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COVID-19 Impact on the Insurance-Linked Securities Market

Life/Health cat bonds may be affected by COVID-19

AM Best expects the overall impact of the COVID-19 pandemic on the insurance-linked securities (ILS) market to be limited given that the underlying risk coverage stems mostly from property losses arising from natural catastrophe perils such as hurricanes, earthquakes, tornadoes, and wildfires. However, losses of the life- and health-related catastrophe bonds (cat bonds) could escalate depending on the size of payouts for pandemic, extreme mortality, and health/medical-benefits-related exposures.

The remaining sectors of the ILS market—collateralized reinsurance, sidecar, and industry loss warranty (ILW)—will see varying impacts from the ongoing crisis. These are ILS convergence transactions¹. Some of these transactions will be confronted with losses from business interruption risk for the policies that provide a broad spectrum of property/casualty insurance coverage.

Some of the most popular non-convergence ILS products,¹ such as life settlements and life contingent structured settlements, may also be impacted by the COVID-19 pandemic since their performance is related to mortality rates. The ultimate effect on these products depends on the duration of the pandemic and the population that is impacted the most.

Cat Bonds

The cat bond market is less affected by the pandemic as the majority of the cat bonds are in the property/casualty space, providing coverage against earthquakes and weather-related catastrophe events. In addition, the collateral is comprised mainly of US Treasuries and International Bank of Reconstruction and Development (IBRD) notes, thereby limiting the impact of financial market volatility.

Trading in the cat bond secondary market increased as the COVID-19 pandemic gained traction, a pattern seen during the 2008-2009 financial crisis, when investors sold off their cat bond holdings to address liquidity issues. The secondary market is trading at a minor discount, with significant price movement in mid-March. Cat bond prices fell by 0.81% during the week of March 20, 2020, as reflected in the Swiss Re Global Cat Bond Performance Index, according to Trading Risk magazine. More recently, prices have started to recover, but liquidity remains low. The increased sell-off activity has been led by generalist multi-strategy investment funds looking to improve liquidity issues and maintain cash.

The most affected cat bond programs are those providing coverage against severe increases in medical benefit claim levels and/or increases in mortality rates due to a pandemic event. These include the World Bank's Pandemic Financing Facility (IBRD Capital-At-Risk notes 111-112) cat bond, the Aetna Life Insurance Vitality Re cat bonds, and the Swiss Re Vita Capital VI bond (**Exhibit 1**).

¹ ILS convergence transactions are defined as securities or structures sponsored by insurers/reinsurers designed to transfer risk and attract capital from the capital markets. ILS non-convergence transactions are defined as securities or structures that are collateralized by insurance-related assets where the transactions are not sponsored by insurers and reinsurers and do not provide capital relief to these entities. (See Best's Insurance-Linked Securities and Structures Methodology)

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The \$320 million IBRD Capital-At-Risk notes 111-112 cat bond was designed to provide funding for developing countries in response to a global pandemic event. Industry estimates put the COVID-19 payout loss amount at around \$132.5 million. Currently, all trigger conditions (number of confirmed cases and deaths, 12 weeks since the start of the outbreak, and the growth rate) have been met. The growth rate is calculated by comparing International Development Association (IDA/IBRD) countries over a rolling period. IDA countries are those with low per capita incomes that lack the financial ability to borrow from the IBRD.

The Vitality Re Cat bonds, covering health/medical benefits sponsored by Aetna Life Insurance Company, are at risk of facing losses due to the COVID-19 pandemic that would result in severe morbidity stress. The Vitality Re cat bonds with risk capital of \$800 million; Vitality Re XI Ltd (\$200 million); Vitality Re X Ltd (\$200 million); Vitality Re IX Ltd (\$200 million); and Vitality Re VIII (\$200 million) could lead to payouts to Health Re Inc. and, ultimately, to Aetna Life Insurance Company.

The \$100 million Vita Capital VI Ltd. extreme mortality bond, sponsored by Swiss Re, may also be under duress. The noteholders will be at risk from an increase in age- and gender-weighted mortality rates that exceed a specified percentage of reference mortality index value for Australia, Canada, and the United Kingdom.

