COVID-19

Initial Insurance Market Impact Assessment of the Pandemic

March 19, 2020 Update
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Introduction

As the situation in each country continues to evolve, we will look to provide our most up to date insights regarding the insurance and reinsurance market implications of COVID-19. Our coverage will include virus data updates and generalized insurance coverage impacts, but more directly regarding the potential considerations for coverage in current reinsurance placements, financial implications for insurers including the potential for M&A activity, rating agency implications, and thoughts regarding longer-term impacts to the industry as society continues to move through different stages of response to the COVID-19 pandemic.

As always, thoughts provided here are general and coverage for each insured and insurer of course will follow individual policy and contract language that should be reviewed on a case by case basis. The content here is meant for thoughtful consideration and is not meant to serve as a complete prediction of coverage or as a generalized coverage position, which should be formed in consultation with a party’s professional advisors.

In situations such as this outbreak where events are rapidly changing, it is often difficult to make generalized coverage or market assessments. Parties need to look at the specific terms of reinsurance agreements, the underlying insurance policies, evolving government and legislative actions and the unique facts and circumstances around each party’s position. As we have seen in the past, local, state and national governments may take certain actions that expand coverage or that otherwise apply pressure to industry participants to react to situations in an expansive manner. This publication and others published by Aon should be read with that understanding in mind and Aon reserves the right to modify its views on any subject addressed in this publication as events change and more information is made available. Please reach out to your Aon representative for specific individual contract treatment.

As a follow-up to this document, Aon will outline specific new product solutions for insurers as a response to COVID-19.
COVID-19 By the Numbers

As many are now aware, COVID-19 was notified from the Chinese authorities to the WHO on December 31. Seventy days later we have reached 220,000 diagnosed cases and close to 9,000 deaths attributed to COVID-19. It is important to note that the 220,000 figure excludes infected individuals who are not showing signs and therefore undiagnosed. It has been estimated that the actual infection figure is 10 to 100 times larger than this, i.e. more than 2 million infected individuals worldwide.

Plenty of media feeds cover the detailed figures behind this so we will stick to those statistics of most interest:

- The doubling time of the number of infected and deaths in a country ranges from 3-5 days once local transmission takes hold. At Aon, we create an initial model for a country or sub-population as soon as the spread is first reported, with the model being refitted and improved as each day of new data becomes available.
- Our modelling allows for the different lags between infection, symptoms, diagnosis and progression of disease. Average time from infection to death is currently estimated to be about 20 days, depending on country, which means the death figures you see now are from infections about 3 weeks ago. And by extension the actions we take now will not significantly impact the deaths until 3 weeks’ time. Assuming the doubling time above, 300 deaths are already in the system by the time a country reaches 10 deaths.
- Our model has particular focus on projecting those who progress to severe disease, requiring treatment in intensive care units (ICU), which we identified early on as being the critical pressure point on health systems. Hence the focus of many governments, health systems and commentators is on managing the country’s intensive care capacity.

Government Response Case Study Comparison

As the first territory impacted, the authorities in Wuhan instigated lockdown, with 8 hours’ notice, on 23 January when the extent of the exponential growth in infections became apparent. From then, it took 10 weeks to bring infections under control. Since infections drive sickness which in turn drives intensive care treatment and deaths, this draconian approach saved thousands of lives. Wuhan effectively had limitless resources, being able to build hospitals and ship in doctors and equipment from other provinces immediately. Interestingly they brought in doctors, but also hospital officials to ensure that everything worked efficiently.

In the exhibit below of severe cases, the escalation from the start of February through the peak in mid-February demonstrates the effectiveness of the lockdown approach. It is important to note that while the blue line diverges from modeled results in the early March timeframe, discussions with Chinese hospitals indicate that this is due to a reluctance in releasing patients in case they infect other people – so really a continued isolation rather than remaining severe cases.
While Korea had a very bad initial experience with one uncontrolled outbreak, they subsequently instituted very effective contact tracing with selective isolation and quarantine. This appears to have worked well and will continue to be effective for a much longer duration than a lockdown. The graph below shows confirmed cases rather than severe cases. Even with sporadic data and the impact of outbreak cluster churches complicating the national view, the tail off currently being experienced is significant.
Much earlier in the evolution of the pandemic, we look to projections for places like Italy. The development of daily reported number of deaths is still in a steep upwards trajectory as per the graph below. This follows the rules expressed above where the doubling time of deaths means that we expect the daily number of deaths to continue to increase for several more days until it is impacted by the effect of the progressive nationwide lockdown.

**Exhibit 3: Modeled vs Actual Cumulative Deaths in Italy**

![Graph showing modeled vs actual cumulative deaths in Italy]

Source: Data is calibrated from public information

Recent predictions – from representatives from the World Health Organization Collaborating Centre for Infectious Disease Modelling, the MRC Centre for Global Infectious Disease Analysis, and the Abdul Latif Jameel Institute for Disease and Emergency Analytics via the Imperial College of London – suggest that, with no mitigation impacts, loss of life in the U.S. could exceed 2 million people. Recent federal and state actions will hopefully mitigate this significantly.
Rating Agency Response

**Life & Health Sector Summary:** Accelerated declines in interest rates and equity valuation paired with global economic slowdown pose greater risks than sharp increases in claims. While S&P, Moody’s, AM Best and Fitch are continuing to provide research and commentary as events develop, we have not seen any rating actions taken to date as a direct result of COVID-19. However, AM Best and Fitch Ratings revised the US Life sector outlook to negative from stable, and Fitch followed on by publishing revised negative outlooks for the Dutch and Asia Pacific life insurance sectors as well. Furthermore, Fitch announced an upcoming series of downward outlook reviews for life insurers in the U.S and Asia Pacific, including China, South Korea and Japan, with certain insurer outlooks already revised to stable from positive. The agency expects that some life insurers with currently stable outlooks will be revised to negative and those with negative outlooks may be exposed to a near-term downgrade.

**Non-life & Reinsurance Sector Summary:** There is broad consensus across rating agencies that the impact of COVID-19 on primary property/casualty insurers will be limited, with the most prevalent frequency and severity increases expected from travel, business interruption, and event cancellation claims. The expectation for reinsurers is similar, though some of the rating agencies such as AM Best and Moody’s note that a more severe pandemic escalation could negatively affect reinsurance companies, particularly the larger global reinsurers.

**AM Best Summary:** AM Best recently reported that it is developing a pandemic stress test to measure the impact of COVID-19 on insurers’ balance sheets. The stress scenario will primarily focus on potential movements in risk-adjusted capital levels, investment portfolios and reserve balances, while also looking at other areas of risk. The rating agency is also extending the submission cutoff date for SRQs to May 1st from April 1st. Based on statutory data reporting as of year-end 2019 and Aon estimates, we believe that approximately 80 non-life insurance groups could suffer a 10 percent or greater decline in policyholders’ surplus from a 25 percent unrealized loss on common stock holdings under current equity market conditions. Additionally, we estimate that 16 insurers’ BCAR scores could drop by 10 or more percentage points under this same scenario.

Overall, the COVID-19 pandemic is a continuously-developing situation that is most likely to adversely impact life and health insurers. Aon is closely monitoring and keeping track of all new rating agency research and actions during this time and will provide relevant updates as necessary.

