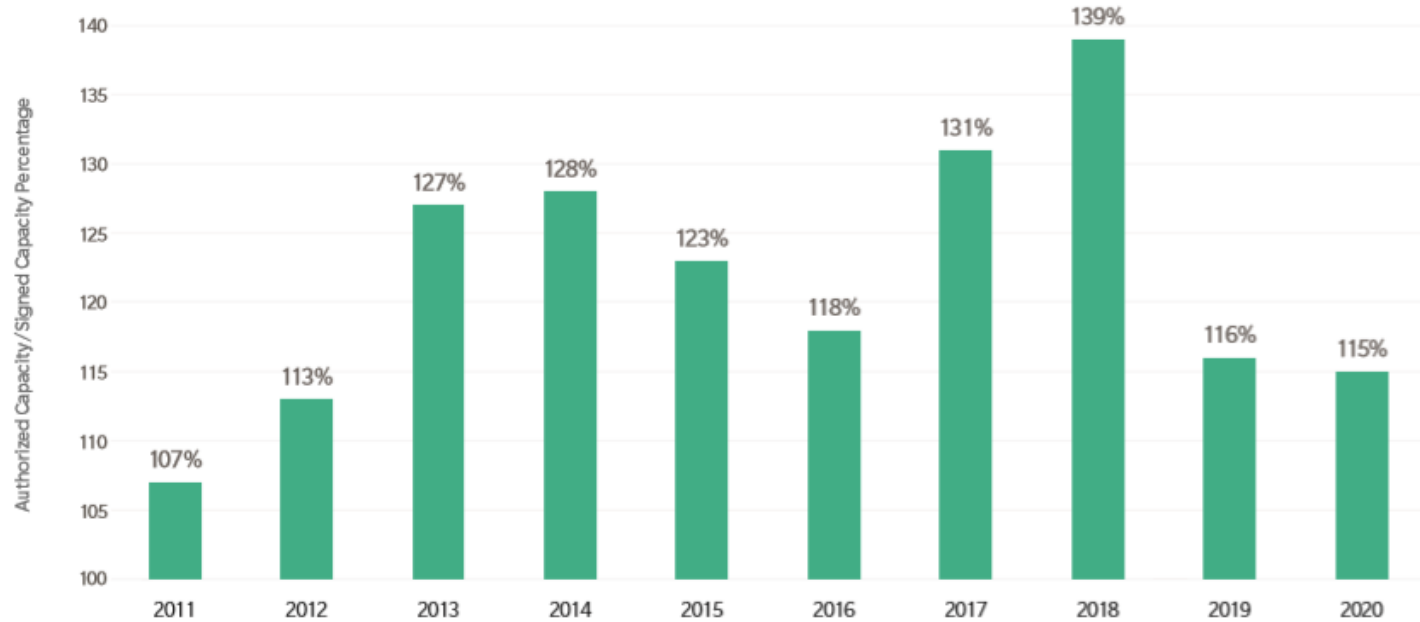


*A preliminary estimate indicates that total dedicated reinsurance capital was resilient at the end of the first half of 2020, increasing 1 percent*



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# Property Catastrophe Capacity Levels April to July, 2011 - 2020



