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Peak Peril Private ILS strategy: A compelling investment opportunity

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Executive Summary:

- Twelve Capital's Peak Peril Private Insurance-Linked Securities (ILS) strategy focuses on providing capital support to reinsurers for so called "peak peril" risks.
- Peak Perils represent the highest concentration of insured values globally, in areas potentially exposed to large natural catastrophes, such as US Hurricanes, Earthquakes in California and Japan, Typhoons in Japan and European windstorm.
- In Twelve's view, peak perils are the most researched, modelled and understood natural catastrophe risks in the global (re-)insurance industry.
- The (re-)insurance industry faces significant regulatory and rating agency capital requirements to cover peak perils, yet capital supply for these risks is often the most constrained.
- This structural capital supply-demand imbalance results in longer periods of higher risk-adjusted return potential for capital markets investors. Twelve's Peak Peril Private ILS strategy seeks to achieve returns above USD LIBOR +10%.
- Following recent catastrophe loss years and the impact of COVID-19, risk-adjusted returns have significantly improved. Twelve expects further upward movement in 2021 and beyond.
- The additional value of low correlation to other asset classes has been highlighted in 2020, before, during and especially post COVID-19.

Dr Jamie Rodney, responsible for ILS Analytics at Twelve Capital, answers questions from investors on the ILS market, in particular the company's Peak Peril Private ILS strategy. These questions cover recent developments and benefits in an investment portfolio. Twelve Capital manages in excess of USD 1.7bn in ILS both in Cat Bonds as well as in Private ILS (collateralised reinsurance) and in aggregate USD 3.8bn in insurance related investments including Insurance Debt and Insurance Equity.

What's the difference between Twelve Capital's Cat Bond strategy and Peak Peril Private ILS strategy?

In terms of investment philosophy, both strategies are fundamentally similar with a focus on natural catastrophe risk in developed economies. Additionally, the investment process for both strategies at Twelve Capital leverages the same underwriting expertise and analytical risk assessment.

The key differences are in the overall relative risk-return profiles and how risk is accessed and transferred to the capital markets.

Cat Bonds are highly standardised, have well-defined coverages and triggers with funds typically offering weekly liquidity. The risk-return profile tends to focus on more risk remote exposure with a large portion of the market offering indemnity protection to insurance companies or industry-linked coverage to reinsurance companies.

Cat Bond portfolios are generally the most defensive within the ILS space, offering yields of around USD LIBOR +5-6%. Portfolios are often constructed using a top-down view relative to the overall Cat Bond market.

In contrast, Twelve Capital's Peak Peril Private ILS strategy delivers capital to the (re-)insurance industry in a more focused manner to where it is needed the most, yet where supply is often more constrained. This results in longer periods of higher risk-adjusted return potential for capital markets investors with target returns in excess of USD LIBOR +10%.

By the nature of private contracts, fund liquidity is matched to fit the renewal of the underlying investments, i.e. annually. Unlike public Cat Bonds, transactions are privately structured and highly customised. This higher complexity requires more conviction with portfolios constructed from the bottom-up which generally results in larger individual position weights compared to a Cat Bond portfolios.

What are peak perils?

Peak perils are typically defined as regions where property catastrophe (re-)insurers have high concentrations of insured values in areas exposed to potentially large natural catastrophes with US Hurricane often posing the largest contribution to tail risk.

Twelve Capital's Peak Peril Private ILS strategy focuses on providing capital support to the reinsurance industry, offering financial stability in the event of single, or multiple, shocks to heavily exposed natural catastrophe regions.

The tail risk associated with peak perils tends to drive higher capital requirements for (re-)insurers and, thus, demands an increased risk premium to meet capital costs. In Twelve's view, peak peril exposures tend to offer improved risk-adjusted returns within ILS and are typically better modelled and understood than other risks in the industry.