**Life & Health Americas**

All major rating agencies consistently acknowledge that the U.S. life and health insurance industry has experienced strong earnings and risk-adjusted capitalization, along with good mortality results in recent years. According to S&P’s analysis of its rated insurers, the aggregate capital redundancy is currently 10 percent at the ‘AA’ assessment level. Insurers have in place robust risk management frameworks and reinsurance strategies. Together with pandemic stress testing, which is included in enterprise risk management programs, these measures normally mitigate impacts of periodic outlier increases in mortality rates and allow stability in statutory capital.
However, now that the COVID-19 regional outbreak has turned into a global pandemic with expected severe macroeconomic ramifications, its impacts may negatively affect capitalization and credit quality of the sector. Those most likely to be affected include life insurers exposed to interest-rate sensitive or fee-driven business, health insurers covering a large percentage of at-risk individuals and medical stop-loss carriers. In contrast with this last opinion, it is important to note that in the pandemic modeling that Aon has done for some clients has indicated that the stop-loss market will experience manageable losses.

Regarding claims reserves, on March 12 and 13, 2020, S&P conducted and published the results of two hypothetical stress test scenarios. The first test encompasses an extreme mortality scenario based on the 1918 Spanish influenza. For life insurers, it resulted in USD52 billion in excess net mortality claims after tax, roughly equal to 12 percent of outstanding industry capital. For health insurers, this scenario would result in USD90 billion of medical claims required to be paid out from reserves. The second moderate scenario was based on the 1957 Asian flu and resulted in USD7 billion of excess net mortality claims after tax (2 percent of outstanding industry capital) and over USD30 billion in medical costs. Moody's stress scenario would expect gross pandemic claims to exceed 100 percent of US capital and life reinsurers would be more adversely affected by the pandemic than primary companies. With regards to investment assets, declines in both interest rates and equity valuations have already stressed market sensitive portfolios of all U.S. life insurers and increased volatility and earnings pressures across the industry.

On March 16, 2020, both AM Best and Fitch Ratings revised their outlooks for the US life insurance industry to negative. Although the agencies acknowledge positive impacts of credit spread widening and the life/annuity segments’ strong capitalization, improved liquidity and good risk management culture, they used the following factors as rationale for their revisions:

- Accelerated global economic slowdown that may last for extended period paired with declines in both equity markets and interest rates.
- Will impact life insurers’ earnings, reserves and capital; these factors include increased reserving due to assumption revisions and for embedded guarantees associated with variable and indexed annuities, pressure on net investment yields and interest margins, increased hedging costs, and reduced fee income due to reduced asset balances.
- Greater expectation of a longer path to sufficient improvements from record low levels for the 10-year Treasury-yield, as well as a flattened yield curve.
- Expected dampened earnings throughout 2020 for both spread and fee-driven businesses.

On March 17, 2020 Fitch Ratings also announced that it expects to soon conduct a comprehensive review of all ratings of U.S. life insurers and began taking rating actions on certain life insurers. Those with positive rating outlooks will be prioritized. The agency expects that some life insurers with currently stable outlooks will be revised to negative and those with negative may be exposed to a near-term downgrade.

On March 19, 2020 A.M. Best announced they are maintaining their stable outlook on the health insurance sector. Reiterating their views from March 6, 2020 that while health insurers face risk from three major types: claims, economic and operational; the credit implications will be disproportionality felt by the segment of the market that focuses at-risk individuals and medical stop-loss
EMEA

Rating agencies agree that European life insurers have solid capital buffers to withstand stresses from COVID-19 related claims, even though ultimate losses are not yet quantifiable. The industry is well equipped to manage these exposures, either by use of reinsurance or other mechanisms. The agencies quote low interest rates paired with increased market volatility as key stressors on insurers’ solvency ratios, because the SCR is highly sensitive to movements in interest rate risk and market risk.

Fitch Ratings believes that most European insurers have capital headroom relative to their ratings and they have well-spread debt maturities, which shields their ratings from temporary market volatility. However, prolonged market disruption could lead to downgrades. On March 17, 2020, the rating agency revised its outlook on the Dutch insurance sector from stable to negative on pandemic-driven increases in market volatility and economic recession risk. Although the sector is well-managed and well-capitalized in the short run, it will suffer from prolonged strains. Significant investment exposures to domestic residential mortgages aggravate the position in its life sector.

Moody’s has identified insurers with high dependence on savings policies that offer high guaranteed returns as the most vulnerable solvency ratios. On the investment side, although the overall credit quality of investment portfolios remains high, Moody’s expects insurers’ solvency ratios to be affected by corporate defaults across Europe. However, the agency believes the European insurance industry can absorb moderate shocks.

Asia-Pacific

Life and health insurance penetration levels have significantly increased since the SARS epidemic in 2003. AM Best expects that low case count, policy exclusions and governmental financial support will mitigate potential losses to life and health industries across South East Asia. However, the insurers will face material challenges brought by global economic slowdown and pressures from both credit and equity markets. Further to this, AM Best predicts that future reinsurance treaty wordings will include enhanced protection for epidemics / pandemics as a cat event.

S&P believes that capital buffers on rated insurers in Asia will remain sufficient at existing rating levels, although they will be narrower. In China, any negative impacts are more likely to be felt by smaller insurers without parental group support. Lockdowns and social distancing in China have affected traditional distribution channels of life policies and will have material negative impact on new business written in the near term.

AM Best believes the majority of Japanese insurers’ ratings are unlikely to change under the global financial market disruption because life insurers in Japan have been continuously building up capital buffers, and experienced solid mortality/morbidity profits and steady investment yields from well diversified bond portfolios, which should help them withstand the storm. On March 3, 2020, AM Best assigned a Stable outlook to Japan’s life insurance industry.
However, similarly to its previous day announcements relating to the U.S. life sector review, on March 18, 2020 Fitch Ratings revised from Stable to Negative its rating outlook for life insurance industry in Asia Pacific (including China, Japan and South Korea) and announced an upcoming comprehensive review of all ratings of APAC life insurers. This will include development of updated base and stress case rating assumptions. The rationale for revisions is consistent to that quoted for the U.S. life sector review. Those with positive rating outlooks will be prioritized. As of March 19, 2020, Fitch has already revised the outlooks for Dai-Ichi Life and Fukoku Life from positive to stable based on increased uncertainty from the global COVID-19 pandemic. The agency expects that some life insurers with currently stable outlooks will be revised to negative and those with negative may be exposed to a near-term downgrade.

Non-life & Reinsurance

In general, the rating agencies expect less impact from claims activity on earnings and capital for non-life insurers than for life insurers, though equity market volatility could significantly affect both. AM Best notes that some losses may arise from business interruption, event cancellations and travel restrictions, but that many of these policies explicitly exclude epidemics or pandemics from standard policies. Given the much higher cost of pandemic endorsements, there are low take-up rates on these kinds of riders, and event organizers that cancel for precautionary measures will likely not be covered by most contingency policies.

However, Best’s views the risks facing the life reinsurance industry as potentially higher than those facing the life and health industry, given greater exposure to mortality and morbidity risks. Prior to diversification, roughly 40 percent of required capital for reinsurers relates to mortality and morbidity risks.

Based on research published by S&P, COVID-19 should be manageable for the US and EMEA insurance industry. Despite an expected increase in claims frequency, most insurers and global reinsurers are not expected to take significant hits to earnings or capital. Particular lines of business noted by S&P to be most vulnerable to higher claims include aviation, travel, credit, and contingency / event cancellation insurance.

Fitch does not currently anticipate much financial impact on property/casualty insurers from COVID-19, though secondary effects on capital from fluctuations in stock markets may be a cause for concern. Travel and (contingent) business interruption insurance might experience somewhat higher claims frequency, but the only product of note that may drive materially greater losses is event cancellation insurance. According to Fitch, approximately 50 percent of surplus is invested in common stocks and equity-like alternative investments. Given a 20 percent decline in the stock market, non-life insurers would report pre-tax unrealized losses roughly equal to 10 percent of statutory surplus, resulting in lower but still adequate capitalization ratios. Additionally, interest rate reductions could mute investment yields going forward.