Source: Guy Carpenter

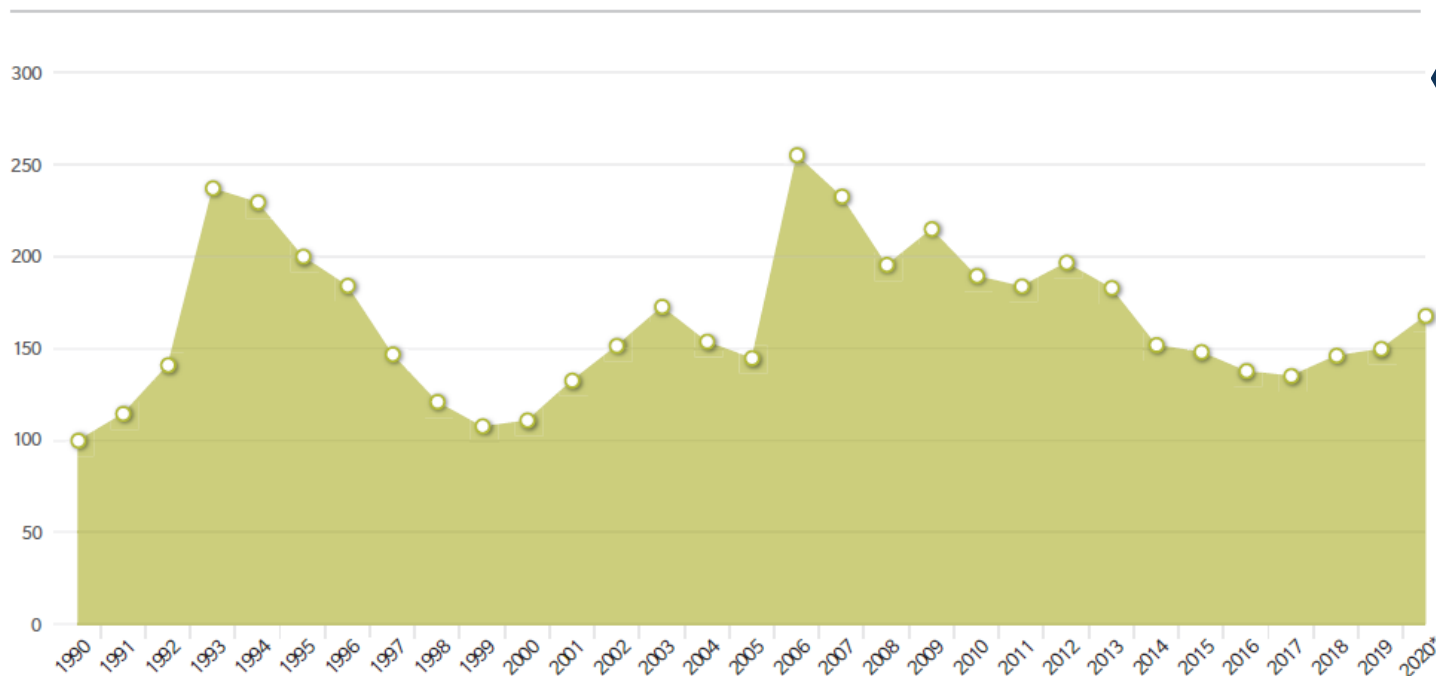
*While wind exposure is a focus at mid-year, virtually all lines experienced reduced authorized capacity*



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# U.S. Property Catastrophe Rate-on-Line (ROL) Index



\*Estimated.

Source: Guy Carpenter

*The U.S. property catastrophe ROL index for January through July renewals was up 12 percent year-on-year*



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# Mid-Year 2020 Reinsurance Renewal Typical Rate Changes



*Reinsurers exhibited increased scrutiny relative to deployable capacity post-COVID-19, resulting in notable average pricing adjustments across most lines of business*



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## Mid-Year 2020 Reinsurance Renewal: COVID-19 Impact on Renewals



Line of Business	Did the COVID-19 pandemic impact clients' renewals (price, terms & conditions, capacity, for example)?		
	Yes	No	Comments
United States Property	X		Communicable disease exclusions were required on all property programs. COVID-19 contributed to an acceleration in hardening market conditions that impacted pricing and capacity.
Latin America/Caribbean Property & Casualty	X		Main impact seen on price. A few markets were inflexible regarding LMA5394. There was a lower appetite for surety and financial lines.
China (Excluding Hong Kong) Property	X		Pandemic restrictions. Markets were more cautious in deploying capacity and had higher expectations on price and terms.
U.S. Financial Lines	X		Reinsurers had heightened concerns over increased litigation due to disrupted businesses and financial markets during the current economic environment leading to some hesitancy to deploy new capacity without significant pricing considerations.
U.S. Workers Compensation - Single Claimant	X		Pandemic on a per employee basis and higher pricing.
U.S. Workers Compensation - Cat	X		Pandemic exclusions/Limitations.
U.S. Umbrella / Excess Casualty	X		Coverage restrictions.
U.S. Cyber	X		Increased level of questioning from markets on claims, rate and underwriting impact.
International Casualty and Professional Lines	X		Reduced capacity and significant pressure on pricing.
UK Motor		X	
Global Aviation and Aerospace		X	
Global Construction & Engineering	X		Infectious disease coverage.
Global Credit, Bond & Financial Risks	X		Reinsurers were more cautious in deploying capacity in the deteriorating risk environment.
International Marine & Energy	X		Uncertainty caused by the absence of a market standard led to variations on a theme being required by markets.
Marine & Energy LMX	X		Reinsurers required exclusions.
U.S. Marine	X		A willingness from most marine & energy reinsurers to consider bespoke communicable disease exclusions. Some reinsurers were unable to offer any flexibility in wording, which resulted in their not being able to support programs.