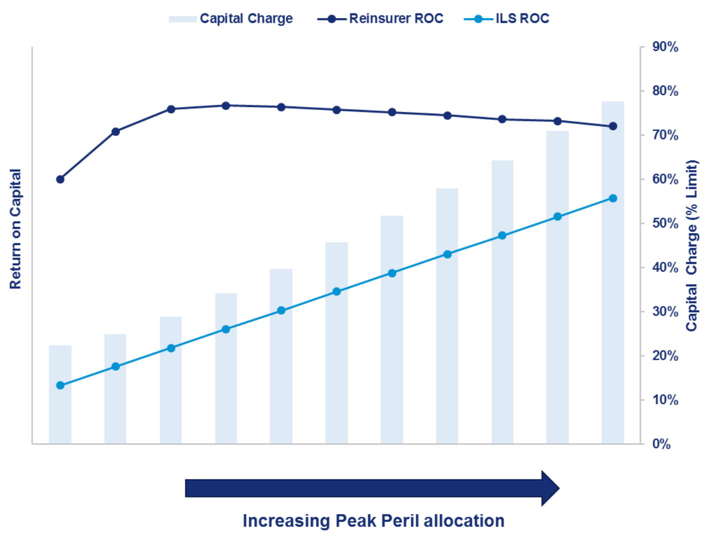

Figure 1: Comparison of return on capital (ROC) and capital charge for a theoretical property catastrophe reinsurance portfolio[1] versus the ROC for a collateralised ILS portfolio both investing in the same underlying risk with an increasing allocation to peak peril exposure. Source: Twelve Capital.

[1] The theoretical portfolio consist of a blend of Twelve Capital ILS investments.

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Why do peak peril make sense from an investment perspective?

Twelve Capital's strategy is to provide efficient capital to the (re-)insurance industry and deliver attractive risk-adjusted returns to investors. The aim is to align capital markets and insurance exposure in the most effective way.

This alignment is of course driven by an investor's risk-return appetite and liquidity requirements.

From a more traditional stand-point investors might seek access to (re-)insurance exposure by means of an equity allocation. (Re-)insurance equity investment returns, however, compensate for a broad range of risks including: market volatility, driven by general equity market beta, non-peak peril underwriting and asset side balance sheet risks. As a result, investors naturally demand higher returns to accept these additional risks, and, thus, equity investors (in general) set a higher cost for their capital.

By stripping out these additional risks "pure play" Peak Peril Private ILS investors seek to invest directly into a portfolio of liability risks, resulting in a lower cost of capital when compared to (re-)insurance equity.

Regulatory and rating agency risk-based capital approaches require (re-)insurance companies to hold a portion of their aggregate limit as capital providing a significant leverage benefit from diversification when compared to collateralised ILS investors.

As a result, from a theoretical perspective, a pure property catastrophe focused reinsurer will start to experience reduced returns on equity when capital charges become too punitive as allocation to peak peril exposure increases. In contrast, the higher reinsurance cost of capital of peak peril regions drives attractive dollar-for-dollar risk-adjusted returns for collateralised ILS investors, who do not benefit from levered (re-) insurance balance sheets (Figure 1).

An allocation to peak peril (re-)insurance exposure therefore delivers attractive low correlated risk-adjusted target returns close to the cost of (re-)insurance equity (Figure 1) and, consequently, should form a core strategic allocation within an ILS portfolio.

Beyond the fundamental cost of capital arguments, Twelve Capital's peak peril risk appetite is designed to optimise returns and minimise collateral trapping through highly selective underwriting and product structuring.

Twelve's track record over the past 10 years provides meaningful data that allows for the continuous evaluation of performance and underwriting principles, in particular around contract types and features, as well as classes of business, to enable the most efficient use of capital.

A data driven approach and in-house simulation methodologies allows Twelve Capital to stress test the effects of different contract features and return profiles on cash drag and performance at both an individual security and portfolio level.

The low correlated nature of the returns sound attractive but what about the risk?

As previously mentioned peak peril exposures often demand the highest natural catastrophe (re-)insurance risk premium and are attractive from a risk-adjusted perspective. Investors can expect to be adequately compensated for the risk they take and peak peril exposure should form the core of any natural catastrophe ILS portfolio.

Within a peak peril allocation a certain level of diversification can be achieved through portfolio construction by combining a number of peril-regions and structure types.

Beyond core peak perils, a more risk averse portfolio might consist of a mixture of peak peril private ILS and Cat Bonds, with the Cat Bond allocation used to manage tail risk and offer more liquidity (Figure 2).

Diversification and risk aversion can also be managed by utilising Twelve Capital's insurance focused multi-asset approach with an allocation to insurance debt or equity, or alternatively by overlaying an efficient hedging strategy.

Combining a number of risk mitigation and hedging techniques allows Twelve Capital to construct portfolios with a wide range of risk-return target profiles (Figure 2).