Moody’s also believes that the impact on commercial lines insurers will be limited, though trade credit insurers may experience an increase in claims linked to a significant global economic slowdown, driven by decreases in consumer spending and the loss of economic activity in China. Global reinsurers are expected to weather the storm barring very high severity levels, as evidenced by a stress-tested 1-in-200-year mortality loss scenario driven by a pandemic event. While potential losses would be significant, the event would be manageable relative to regulatory capital for large European reinsurers.
Insurance-Linked Securities Update

The COVID-19 outbreak has disrupted industry segments within the global economy and pushed nations to the brink of a recession. However, the impact on the ILS market is relatively muted given the limited cover placed for pandemic catastrophe events and the asset class’ fundamentals around diversification for investors. Catastrophe bond investors fully collateralize the limits they write, and that collateral is invested in some of the safest assets such as U.S. treasuries, limiting the impact from financial market volatility. The COVID-19 outbreak is likely to increase the demand for this cover as potential sponsors become more conscious of global pandemic economic risk and select markets look to be opportunistic in providing cover.

There is a precedence for securing pandemic capacity in the capital markets, as parametric catastrophe bonds set a strong framework for large corporations, across all sectors, to protect against such enterprise-wide risks, with the potential to share limits across other catastrophic events.

In 2017 the World Bank launched a catastrophe bond aimed at providing financial support to the Pandemic Emergency Financing Facility (PEF), a facility created to channel surge funding to developing countries facing the risk of a pandemic. The coverage provides parametric protection linked to the occurrence of specific pandemics.

The parametric structure helps eliminate the need for a proof of loss / revenue, while expediting providing the ability to rapidly receive recoveries in the event of deadly pandemics. Capital markets syndication helps to expand the availability of coverage, particularly during such straining times. While capacity is expected to be limited, we are working across Aon to explore demand and prioritize client interest.

Another precedence for securing pandemic capacity within the capital markets was the Atlas IX Capital Limited 2013-1 transaction that secured USD180 million of excess mortality protection covering pandemics, disease outbreaks, influenza outbreaks, earthquakes causing large loss of life, terrorist events, nuclear accidents, or an outbreak of war. The transaction uses a mortality index based on the U.S. Center for Disease Control (CDC). The mortality index is both gender-and age-weighted, and calculated for five two-year risk periods during a six-year span.

The following illustrative term sheet compares these two ILS pandemic solutions:

<table>
<thead>
<tr>
<th>Structural Feature</th>
<th>Parametric Example</th>
<th>Mortality Index Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covered Area</td>
<td>Pandemic Influenza: Worldwide Other Perils: IDA eligible countries</td>
<td>United States of American and District of Columbia</td>
</tr>
<tr>
<td>Covered Peril(s)</td>
<td>Pandemics from the following pathogens: influenza, coronavirus, filovirus, rift valley fever, nipah virus, crimean congo hemorrhagic fever</td>
<td>Pandemics, disease outbreaks, influenza outbreaks, earthquakes causing large loss of life, terrorist events, nuclear accidents or an outbreak of war</td>
</tr>
<tr>
<td>Trigger</td>
<td>Confirmed death threshold, geographic spread, rolling confirmed case count, minimum reporting period and a growth rate</td>
<td>CDC Mortality Index weighted by age and gender mortality</td>
</tr>
<tr>
<td>Reporting Source</td>
<td>The World Health Organization (&quot;WHO&quot;)</td>
<td>The U.S. Centers for Disease Control and Protections (&quot;CDC&quot;)</td>
</tr>
<tr>
<td>Modeling Firm / Calculation Agent</td>
<td>AIR Worldwide Corporation</td>
<td>Risk Management Solutions, Inc.</td>
</tr>
<tr>
<td>Term</td>
<td>3 years</td>
<td>6 years</td>
</tr>
</tbody>
</table>

Aon Securities has historically structured and placed multiple transactions in both parametric and index forms. The timing from initial launch to funding for either a parametric or index structure is two to four months.
Commentary by Lines of Business

The following provides commentary regarding five key elements across many major lines of business we see impacted directly or indirectly by COVID-19. These elements include coverage considerations for both primary policies and reinsurance transactions, initial considerations for longer-term industry impacts as well as evolving new products and services available to each lines of business. We encourage clients to reach out to your Aon representative on questions about any element of the following commentary. As reinsurance contract language is unique for each insurer, it is important that companies engage with your team directly to consider how your contract will respond in the event of several evolving loss parameters.

## Property

<table>
<thead>
<tr>
<th>Primary Loss Coverage</th>
<th>The trigger for any property insurance policy and resulting time element coverage is physical damage to insured property by an insured peril. Most property policies, including ISO, specific insurer forms and most manuscript policies, do not cover a loss resulting from a virus. There are select policies designed with specific industries in mind such as hospitality or retail that might provide coverage for the virus in clauses titled Loss of Attraction, Communicable Diseases, or Special Perils Business Interruption. The coverage is usually subject to a low sublimit and is often aggregated as well. In response to COVID-19, state legislators and regulators are increasingly and rapidly adopting policies and considerations that may directly impact primary coverage providers and existing policy language. As an example, the state of New Jersey in the United States has introduced A3844 which mandates that business interruption policies in force will be interpreted to include pandemic irrespective of the policy exclusions. The ultimate impact of these developments will not be known for some time but have the potential to flow to reinsurers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reinsurance Loss Coverage</td>
<td>Generally, property reinsurance contracts will follow the fortunes of the reinsured. Reinsurance contract language regarding judicial and regulatory invalidation may differ so individual contracts should be reviewed on a case by case basis.</td>
</tr>
<tr>
<td>Prospective Primary Market Impacts</td>
<td>Given the limited coverage in property policy forms, we do not expect the primary market to be materially impacted beyond the effects of the broader economic impact of the virus and the ensuing uncertainty and illiquidity of the financial markets. Longer term, there may be increased demand among insureds for endorsements or separate policies to provide business interruption cover for pandemics. New insights into the macro economic impacts of pandemics could allow for an opportunity for greater coverage expansion and purchasing of new lines of business within certain industries and classes.</td>
</tr>
</tbody>
</table>
Prospective Reinsurance Market Impacts

We expect the property reinsurance impact will largely be driven by broader macroeconomic trends. The zero-interest-rate environment will impact reinsurer access to capital and pricing requirements. Additional there may be scrutiny on client portfolios within specific jurisdictions as it relates to regulatory involvement.

New Solutions / Ideas

As the debt markets constrict, quota share and other forms of reinsurance will continue to be an accretive form of capital for insurers.

Retained earnings will be impacted by mark-to-market accounting and as a result they may have less appetite for risk. As such, providing reinsurance solutions to clients to reduce other forms of uncertainty will be important.

### General Casualty and Environmental

#### Primary Loss Coverage

**General Casualty**
The most likely scenario for a potential liability claim may be alleged negligence from failing to protect a customer and/or invitee from being exposed to the virus. However, general liability claims could include those from an employee’s family due to his/her workers’ compensation claim. These claims could arise from exposure due to the employer’s alleged failure to use reasonable care to protect workers and their families.

It is interesting to note that SARS and Avian flu crisis had little to no litigation in the U.S. Although the recent effects of social inflation in the U.S. could impact the result in this instance.

**General Umbrella**
Umbrella and Excess Liability policies typically do not exclude virus or pandemic. While they are not designed to include business interruption, they would cover bodily injury. As the disease becomes more widespread it will be harder to apportion liability in most cases.

Defense cost will still exist, especially for earlier cases where the “duty of care” is more central. Cruise ships are different where liability is much easier to establish.

