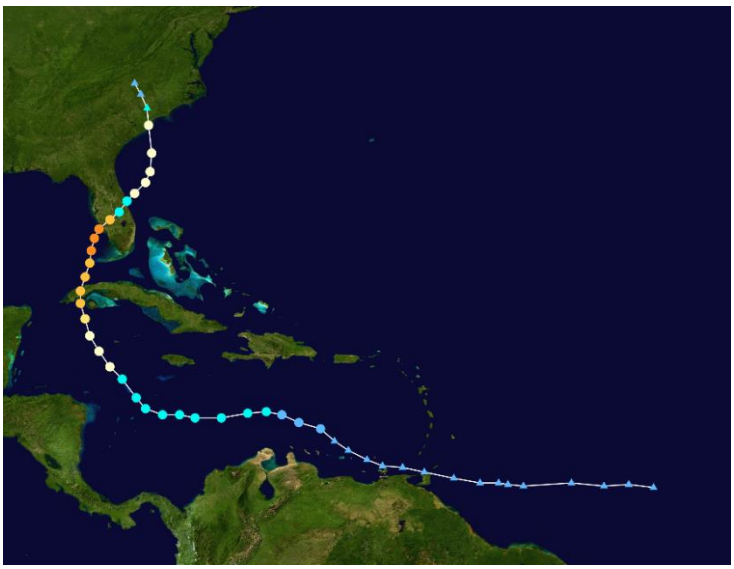
3. October 2022

Event Report: Hurricane Ian

Meteorological Development

Hurricane Ian was the second major hurricane (a storm of category 3 or higher) of the tropical Atlantic season 2022. Developing from a tropical depression about 1000 km east of Trinidad and Tobago, the system moved through the Southern Caribbean towards Cuba. Hardly disturbed by the mountainous terrain of the island, the storm entered the Gulf of Mexico already as a major hurricane. After an eye replacement cycle about one day before landfall, the large storm was able to gain more energy over the warm waters of the Gulf and further strengthened into a strong category 4 hurricane.



On September 28, the storm hit land for the first time at Cayo Costa, an offshore island about 40 km west of Fort Myers, Florida. Later, the storm made landfall on the mainland close to Punta Gorda / Port Charlotte and then crossed the Florida peninsula in the direction of Cape Canaveral, weakening relatively quickly over land into a tropical storm. Entering the Atlantic, the system regained some strength again over the open water and made a second landfall in South Carolina as a hurricane of the lowest category 1. Classified as an upper-end category 4 hurricane during landfall by the American National Oceanic and Atmospheric Administration (NOAA), Ian is part of the group of the strongest hurricanes that have hit Florida during the last 30 years. A shift further south from the projected path of the storm spared the highly densly populated Tampa agglomeration from a storm flood and the strongest winds. However, the extended wind field now pressed large masses of water towards the flood prone cities of Naples and Fort Myers. Fortunately, the worst flood level prognoses of more than 5 m above normal high tide did not materialize, but the flood component will nevertheless make up a considerble portion of Ian's final loss toll.

Ian's impact on the Reinsurance and ILS Market

Early loss estimates that circulated even before Ian's landfall were based on selections of proxy events from the stochastic catalogues of the modelling firms, which are only approximately able to reflect the specifics of an actual storm, and consequently prone to a large inaccuracy. A first post-landfall analysis that was based on the actual wind field and flood footprint of the storm was published by Corelogic, indicating an insured loss of USD 28 – 47 Bn. As had to be expected, the flood component

contributes untypically severely with 20% to 30% to the overall loss. AIR published their estimate after the weekend and estimates an insured loss of USD 42 to 57 Bn.

With projected losses of such magnitude, the reinsurance industry needs to expect a considerable claims burden. The cat bond market as well will suffer capital losses to individual bonds. Especially for local, Florida-specific programmes and for storm flood related bonds some defaults are possible. Such punctual defaults will go hand in hand with a markedly enhanced price volatility in the short term, as can be seen in the development of the Swiss Re Cat Bond Price Index, which lost 9.9% over the week.

Three factors are causing this price volatility:

- In addition to the devaluation of bonds with an elevated risk of actual capital losses, a general 'fear factor' is priced into the market, reflecting itself in vastly enlarged bid-ask spreads, affecting as well such paper where losses have to be considered as highly unlikely.
- In a technical reaction the yield to maturity increases for bonds with an aggregating characteristic, which became riskier due to the partial erosion of their underlying retentions. Until the time of the resets of such bonds, typically end of the year or beginning of the next hurricane season, such bonds will amortize these devaluations and yield a higher return, reflecting their current risk profile.
- Interesting is a component of a general reaction towards higher return expectations for identical risk: Bonds that are not affected at all by the current event, such as paper with exclusive exposure to European winter storm or Japanese earthquake, devalues as well. On Swiss Re's weekly pricing sheet only three out of 224 non-life cat bonds show a marginally positive price movement. This behaviour shows that hurricane Ian has the potential to further reinforce the tendency towards a significantly harder market that lead to markedly better conditions and earning prospect for cat bonds and private ILS already in the first half of 2022.

In the case of hurricane Irma in 2017, it took the market about three months until the additional price volatility finally subsided and the prices of non-affected bonds fully normalised. It remains to be seen how quickly the market will recover this time from its worries.

Impact on the Portfolios

Liquid positions in the portfolios are valued with an 'average bid' principle, based on the price indications of several brokers. For potentially affected private transactions with similar underlying and conditions as specific cat bonds, the reserve setting reproduces the market expectations reflected in the market prices of such liquid proxy instruments. On the basis of the currently available information, the management expects that there are no private transactions in the portfolios for which the reserve setting cannot be effectuated in such manner.

On this basis, the following results are expected for the month of September

Solidum Cat Bond Fund (R Class, USD)	-5.5%	to	-6%
Solidum ELS Fund, SAC 2 (A-1 Class, USD)	-7%	to	-8%
Solidum ELS Fund, SAC 3 (I-1 Class, USD)	-6.5%	to	-7.5%

As the portion of liquid investments is highest in the Solidum Cat Bond Fund, the effect of an over-reaction of the market as described above is expected to be most pronounced in this fund. On the basis of currently available information, it is expected that the finally realised loss will amount to approximately half of the devaluation in September. This recovery potential is further supported by the conservative valuation logic of the fund. For the SAC2 the recovery potential is expected to be somewhat smaller and least pronounced in the case of the SAC3.

We wish to emphasize that shortly after an event the amount of uncertainty in an impact analysis remains fairly elevated. Variations of the assumptions of ultimate losses impact the results. Especially for so-called 'indemnity' transactions, covering the genuine individual loss of a counter party and not referring to general market loss figures, only the reporting of the insured counter party will lead to a reduction of uncertainty.

A significant impact driver in all three portfolios are investments in storm flood risk. The market prices of cat bonds covering the national flood insurer NFIP imply a loss to this programme in the order of USD 8 Bn, well in line with the expectation of risk modelling firm Corelogic. Should the loss to the NFIP turn out to be higher or lower than this figure, the ultimate impact to the fonds could vary by 2 to 3 percentage points in either direction.

The management team is pleased to remain at your disposal for any further discussion.

With kind regards

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