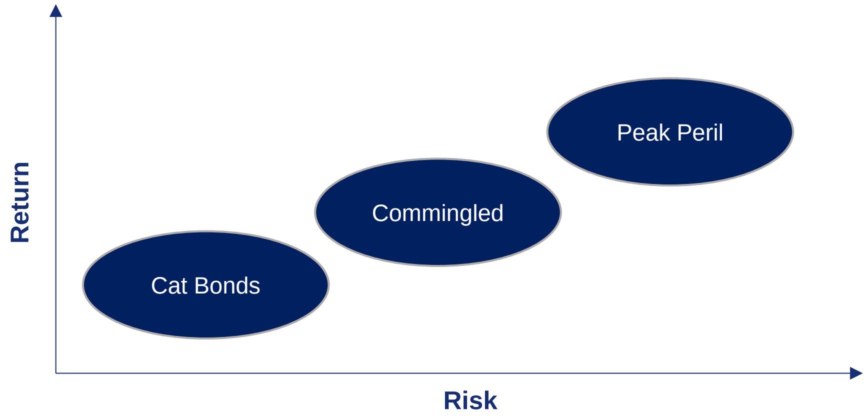
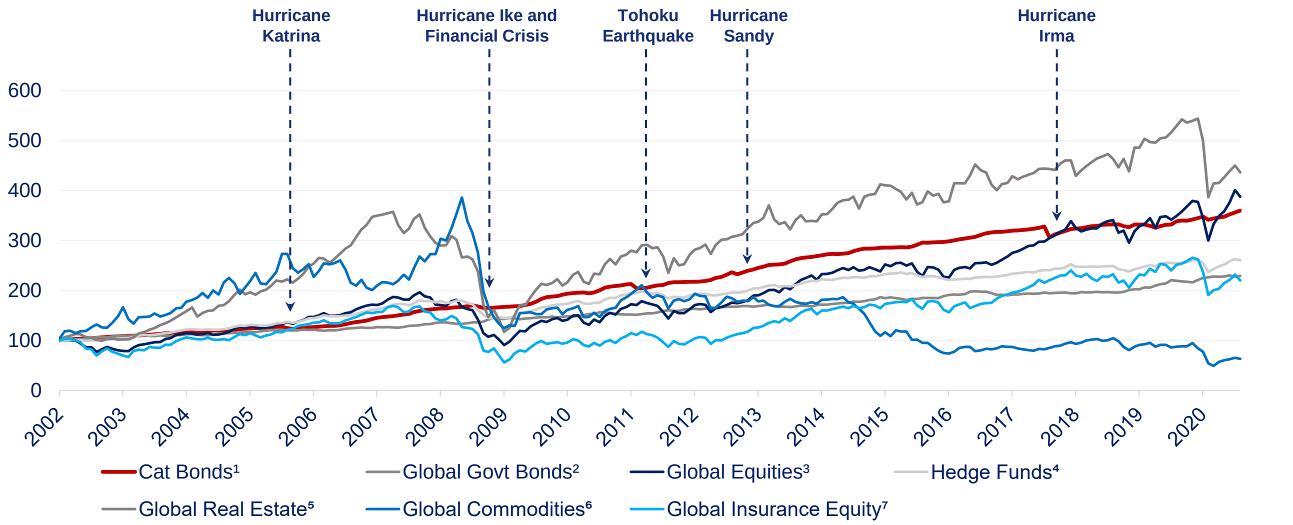


Figure 2: Risk-return profile for ILS investing at Twelve Capital. Source: Twelve Capital.

How does an ILS allocation benefit an institutional investment portfolio and how has the asset class performed in the recent market environment?

ILS in the broader sense offers the potential to enhance risk-adjusted returns to capital markets investors, while adding diversification and reducing volatility of an institutional portfolio. The asset class remains a low correlated asset class compared to others, particularly highlighted before, during and especially post COVID-19. Year-to-date returns remain positive with no significant volatility seen in indexed returns during the COVID-19 market disruptions (Figure 3). Coupled with the low interest rate environment ILS remains an important allocation within wider investment portfolios.