Social inflation may add exposure on general liability policies since it was a prevalent topic prior to the COVID-19 pandemic.

**Environmental**
Except for specifically named items, like mold and legionella, insurance policies generally are not intended to cover bacterium, viruses, or other pathogens, including COVID-19. However, there could be potential exposure if virus and bacteria are covered as a “pollutant.”

Policies typically contain Communicable Diseases and Naturally Occurring Materials exclusions which usually apply to all applicable coverages.
1. For site/premises policies: They can offer disinfection coverage for certain types of locations, generally, at sub-limited amounts. This coverage only provides clean-up costs (no BI/PD) and is generally intended to only cover building-related illnesses (e.g. MRSA), not communicable diseases as COVID-19.

2. For services/contracting policies: A “Pollution Condition” must arise from covered Contracting Services or Professional Services for coverage to be triggered.

<table>
<thead>
<tr>
<th>Reinsurance Loss Coverage</th>
<th>For the most part, there are very limited, if any, exclusions for communicable diseases in general casualty reinsurance treaties.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prospective Primary Market Impacts</td>
<td>Our expectation is increased demand for pandemic products (forward looking, post COVID-19) and business interruption protections. Some insurers have already started modifying policy wording to include an exclusion for environmental policies.</td>
</tr>
<tr>
<td>Prospective Reinsurance Market Impacts</td>
<td>Most traditional liability reinsurers are not likely to be aggressive with new product development for the current event if there is any potential for significant tail, as they believe they are already struggling to maintain profitability in casualty.</td>
</tr>
<tr>
<td>New Solutions / Ideas</td>
<td>The ILS market has an opportunity to offer new capital into the tightening casualty reinsurance marketplace to support an ILW structured placement as the demand will likely materialize.</td>
</tr>
</tbody>
</table>

**Life**

| Primary Loss Coverage | While life policies in general typically include coverage (or no exclusion) for pandemics, mortality risk books of business overall (term, whole of life, and Yearly Renewable Term products) are not expected to experience significant losses. They are, however, anticipating higher claims in the older age population which is expected to be more severely impacted by COVID-19. For long-term disability policies, the waiting (or deferral) periods will likely mean that minimal claims will occur because the individual will have recovered or died during the waiting period. Short-term disability policies, on the other hand, may pay out significantly as claims will fall in the coverage period. Some life offices have instituted COVID-19 or cold/flu exclusions on claims for new policies. While some policies do provide respiratory related coverage, critical illness significant losses are not expected to materialize given the small percentage of claims this typically relates to and the survival definitions for claims and the fact that people have typically either recovered or die in a shorter period. Annuities, which pay if policyholders are alive and no longer pay after death, see some reserve releases (profit) because of earlier death of policyholders. |

| Reinsurance Loss Coverage | Coverage is expected to be provided under reinsurance contracts as pandemics are typically not excluded and cover follows the underlying policies cover. The amount of protection for life insurers is largely dependent on the country and proportion reinsured:  
  - Quota share treaties: loss proportionally reinsured with reinsurer (circa 99 percent of mortality risk is reinsured in UK and approximately 40 percent in US).  
  - Individual surplus reinsurance treaties: there are some claims, but socio-economic filter possibly means better medical treatment and a better outcome.  
  - Aggregate portfolio covers are not anticipated to respond as losses are unlikely to be more than 5-10 percent of expected mortality and hence claim definition not triggered. |

| Prospective Primary Market Impacts | Going forward, a small increase in volumes in the market is likely. Somewhat surprisingly, whole life protection (paying out on death), still seems to be available for people over 50. Premium holidays (option to delay premium payment) and adding free (or low cost) features to policies (such as hospitalization benefits) is still being seen in some geographies.  
  
The more imminent threat for life insurance companies is solvency positions which are heavily under stress driven largely by interest rate and credit spread movements, and less so from equities. |

| Prospective Reinsurance Market Impacts | The main life reinsurers remain open for business for traditional proportional business, but not for non-proportional reinsurance. Specialist non-proportional reinsurers continue to write pandemic protection orientated reinsurance but price increases expected. While the initial response from reinsurers has been talk of exclusions, we expect this stance to evolve as the impact of the pandemic unfolds. |

| New Solutions / Ideas | Recently, insurers have been focused on innovation in two areas. The first is health coverage and innovation here will need to be customized to each country given the differences in healthcare systems. The second focus is on how to help people maintain coverage throughout the upcoming months as job loss and other economic fallout impacts global individuals.  
  
In order to support insurers being the most responsive to the needs of an evolving policyholder base, it’s imperative that the reinsurance market react with innovative solutions that include ongoing coverage for pandemic risk. |
Health – Americas

| Primary Loss Coverage | The U.S. has an expansive health system, with a variety of product offerings (ancillary, individual, employer group, senior) and a wide spectrum of entities bearing the risk (insurance carriers, health plans, employers, providers, captives, government). The market remains less concerned about severity of large claims emanating from COVID-19 (albeit knowing they will happen), and more concerned regarding frequency and overall claims spend. That said, increased utilization from COVID-19 could be offset by decreased utilization of elective services. The U.S. Surgeon General recommended that hospitals stop performing elective procedures to prevent the spread of the virus and preserve capacity in hospitals (i.e. equipment, rooms and staff), obviously a concern being the ability of our U.S. healthcare system to effectively care for patients should the infected population fall closer in line with higher estimates. Hospital Emergency Preparedness plans in motion, addressing concerns on providing appropriate levels of care (i.e. staff, equipment, space). Increased use of Telehealth, and other access/care discussions, have called into review Federal and State regulations around care and data. Concerns center on increased utilization from COVID-19 and the potential stresses that could be placed on medical loss ratios and revenue cycles. |
| Reinsurance Loss Coverage | The main reinsurance coverages issued today are:  
- Per person excess of loss for severity concerns  
- Aggregate stop loss for frequency concerns, and  
- Quota share for capital and RBC concerns  
For now, reinsurers are less concerned about COVID-19 severity (catastrophic claims) as typical Per Person reinsurance attachment points are 250K and up (varying by product line). More concern centers on aggregate stop loss covers due to the estimated increases in utilization. Reinsurance contracts typically have not excluded pandemic coverage. Emergency preparedness plans instituted by the U.S. Government are leading to questions on how claims will be handled should services be offered by non-certified facilities and personnel. |
| Prospective Primary Market Impacts | Increases in total claims/costs could cause an increase in industry medical loss ratios, which could put pressure on rates. This will vary by product line. Hospitals could also face pressures should revenue from COVID-19 related care not match lost revenue from delayed or cancelled elective services. Additional concerns center around provider owned health plans where the hospital is the parent. **Concerns by Product Line:**  
- **Employer stop loss:** Where employers self-fund their employee’s health benefit plans. This commonly involves a specific excess coupled with an aggregate feature. Insurers/reinsurers seem less concerned on “catastrophic” specific claims, and more so over the Aggregate stop loss. Claim concerns vary by segment: less so with middle to large group due to higher specific attachment points, and more so with small group (including level funded which is a hybrid between traditional small group fully insured and self-funded) due to lower attachment points. The level funded product has been used to help small groups transition from fully insured to self-funded (coverage expansion due to plan benefit modifications). |
Medicare/Medicaid: These are the two key government funded plans, for the elderly and the poor respectively. Typified by older and/or less healthy population, high utilizers and individuals with compromised immune systems being more susceptible to COVID-19. Increased fatalities could work to reduce overall increased medical spend, not just spend associated with COVID-19

First dollar and state exchange: there will be increased utilization and overall claim spend, leading to a frequency issue rather than severity

Hospital Indemnity/Gap Medical: increased utilization should drive increased claims, loss ratios and potential increased rating methodologies.