The cat bond market reached record issuance levels in the first quarter of 2020. The immediate impact of COVID-19 is the delay in issuing future cat bonds because of the disruption in the capital markets. The future for the cat bond market, however, remains promising given that the amount of cat bonds expected to mature in the second quarter of 2020 is approximately \$4.1 billion. SCOR recently delayed issuing \$200 million in cat bonds that provide protection against named tropical storms and earthquakes because of the COVID-19-related market disruption. SCOR, however, has relaunched this transaction at a smaller issuance size (\$150 million), later securing the original issuance size of \$200 million with a higher price guidance as the capital markets have begun to stabilize.

Exhibit 1

Life and Health Related Cat Bonds at Risk of Facing Losses

Vehicle	Series	Class	Sponsor	Peril	Amount Issued (\$ million)
IBRD Capital at Risk Notes 111-112	Series 111	Class A	World Bank's Pandemic Emergency Financing Facility (PEF)	Pandemics (Flu, Coronavirus)	225
IBRD Capital at Risk Notes 111-112	Series 112	Class B	World Bank's Pandemic Emergency Financing Facility (PEF)	Pandemics (Flu, Coronavirus, Lassa Fever, Rift Valley Fever, and Crimean Conga Hemorrhagic Fever)	95
Vita Capital VI Ltd	Series 2015-1	Class A	Swiss Re	Extreme Mortality	100
Vitality Re XI Ltd.	Series 2020-1	Class A	Aetna Life Insurance Company/Health Re Inc.	Health - Medical Benefit	140
Vitality Re XI Ltd.	Series 2020-1	Class B	Aetna Life Insurance Company/Health Re Inc.	Health - Medical Benefit	60
Vitality Re X Ltd.	Series 2019-1	Class A	Aetna Life Insurance Company/Health Re Inc.	Health - Medical Benefit	140
Vitality Re X Ltd.	Series 2019-1	Class B	Aetna Life Insurance Company/Health Re Inc.	Health - Medical Benefit	60
Vitality Re IX Ltd.	Series 2018-1	Class A	Aetna Life Insurance Company/Health Re Inc.	Health - Medical Benefit	140
Vitality Re IX Ltd.	Series 2018-1	Class B	Aetna Life Insurance Company/Health Re Inc.	Health - Medical Benefit	60
Vitality Re VIII Ltd.	Series 2017-1	Class A	Aetna Life Insurance Company/Health Re Inc.	Health - Medical Benefit	140
Vitality Re VIII Ltd.	Series 2017-1	Class B	Aetna Life Insurance Company/Health Re Inc.	Health - Medical Benefit	60

Source: AM Best data and research

COVID-19 is likely to increase future demand for pandemic coverage as this event will bring more awareness to the economic losses associated with pandemic exposures. It remains to be seen to what extent cat bond sponsors will bring this exposure to the capital markets.

Mortgage insurance-linked securities (MILS) transactions, which are highly effective for reinsuring mortgage insurers' books of business, may face challenges as a result of COVID-19. The ability of private mortgage insurers to continue accessing the MILS market is tied to volatility in the bond market and volatility in the bond markets affects investor demand for the MILS transactions. AM Best believes that, given the market's dislocation, the private mortgage insurers will have to delay any plans to sponsor more MILS transactions, until there is more certainty in the capital markets and the effect of COVID-19 on their operational results.

Collateralized Reinsurance Market

The collateralized reinsurance market mostly provides property coverage for natural catastrophe perils such as hurricanes, earthquakes, tornadoes, and wildfires. The exception to this will be for transactions covering a broad spectrum of property/casualty insurance risks, including specialty insurance lines (marine, aviation, and professional liability), where communicable or transferrable disease is not a named exclusion and business interruption cover is provided.