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# Impact of COVID-19 on Policy Wordings

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# Policy wordings – FCA test case

## Why a test case?

1. FCA's aim was to get clarity for as wide a range of parties as possible removing roadblocks to successful claims, as well as clarifying those that may not be successful
2. Clarity to the COVID-19 coverage issues awarded in the FCA legal case by finding in favor of policyholder arguments on the majority of key issues out of the 21 different policy wordings considered by the court in the test sample.
3. Analysts estimate between £3.7 billion and £7.4 billion of claims could be on the line

## What did we gain clarity on?

- **Disease Clause**

Most, but not all, of the disease clauses in the sample provide cover.

- **Denial of Access Clause**

The Court's restrictive interpretation of the "Denial Of Access" wordings under review in the test case will be particularly welcomed by insurers

- **Causation and interpretation of Trends clauses**

The pandemic and the government and public response are being ruled as a single cause of the covered loss



# FCA test case – further clarity

1. Aggregation:
  1. **“Cause” trigger vs “Event”** - Aggregation clauses that use a “cause” trigger, as opposed to the more restrictive “event” language have greater prospects of successfully presenting a single claim arising from their Covid-19 losses.
  2. **Single catastrophe vs distinct catastrophes** - Argument that Covid-19 and the government’s response to it are **two distinct “catastrophes”**, vs Covid-19 and the government’s response to it amount to **a single “catastrophe”**. The Court has ruled this as a single cause.
  3. **By wording** - A related issue is whether losses arising from “disease”, “denial of access” and “hybrid” wordings can be aggregated for the purposes of reinsurance recoveries. The Court’s finding that the disease in the UK is **one indivisible cause**” (single cause) is therefore relevant.
2. **Damages for Late Payment:** insurers are legally obliged to pay claims in a reasonable time. Insurers liable for damages for failing to pay claims promptly, will likely look to pass on those legal liabilities to reinsurers.



# FCA test case - Uncertainties

1. Aggregation:
  1. **Territorial scope** - Many reinsurance contracts is not limited to the UK; and cover other regions. Cedants may seek to aggregate UK losses with those from other jurisdictions. The courts in other jurisdictions may reach different conclusions to those in the FCA test case judgment.
2. **Hours Clauses**: uncertain particularly in circumstances where BI losses have accrued over a period of several weeks and months
3. **Coverage** : Reinsurance contracts are structured to cover either “Natural” or “Non-Natural” perils. The general consensus is that Covid-19 originated naturally. Whether the government-mandated national lockdown, albeit arising in response to Covid-19, can be categorised as a “Natural” peril is open to debate.
4. The judgment does not determine how much is payable under individual policies (but will provide much of the basis for doing so).
5. In some cases, insurers have disputed liability



# Policy wordings – Impacts and considerations

## 1. AM Best estimates :

- Commercial property premiums account for approximately GBP 7.5 billion of the GBP 50 billion gross premiums written by UK.-domiciled non-life insurers
- Approximately 10% of commercial property premiums relate to business interruption extensions.

## 2. WTW estimates :

- UK insured losses together with event cancellation, could total up to \$14 billion.

## 3. Considerations:

1. Prospect of class action lawsuits against BI insurers due to perceived ambiguity of some policy wordings
2. The pandemic could see General Liability (and other lines) claims brought by third parties for bodily injury or property damage, resulting from an alleged unintentional or negligent failure to protect from the virus.
3. The challenges of navigating large claim exposures combined with a fall in the global equity markets, which has reduced investment return
4. Could the financial implications for insurers cause more onerous regulatory requirements? And how will capital, solvency, and stress-testing regimes change?