Prospective Reinsurance Market Impacts

Signs of a harder market began at January 2020 renewals with higher rates (excess of loss) and ROL’s (aggregates) combined with an increased effort to adhere to standardized trend, leverage trend, and profit margins. While the reinsurance market is not expecting a significant loss out of this event, we would expect reinsurers will continue to push for upward rate movement, some due to COVID-19, others due to the amount of high costing specialty drugs.

New Solutions / Ideas

While concerns exist, most still believe COVID-19 will be a non-event to the health reinsurance market, with a majority of the increases in overall claims and loss ratios being absorbed by the insurance market and employers. Insurance and reinsurance companies already provide products/coverages that include care for pandemics, with most incorporating unlimited coverage limits, something the market adopted back in 2010 when Healthcare Reform Affordable Care Act legislation was passed.

Opportunities will center on new aggregate stop loss, capital/surplus relief, and potential revenue strategies.

Government and state de-risking solutions/offering will be high priority.

Health – UK / EMEA

Much of the EMEA region has a social healthcare system which is sometimes supplemented by private health insurance. Typically, top-up plans offer modest limits, but faster access to specialist care.

Though COVID-19 is a ‘Health’ event, it is having a modest impact on private health insurance because of limited beds (particularly in ICU) and insufficient ventilators. There are also no expensive drug regimens to administer.

While the healthcare system focus has been on containing the virus, a side-effect has been that general utilization has reduced. In other words, people are not attending clinics or hospitals unless they absolutely must.

Hospital stays are also longer than normal; the average being 23 days from onset to recovery or death.
<table>
<thead>
<tr>
<th><strong>Reinsurance Loss Coverage</strong></th>
<th>In addition, it is an older population cohort that is most severely impacted and over age 70 are not typically covered under corporate private health schemes.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risk strategies involve per person excess (risk excess) covers for severity claims (high individual claims). These are unlikely to be triggered.</strong></td>
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<tr>
<td><strong>Aggregate stop losses which typically address frequency claims and as outlined above, increased frequency of ‘flu’ claims are largely offset by reduced utilization for other conditions that are not life-threatening.</strong></td>
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<tr>
<td><strong>Quota share is more frequently used for capital optimization purposes.</strong></td>
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<table>
<thead>
<tr>
<th><strong>Prospective Primary Market Impacts</strong></th>
<th>A major concern for primary insurers will be where governments designate schools/sports arenas as temporary medical facilities. If this occurs at a high level, the implicit cap that existed due to hospital ability on medical treatments would effectively be removed.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ironically certain plans which are guaranteed issue and have been struggling because of under-estimating healthcare trend, will undoubtedly benefit if a meaningful portion of insureds who are older and have underlying health conditions are unable to survive COVID-19.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>On a more positive note, there is thoughtful discussion around the increased role that private insurers might play to support overstretched public health systems.</strong></td>
<td></td>
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<table>
<thead>
<tr>
<th><strong>Prospective Reinsurance Market Impacts</strong></th>
<th>So far these are limited. We expect an increased interest in the availability of stop-loss covers and likely increased focus on capital strategies.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As significant as the underlying issues with medical costs are, the impacts of lower interest rates and less investment income against higher healthcare trends will drive prices higher. These higher health prices will impact portfolio balancing and diversification.</strong></td>
<td></td>
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</tbody>
</table>

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<thead>
<tr>
<th><strong>New Solutions / Ideas</strong></th>
<th>Much of the new primary products are low cost, low limit, or ease of access products. There is little obvious risk impact, but potentially significant capital balancing strategies must be developed.</th>
</tr>
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<tbody>
<tr>
<td><strong>We expect government de-risking will be a significant local topic of conversation.</strong></td>
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</table>
## Workers’ Compensation

| Primary Loss Coverage | Workers who contract COVID-19 during the course and scope of employment may find workers’ compensation coverage to apply. While each jurisdiction is different regarding workers’ compensation and communicable disease claims, the general rule is that the matter would likely not be deemed compensable if the employee was considered at no greater risk than the public. However, if a worker can confirm the exposure is through his/her work, and proves the condition was contracted in the course and scope of employment, then any subsequent lost time, including the period of absence required during the quarantine/monitoring period, could be deemed compensable. |
| Reinsurance Loss Coverage | Typically, workers’ compensation reinsurance contracts do not specifically exclude pandemic or communicable disease, so there is likely coverage for COVID-19-related losses unless other reinsurance contract exclusions or limitations apply. The mechanics of the recovery under individual contracts may vary based on how the term “occurrence” is defined. Ultimate determination of coverage and associated reinsurance coverage amounts will likely take time to fully emerge. |
| Prospective Primary Market Impacts | Having no experience with pandemic events, we expect COVID-19 to present new challenges for the workers compensation sector. Each state and class may present unique issues regarding the requirement of course and scope of employment. |
| Prospective Reinsurance Market Impacts | As we move past the threat of COVID-19, carriers will likely seek new ways to address pandemic exposures to workers, creating new coverage demand and growth opportunities for the reinsurance market. |
| New Solutions / Ideas | Aon’s analytics team will continue to monitor and model pandemic losses and exposures to establish new alternatives to manage and reduce this unexpected volatility to our clients. |

## Retro

| Retro Loss Coverage | Retrocession transactions tend to focus on natural perils although exact coverage for COVID-19 related claims will vary by policy wording and underlying exposure profiles. Specifically, for each line of business:  

For per risk retro, there would typically need to be coverage (or non-exclusion) within the original contracts as well as within the retro placements to see coverage for events. It is further expected that an accompanying property defined loss would need to occur for these covers to trigger. However, there may be some wordings which are more ambiguous and do not exclude specific coverage for this nature.  

Coverage on property catastrophe excess of loss treaty retrocession is usually subject to the peril and class of coverage defined in the contract which will focus on natural catastrophes specific to property losses. |
For whole account deals, especially on an aggregate basis there are often specific writebacks for non-property classes however almost universally these are sub-limited well below the aggregate deductible and on their own (even with multiple events) would be unlikely to trigger the contract. For many of the contracts a property catastrophe loss would need to occur during the same risk period to impact the program.

ILW contracts are universally triggered via a third-party index for natural perils only therefore we expect limited impact to this product specifically from COVID-19 claims.

For proportional treaty placements, coverage will likely be limited to the perils in the slip which will focus on natural perils only. In some cases, an all perils type cover is provided or there is an extension to include cover for other exposures like SRCC which may occur or be related to COVID-19.

Proportional whole account programs will include exposure which covers COVID-19 however while the loss ratio of impacted classes could be significant on their own basis (potentially more than 100 percent loss ratio), the overall impact to the proportional retrocession treaty is expected to be within a normal range. The majority of the whole account programs will include extensions for marine and aviation which will be economically impacted. Many of these coverages through to the retro market will be on a per interest / per vessel basis and aggregation may be an issue. Furthermore, it seems that potential claims are relatively well spread among the insurance industry.

Catastrophe on direct and facultative for Lloyds Syndicates tend to follow the underlying policy terms however will also be limited to the description of the peril coverage within the retrocession slip. This is usually on a natural catastrophe property only basis however business interruption and contingent business interruption will undoubtedly have an impact through this class subject to the terms of the original policies requiring an accompanying property loss to trigger recovery. Coverage also typically requires physical damage although select occupancies such as hospitality or retail, might provide coverage for COVID19 on an aggregate sublimit basis, after the application of a policy indemnity period. For BI and CBI specifically, the requirement for physical damage loss would extend to civil authority coverage (i.e. access to the property is limited because the government has ordered closure or has instructed limited access). However, many property commercial policies began including pandemic exclusions after SARS, MERS and/or Swine Flu so the breadth of this coverage will vary.