Business interruption includes the loss of income arising from the closure of a plant or a commercial enterprise due to damage. Related contingent business interruption coverage addresses business continuity issues due to the unavailability of an asset or a component in the supply chain due to war, terrorism, or governmental intervention (e.g., a state of emergency). Usually, the requirement for a business interruption claim is direct physical damage to the premises or premises in the vicinity.

Most commercial insurance policies have explicitly excluded pandemics and viruses since the 2009 H1N1 influenza. Current commercial insurance policies without explicit exclusions for losses due to virus or pandemics may pose potential problems for traditional reinsurers and the collateralized reinsurance market alike as the reinsurance program generally follows the fortunes of the insurer. Legal actions focused on claims related to COVID-19 business interruption losses are likely to rise for the foreseeable future. To the extent reinsurers follow the fortunes of insurers, the business interruption losses will impact the traditional reinsurance market and the collateralized reinsurance market.

Sidecars and Insurance Industry Loss Warranties

The sidecar market generally will face a relatively higher impact on claims activity from COVID-19. Some sidecar investment vehicles that follow the fortunes of a reinsurer on a quota share basis could be exposed to business interruption claims due to the COVID-19 pandemic. The quota share sidecar could see more claims activity, leading to capacity constraints in the retro segment of this market. Overall impact, however, may be limited given the low sublimit for business interruption coverage.

The ILW market, on the other hand, is less likely to see any claims activity from COVID-19 given that the ILW market does not provide coverage for pandemic activity.

ILS Fund Managers

ILS fund managers may see more redemptions as investors unwind their ILS positions. This includes selling cat bonds to generate liquidity as it's one of the few asset classes where pricing is close to par. The ILS market views the elevated redemptions as temporary, anticipating that

investors will get back into the market when the capital markets return to normal after the pandemic event.

ILS fund managers' assets under management may not change that much in the short run given the redemption notice period and various restrictions on capital outflows. Generally, most ILS fund managers require a 45 to 180 day notice period before redemption. In the long-run, investors in ILS (pension funds and institutional investors) usually maintain a long-term investment horizon and are attracted to the diversification benefits provided by ILS exposures, which have a low correlation with the general financial market. These dynamics could mitigate against full-scale withdrawals.

AM Best expects COVID-19 exposure to result in additional "trapped capital" that likely will be held for multiple years given that the ultimate quantification of covered losses will prove much more challenging. Fund managers may face funding problems for future Florida business renewals should redemptions occur. Industry sources also have confirmed a drop in ILS capacity for Japan-based risks for April renewals, partly because some ILS funds have pulled out at renewals because there was no absolute COVID-19 exclusion in place.

Non-convergence Transactions (Life Settlement and Life Contingent Structured Settlements)

According to a US Center for Disease Control and Prevention (CDC) study based on data from February 12 to March 16, 2020, the fatality rate for age 85 and older is about 18.5% and 0.6% for age 45 to 54, which is similar to the study in China (Chinese Center for Disease Control and Prevention), where the fatality rate is 14.8% for people age 80 years and older and 0.4% for age 40 to 49.

The life settlement population represents a unique cohort that may experience greater vulnerability to COVID-19 than the broader US public. Even with the life settlement population skewed to a significantly older age, with a median age of 86, the total life settlement population to be infected by COVID-19 is expected to be low, and the overall impact should be relatively minor. The open-end fund structure of some life settlement transactions could also bring in the stress of redemption demands from uneasy investors frightened by the volatility in the stock market as deleveraging, margin calls, and liquidity issues become a concern.

The median age of annuitants in life contingent structured settlement transactions is 44, with some morbidity issues and income levels at the lower end of the general population. Investors in life contingent structured settlements may see a reduction in annuity cash flows due to the increased underlying annuitants' mortality from the COVID-19 pandemic. However, for transactions structured with a mortality insurance policy, the cash flow reduction may be mitigated by receipt of the proceeds from the insurance counterparty depending on the degree of the reduction. For un-hedged transactions, the investors will bear the risk.

AM Best expects the overall impact of COVID-19 on life settlements and life contingent structured settlements to be relatively minor.

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