# Policy wordings – Impacts and considerations

1. Important to have best outcomes on language to ensure that losses for **non-pandemic contagious disease can be priced**, ensure that those are not unintentionally removed
2. Pandemic peril may be **more standardized** going forward
3. Insurers developing knowledge of what is included or not under the policy and **charging appropriately for these risks**, understanding where it makes sense to be **standardized vs bespoke**.
4. Track COVID-19 Coverage litigation in the US : <https://cclt.law.upenn.edu/cclt-case-list/>





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# Solvency II resilience

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# Solvency II resilience



# SII resilience

## Covid-19



- Covid-19 has presented a test of the resilience of Solvency II, in particular:
  - The impact on coverage ratios; and
  - Whether measures intended to mitigate the impact of financial market volatility have worked as expected.
- SII’s long-term guarantee package includes measures designed to provide insurers with relief in times of market stress. How have they borne out under Covid-19?
  - Overall, the **matching adjustment** appears to have performed as expected
  - On the other hand, the **volatility adjustment** has only compensated for some of the spread stress caused by Covid-19



# SII resilience

## Emerging risks



Solvency II makes provision for the identification and assessment of emerging risks through Pillar II via the ORSA. However, does it adequately address the following risks?

Cyber Risk

Climate Change



# SII resilience

## Level playing field



- Level playing field between SII insurers and other international insurers:
  - Greater flexibility for countries with **SII equivalence**, such as Japan and Bermuda
  - Differences in supervisory approach with respect to **Pillar II**
  - It has encouraged **migration away from certain products**
- Regulatory divergence between national supervisors:
  - Group Supervisors can **exclude certain undertakings from Group supervision**
  - A divergence in the exercise of **early intervention powers** both in the choice to exercise such powers and how they are exercised



# SII resilience

## Long-term sustainability & Policyholder protection



- Policyholder protection:
  - To the extent that insurance companies are **well capitalised**, SII has achieved this objective
  - In terms of disclosure, the general consensus is that **SFCRs** are not read by policyholders and that they are not easily understood by policyholders
  - **Solvency II 2020 review** includes a number of proposals aimed at improving policyholder protection
- SII impact on long-term financial sustainability of insurance companies
  - The **level of capitalisation** of insurers following Covid-19 is evidence of the long-term benefits of Solvency II to the insurance sector
  - However, Solvency II also has **unintended consequences**





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# Long term impacts of COVID-19

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# Long term Impacts..on Capital

1. According to S&P, the non-life insurance industry the **least likely to default**
2. Industrywide level of general insurance losses could exceed that resulting from the 2001 World Trade Centre event
3. There may be a new normal in terms of capital levels : Above the minimums on a regulatory basis but perhaps **not at the high levels seen during year-end 2019.**
4. Primary concerns of COVID-19 impacts with:
  1. Sustained period of low interest rates, entering a hard market
  2. Threats of global recession
  3. Small and medium-sized insurers more distressed than larger insurers – **M&A activity** and further consolidation
  4. **Trapped capital** : collateral due to higher catastrophe losses, and uncertainty with pandemic losses



# Long term Impacts...on the Industry

1. Market changes
  1. Re-evaluating investment portfolio mix, reconsidering hedging strategies, reviewing ALM approaches
  2. Switch back of retrocession coverage to **named-peril basis** to seek more precision and clarity in cover
  3. **New products** around pandemic risks
  4. More sophisticated or complex methods in capital models? E.g Environmental risk as **standalone risk type**, with zoonotic disease risk as sub-category
2. Multiple proposals for **public-private partnership programmes** are being considered.
  1. Losses from the coronavirus pandemic too high to be insurable in the private insurance market without substantial government support.
  2. E.g. FERMA's solution, ABI with Pandemic Re
3. **“Take-home” COVID-19 exposure**: Drawing parallels to take-home asbestos lawsuits, which were based on the negligence of the employers whose workers created secondary disease exposure for family members.



# Conclusion

## Has Covid19 had an impact on industry and regulatory approaches?

- **Yes** – specific areas include: *Technical provisions & Regulatory returns, Solvency II Capital, Reinsurance and Policy wording*

## Has Solvency II remained resilient in light of this pandemic?

- **Yes** – with respect to level of capitalization
- However, attention should be given on a case-by-case basis, and longer term impacts

## Next steps

- Monitor Covid19 impact and Solvency II resilience
- Publish report with **Survey results** (link included)
- *Revisit the implications of Brexit on Solvency II*



# Questions

# Comments

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# Still time to complete our Survey! Closes 20 November 2020

<https://www.surveymonkey.co.uk/r/SolvencyIIWP20>