Prospective Retro Market Impacts

Despite the potential recovery impact to the market being minimal, we are seeing some markets specifically exclude any nature of COVID-19 cover effective immediately for April renewals.

More broadly across the retrocession segment the legacy of COVID-19 will be felt for many months to come. ILS capacity accounts for approximately 65 percent of the USD20 billion marketplace and disruption to capital maintenance and further raising through the year will have a direct impact on pricing and supply. The excess of loss retrocession market is heavily geared to January renewals (circa 75 percent of the annual limit) and April (circa 15 percent) suggesting as the market evolves over the next few months it will only impact a small percentage of buyers. For proportional buyers, this segmentation is even
more dramatic, with nearly 95 percent of the limit traded at January. That said, 9 months of risk period remains and markets will be extremely sensitive to any catastrophe event during this time. In addition, while traditional balance sheets / rated reinsurers have been expanding their position in the retrocession market over the last few years, it is uncertainty how they will react to margin requirements driven by the volatility on their asset base and a stress to their ability for leverage via ILS capital.

Contingency

<table>
<thead>
<tr>
<th>Primary Loss Coverage</th>
<th>A typical cancellation and abandonment policy is an all risks policy with several standard exclusions of which Communicable Disease (CD) is one. For a claim to be valid, the cancellation needs to be ‘necessary’ and beyond the control of the insured. CD is dealt with generally in three different ways:</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>1. On smaller policies and most binders it is excluded.</td>
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<td></td>
<td>2. For medium size risks, CD is sometimes offered as a buyback. When this happens, the exclusion is typically left in and a ‘notwithstanding the CD exclusion’ endorsement is added to the policy that will give cover for an actual event but not for fear or threat.</td>
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<tr>
<td></td>
<td>3. For large global events the exclusion is completely removed giving cover for fear and threat etc.</td>
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<tr>
<td></td>
<td>Many events currently have not been cancelled but postponed and this will produce a lesser claim amount when but more importantly if the events are staged. On average, approximately 10 percent of an insurer’s portfolio of event cancellation business will have CD coverage.</td>
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<tr>
<td></td>
<td>Many previous loss notifications received by cedants to this point are not covered as they have not been ‘necessary’ but have been responding to fear/threat. Since the end of last week, the position regarding fear and threat has changed quickly as governments worldwide have started to order the cancellation of events either directly (France) or by other means such as withdrawing emergency services support from events (UK). This will now produce claims under part 2 above and we expect these to be substantial.</td>
</tr>
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<table>
<thead>
<tr>
<th>Reinsurance Loss Coverage</th>
<th>Most cedants were more concerned about their aggregation on trade show cancellation business (particularly in the U.S.) than the cancellation of large sporting events. The larger and more established writers of event cancellation will be hit hardest as they have the most exposure.</th>
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<td></td>
<td>For many of our clients, the hours clause has been removed from the event definition making aggregation potentially easier but reinstatement potentially harder.</td>
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</table>

| Prospective Primary Market Impacts | Currently the primary market is looking to exclude all CD (not just COVID-19) and going forward we could possibly see primary CD cover being placed separately. There is already substantial demand from primary clients for this cover. |
| Prospective Reinsurance Market Impacts | Immediate responses to date have been to exclude CD in coverage, but it’s too early to tell how the market will evolve as the impact of the pandemic continues throughout the following months. |

**Travel Insurance**

| Primary Loss Coverage | Travel insurance coverage typically provides for low limit travel benefits for cancellation, curtailment, abandonment and delay. The maximum benefits are usually no greater than GBP 5,000 as an absolute max for cancellation and GBP 250 per day for travel delay. At this point, while travel medical coverage is available, many are interpreting that this exposure is limited. |
| Reinsurance Loss Coverage | Travel books have often gone un-reinsured. Where coverage has been provided within personal accident catastrophe excess of loss towers hours clause are often not appropriate. The resulting impact is that there are many writers of global travel business who have no coverage for COVID-19, or extremely limited / not transparent cover within personal accident contracts. |
| Prospective Primary Market Impacts | We are seeing temporary retraction of capacity for cancellation benefits where the trigger is travel advisory by the FCO (Foreign Commonwealth Office). Some insurers have declined pandemic claims as they do not fall within designated notification periods (e.g. can only cancel your holiday and recover if a pandemic is declared seven days before you are due to travel). Anticipating potential involvement of the Financial Ombudsman here, insurers could be forced to pay claims technically out of scope in the policy wording. |
| Prospective Reinsurance Market Impacts | Expect to be minimal now due to the above. Travel specifics have been purchased less and less as ceded re functions look to make savings in the soft market we’ve been experiencing in A&H. |
| New Solutions / Ideas | Three solutions should likely be considered by travel insurance writers. |
| | 1. a COVID-19 travel cancellation aggregate excess of loss |
| | 2. a contingent coverage to protect against cancellation claims resulting from a second COVID-19 pandemic wave |
| | 3. a more forward looking all perils travel aggregate excess of loss excluding COVID-19 |
### Marine

<table>
<thead>
<tr>
<th>Primary Loss Coverage</th>
<th>P&amp;I</th>
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<tbody>
<tr>
<td>Cover remains intact during the virus outbreak. Owners liability for crew illness and death includes medical treatment and repatriation. If death occurs this would include compensation, repatriation of the body and funeral expenses.</td>
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</tr>
<tr>
<td>Owners liability for passenger illness and death (assuming the virus was contracted while on the ship) will include medical expenses and compensation for illness or death.</td>
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</tr>
<tr>
<td>No coverage is typically included for prospective commercial losses should a vessel be quarantined or a cruise cancelled.</td>
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</tr>
<tr>
<td>Owners liability for illness or death of persons ashore (where they are infected by a virus from persons on board the ship) is unlikely to be an issue during a global pandemic as owners would argue Force Majeure.</td>
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<tr>
<td>Owners liability for quarantine and disinfection expenses and fines may be levied by authorities towards an owner or individual crew for bringing disease to a port or failing to comply with certain health obligations (absent of recklessness).</td>
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</tr>
<tr>
<td>Hull</td>
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<tr>
<td>Coverage is not directly provided under a normal hull or loss of hire policy. There is potential for indirect effects if capacity in ship yards is reduced which may impact repair prices – a large proportion of steel repairs currently take place in China.</td>
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<tr>
<td>Under extended loss of hire policies there may be direct cover for time lost due to virus outbreak – e.g. via quarantine. That said, extended loss of hire is not generally purchased for cruise vessels as the day rate would require too much capacity and/or be cost prohibitive.</td>
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<tr>
<td>There is also the potential that should vessel usage decline substantially, we will see a high number of ships laid-up. This may result in greater exposure on a multi-hull basis to natural catastrophes or fire should they be moored close to one another. Insurers have protocols which must be followed should a vessel be laid-up and we would expect these to be adhered to.</td>
<td></td>
</tr>
<tr>
<td>Cargo</td>
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<tr>
<td>There has already been a significant impact already on global transport and supply chains. Limitations on available workforce should the crisis deepen further will exacerbate the disruption.</td>
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<tr>
<td>Most cargo and stock throughput policies exclude loss or damage caused solely by delay. Additional costs/charges – hold-ups and costs associated with re-routing goods to an alternative destination due to government prohibition are likely. Policies are often sub-limited for costs sustained in this way. Perishable items such as pharmaceutical products and food produce may be particularly sensitive to transit delays.</td>
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<tr>
<td><strong>Energy</strong></td>
<td>Direct impact upon this sector in an insurance capacity appears unlikely. While there will be immediate impact on the U.S. shale oil production, as well as short-term deployment of contractor vessels, current (extremely suppressed) oil price levels are likely to be a short to medium term event.</td>
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<tr>
<td><strong>Reinsurance Loss Coverage</strong></td>
<td>In-force contracts have no exclusion for Contagious Disease claims and reinsurers would expect to cover losses incurred by the direct market. While individual claims are unlikely to result in reinsurance program collections, this may be different if aggregated as one or more event(s). Forthcoming renewals are already seeing a requirement by reinsurers for the exclusion of COVID-19 related claims. The majority of marine and energy programs are placed on a Losses Occurring During basis, therefore contracts renewing soon are unlikely to have coverage for exposures written prior to the outbreak of the virus.</td>
</tr>
<tr>
<td><strong>Prospective Primary Market Impacts</strong></td>
<td>With several quarantined vessels, major cruise vessel operators have seen more than 70 percent wiped from their share values. Claims due to passengers are likely however liability for wider infection borne by cruise operators would likely be denied as COVID-19 would be viewed as a force majeure event. At present, two passengers who had travelled onboard a cruise ship are suing the cruise operator for emotional distress, trauma and the fear that they will develop COVID-19 due to having been quarantined on the ship. Cargo and cruise ships are being denied access to ports where there are contagion fears which may give rise to costs associated with their re-routing and possible decontamination expenses. There may also be a substantial downturn in global shipping if the receiving of goods can’t be guaranteed at destination.</td>
</tr>
<tr>
<td><strong>Prospective Reinsurance Market Impacts</strong></td>
<td>Slower Port transit may lead to significant dockside / warehouse exposures, greater than that which we would normally expect to accumulate. If COVID-19 related claims can be grouped as one or more event(s), this may be sufficient to give rise to reinsurance market claims. Standard marine excess of loss wordings require claims to be unified by time, distance and cause. However, there is precedence for this requirement to be overridden by major events.</td>
</tr>
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### Aviation

| **Primary Loss Coverage** | Aviation insurance predominantly covers physical damage, injury. Policies would only respond to COVID-19, if it could be proven that the proximate cause/infection was while on an aircraft or at an airport and as the virus continues to spread, the expectation is this would be extremely difficult to prove. |
| **Reinsurance Loss Coverage** | Aviation proportional reinsurance policies are would likely respond on a follow the fortunes basis. Aviation non-proportional policies respond to a physical damage loss, so they are not expected to respond to COVID-19. |
| **Prospective Primary Market Impacts** | A significant impact is expected for airlines, product manufacturers, airports, and other related industries. This will likely to result in Airlines seeking alleviation of insurance premiums on their current policies. This result could mean significant premium income reductions for insurers. |
| **Prospective Reinsurance Market Impacts** | Cedants are likely to request reduced minimum premiums from reinsurers. |

### Cyber

| **Current and prospective primary market impacts** | The COVID-19 outbreak has created an unexpected switch in the way we conduct day to day business. Self-isolation, work from home policies, and limitations on in-person meetings have created a heavier-than-usual reliance on virtual and electronic channels. In addition, employees are also looking to those channels for information, advice, and for solutions to the evolving practical challenges they’re facing. For more specific advice about risk management techniques around preparedness and resilience, read [Aon’s recent publication on social engineering and COVID-19](#). In addition, cyber criminals always will seek to exploit peoples’ fears and vulnerabilities in systems, and the COVID-19 pandemic has created ongoing opportunity for cyber attacks, such as the attempt on the U.S. Department of Health and Human Services. The methods are not new, namely phishing emails, now COVID-19 themed, which could introduce malware into systems or dupe users into divulging personal information such as banking details. The market impacts of COVID-19 on cyber insurance will follow the attack trends already at play, with the potential of increased frequency and severity. |
| **Current and prospective reinsurance market impacts.** | Cyber (re)insurers were already tracking increased ransomware attacks, for example. Continued vigilance is needed now. Insurers are encouraged to review their portfolios by segment – especially healthcare, pharma, retailers, and public sector – and disseminate good risk management information to their insureds. Reinsurers will be asking about ransomware and other malware loss experience and trends, how the underwriter is pricing for the exposures, and what aggregation potential exists in the carrier’s book. |
Medical Malpractice

| Primary Loss Coverage | Unlike other classes of business where there have been claims received with underlying COVID-19 allegations the potential impact in the Medical Professional Liability (MPL) space is speculative now. (Re)insurers are in the process of analyzing potential risk(s) and the impact on their portfolio. There have not been restrictions on coverage implemented since the advent of the COVID-19 and none appear imminent.

When analyzing potential MPL exposures that may emanate from COVID-19 it is helpful to categorize into the following segments:

**Hospitals:** Generally speaking, MPL insurance policies do not have exclusionary language on infectious diseases and full coverage is provided. Potentially, hospital systems will be judged on their level of preparation and quality of disclosure. Staffing is a challenge for many health care systems and the potential exposure of key personnel and physicians to COVID-19 may put a significant strain on hospitals’ ability to properly care for patients which may well result in errors and failure-to-diagnose litigation.

**Long Term Care Liability.** Coverage for communicable diseases is generally provided so potential exposure seems significant. Numerous potential mitigating factors surrounding where the virus was contracted may impact potential liability.

**Physicians:** The immediate potential exposure would seem to be failure to diagnose or a misdiagnosis. A significant number of physicians are hospital employees in the United States and as such potential liability may reside with the hospital and not the physician. Numerous retired physicians are being contacted given the physician shortage and providing insurance coverage is an important consideration.

| Reinsurance Loss Coverage | Reinsurers are in the process of analyzing potential risk(s) and the impact on their portfolio. There have not been restrictions on coverage implemented since the advent of the COVID-19 and none appear imminent. While claims have not been received, hospitals have been receiving potential circumstances with underlying COVID-19 allegations.

| New Solutions / Ideas | Pandemic insurance products have historically been developed and very few policies were sold. Hospital networks and physician practices did not feel the need for such coverage justified the cost. Some may rethink that position once this pandemic passes. |
Professional Liability / Directors & Officers

| Primary Loss Coverage | Coverage is typically available for situations involving breach of fiduciary duty, misrepresentation of a company's financial assets, lack of corporate governance, etc. which can apply. When it comes to bodily injury, there is generally no exclusion specific to a COVID-19 event, both public and private D&O policies contain varying forms of a “bodily injury” exclusion limiting the extent of coverage for claims. The bodily injury exclusion can contain "carve-backs" to the exclusionary language providing further clarity regarding the intent of the exclusion to not apply to securities claims, defense costs, or non-indemnifiable claims. Therefore, simply because a claim arises from or is based upon bodily injury from the COVID-19 virus, coverage may not automatically be excluded.

While most private/non-profit D&O policies also contain certain carve-back language to a “bodily injury” exclusion, some policies have a more absolute exclusion. The “absolute” language is more likely to be applied to industries with higher exposure to bodily injury claims, such as education, healthcare, sports teams, entertainment venues, or real estate.

Some D&O policies may exclude coverage for libel, slander, oral or written defamation or disparagement or invasion of a person’s right to privacy. Unfortunately, there have been situations where individuals have been slandered due to their national origin in relation to COVID-19. A scenario can be imagined where an employee’s medical condition related to the virus is disclosed without his/her permission. Neither the bodily injury nor the libel/slander exclusion typically applies to allegations that are made as part of an employment practices wrongful act or a securities claim.

In E&O related lines such as travel services, real estate/property management risks may have exposure to how they have prepared and advised clients during the pandemic. |
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<tbody>
<tr>
<td>Reinsurance Loss Coverage</td>
<td>Typical reinsurance coverages for the D&amp;O and Management Liability classes tend to follow the fortunes of the underlying policies. Exclusions, in reinsurance contracts, for liability arising out of malfeasance or mismanagement of the companies for D&amp;O’s arising out of pandemic events typically do not exist. Reinsurers did attempt to include exclusions for Y2K (late 1990’s) and terrorism (post 9/11) with little success.</td>
</tr>
</tbody>
</table>
| Prospective Primary Market Impacts | Heightened concern over exposure to “event driven” suits is expected. Near term financial impacts could be severe, including bankruptcies, and a company’s ability to adequately prepare for the impacts of this virus will come into question. Also, reporting requirements along with public statements, will be closely watched by plaintiff firms to find potential targets to chase that did not disclose extent of possible impact of a pandemic/health crisis. There are already suits against a cruise line and a pharmaceutical company. Whether the heightened litigation environment will result in increased loss is debatable in a scenario where the entire market is feeling the economic and valuation pain.

It’s possible for increased employee related suits based on alleged wrongful termination and discrimination during tougher financial times under EPLI policies. |
### Surety

<table>
<thead>
<tr>
<th>Prospective Reinsurance Market Impacts</th>
<th>To be determined but reinsurers will focus on potential for increased class action/event driven litigation potential on reinsurance results. The lower interest rate environment could cause reinsurers to place additional focus on reinsurance pricing in the event their insured carriers aren’t obtaining appropriate price increases on the original business.</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Solutions / Ideas</td>
<td>The current supply of reinsurance capacity is sufficient to cover the demand. We expect that the balance of demand/supply will stay reasonably stable through the event. Current reinsurance structures are responding to the early views of where exposures may present themselves.</td>
</tr>
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</table>

#### Surety

| Primary Loss Coverage | A contract surety bond provides a guarantee by the surety that the underlying contract between the principal and the obligee will be completed per the terms of the contract.  

Should the principal be unable to complete the underlying contract per the terms, for whatever reason, the surety is obligated to complete the project or pay the bond penalty. |
| --- | --- |
| Reinsurance Loss Coverage | Quota share contracts are executed on a per bond basis and Excess of Loss (XOL) contracts are done on a Losses Discovered basis (which is akin to occurrence coverage).  

With an XOL contract, if the loss for the principal exceeds the stated treaty retention, the amount in excess of the retention is paid by reinsurers. |
| Prospective Primary Market Impacts | While a global pandemic may be a factor leading to a default of a principal, it will never be the only factor. The financial strength of the company, management decisions, internal procedures, obligee relationships, and insurance purchased would all come into play and in theory could have been underwritten as part of the decision-making process of the surety before issuing the bond.  

In some situations, force majeure language exists in the underlying contracts to address situations where something completely unforeseen or uncontrollable occurs (war, a nuclear incident, earthquake, or potentially a global pandemic) and prevents the project from being completed. Such provisions may exonerate the surety bonds and/or free the contractor from any liability if the project is postponed or cancelled. |
| Prospective Reinsurance Market Impacts | Due to concerns about a broader downturn in the financial lines marketplace leading to an elevated number of contractor defaults and future losses, some reinsurers may begin to re-trench or non-renew certain contracts.  

Adequate surety reinsurance capacity is expected to continue but potentially at a higher cost. Reinsurers will become less inclined to support treaty programs if the rate or the expected ceded profit has been reduced from the expiring program. Treaty pricing and margin expansion is likely to occur to offset the possibility of above average losses in the future. |
Existing reinsurance structures like Losses Discovered XOLs that contain multi-year extended discovery loss provisions, along with bond attaching quota share treaties, are widely considered to provide the best protection to surety writers at this time.

Transaction Liability

**Primary Loss Coverage**

Transaction liability largely focuses on two insurance products:

1. Representations and warranties insurance (RWI) is a policy used in mergers and acquisitions to protect against losses arising due to the seller's breach of certain of its representations in the acquisition agreement.

2. Tax liability insurance protects a taxpayer against the failure of a tax position in connection with a transaction, reorganization, accounting treatment, investment, or other type of taxable event.

Unlike traditional insurance policies that cover “go-forward” events, transaction liability is designed to cover unknown and unintended breaches that have already happened prior to inception of the policy. For policies in-force prior to COVID-19, the nature of the policy should protect against losses. Exclusions specific to COVID-19 have since been requested by underwriters on new policies.

**Reinsurance Loss Coverage**

Unlike other classes of business where there have been claims received with underlying COVID-19 allegations, the potential impact in the transaction liability space is expected to be minimal based on the language in the policy. The potential for “manufactured” claims exists however the coverage in the manuscripted policy should provide defense. Typical reinsurance coverages for transaction liability products tend to follow the fortunes of the underlying policies and will receive the benefit of the COVID-19 exclusions on future policies.

**Prospective Primary Market Impacts**

The impact of COVID-19 to the financial markets is a key driver for postponing or cancelling proposed merger and acquisition transactions that were in the diligence/bidding stages. The impact will be felt more strongly in some industries as opposed to others (manufacturing, retail, travel, hospitality, etc.) Deal flow is expected to slow, however transactions will still occur and underwriters will need to be mindful and mitigate the risk that the COVID-19 poses to corporate transactions.

**Prospective Reinsurance Market Impacts**

Explosive growth by premium and policy count has occurred in the last five years. With the potential for a slowdown in deal flow, reinsurers will place additional focus on the original business in regard to pricing, retentions and due diligence to confirm that all the representations have been fully vetted.
Trade Credit

| Primary Loss Coverage | Trade credit insurance, and to a significant degree also surety and political risks insurance, are business lines that will be directly impacted by the economic turmoil caused by the spread of COVID-19. Losses in trade credit and surety are directly triggered by financial stress, and in many cases, ultimately insolvency. The public policy measures being put in place to contain the spread of the virus are adding huge stress to economies which were already under pressure. Trade credit is a global business involving domestic and export trade, and with almost all nations facing weeks if not months of poor trading conditions, the industry is facing the possibility of significantly increased loss ratios for the first time since 2008/9.

The situation is developing so quickly that accurate predictions of the effects and outcome are impossible at this point. The expectation is for a global recession with higher insolvencies which will trigger more claims. Although trade credit insurers normally can manage exposures, the speed and severity of the spread of the virus has presented a unique challenge for the market. The possible breakdown of supply chains is unlike any previous recession.

Government action to mitigate the effects will hopefully have a positive impact to reduce volatility. The most badly affected trade sectors (e.g. travel/retail/leisure) are ones where credit underwriters have traditionally been more cautious, and exposure generally relates to stronger credits. Surety business has a huge concentration on the construction sector which was already under pressure in many parts of the world. This may exacerbate the situation and cause more failures, especially amongst the smaller/medium sector of the market. Political risk (government related) is more difficult to predict, although the issues in the oil sector present challenges to those countries where there is material dependency on revenue from oil. |

| Reinsurance Loss Coverage | Reinsurers are treating the current situation with understandable concern given the majority of placements involve both proportional quota share and risk excess of loss structures. We also anticipate that commercial terms will come under pressure if the loss ratios rise. There are few structures in place which provide aggregate protection for insurers, partly because insurers have not seen the need to consider these in the past. A result of this situation may be that the market reviews and changes its traditional approach to reinsurance structures. |

| Prospective Primary Market Impacts | Capacity is likely to be reduced, especially for risks where there was already a greater credit risk. This reduction is likely to be widespread, but especially for those countries where the impact of the virus on supply chains is most acute. |

| Prospective Reinsurance Market Impacts | In the short term we anticipate capacity to be restricted until the situation becomes clearer. |
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