[1]Swiss Re Global Cat Bond Index Total Return, calculated by Swiss Re Capital Markets, is a market value-weighted basket of natural Cat Bonds tracked by Swiss Re Capital Markets, calculated on a weekly basis. [2]JPMorgan Hedged USD GBI Global. [3]MSCI World USD [4]The Dow Jones Credit Suisse Hedge Fund Index, an asset weighted benchmark that seeks to measure hedge fund performance and provide the most accurate representation of the hedge fund universe. [5]EPRA/NAREIT Dev TR USD. [6]The S&P GSCI serves as a benchmark for investment in the commodity markets and as a measure of commodity performance over time. It is a tradable index that is readily available to market participants of the Chicago Mercantile Exchange. [7]The MSCI World Insurance Index is an Index focused at measuring the equity performance of the c.80 largest listed global insurance companies weighted by free-float of market capitalisation.

Figure 3: Indexed returns comparing ILS to global equities, hedge funds and global government bonds. Source: Bloomberg. As at 30 September 2020.

Twelve sees the ILS market as being on an upward trajectory, forecast to continue to grow in 2021. Following short-term redemptions post COVID-19, allocations to ILS are expected to move in a positive direction.

Continued capacity constraints and increased demand from (re-)insurers at both 1 April and mid-year 2020 renewals have further improved the rating environment resulting in significant strengthening in pricing. This enhanced market dynamic is expected to continue into 2021.

In addition, underlying terms and conditions are being tightened to the benefit of risk-adjusted returns. Multi-year contract terms and more complex features are being excluded in favour of more defensive occurrence structures with narrower geographical scope as well as more restrictive coverage. Pandemic exclusions are also being introduced to remove exposures similar to COVID-19.

Furthermore, the industry is experiencing significant rate improvement. Pricing and underwriting conditions have materially improved over the past 6-12 months with rate levels at a five-year high. Risk-adjusted returns are significantly up when compared to 2017 (Figure 4).

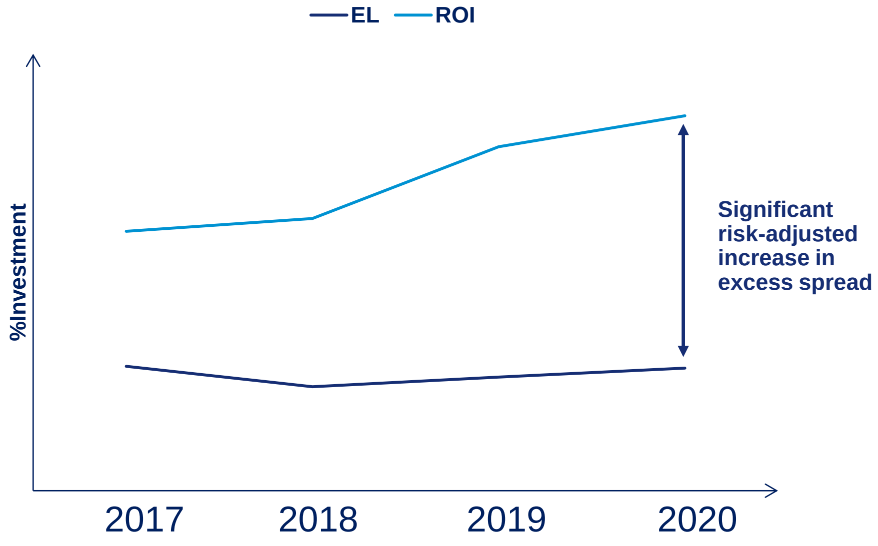


Figure 4: Evolution of weighted average expected loss and return-on-investment for an indicative peak peril allocation. Source: Twelve Capital.

You recently released a spotlight paper on the impact of climate change on North Atlantic hurricane activity. How do you incorporate your research in Twelve Capital's investment process?

Since Twelve Capital holds multiple insurance assets across a range of investment horizons its risk assessment process must incorporate the impact of climate variability over multiple time windows ranging from sub-annual (seasonality) to decadal.

Twelve's research, in collaboration with climate-tech firm reask[2], focuses on understanding the effects of climate variability on hurricane activity and landfalls by considering past, present and future climate data.

Season-to-season variability is measured using a machine learning approach to estimate the expected shift in seasonal hurricane risk relative to long-term climatology.

Climate change factors are evaluated using climate simulations to assess the potential future impacts on US hurricane risk.

[2] reask services the global insurance industry in the fields of catastrophe risk management, modelling and forecasting.

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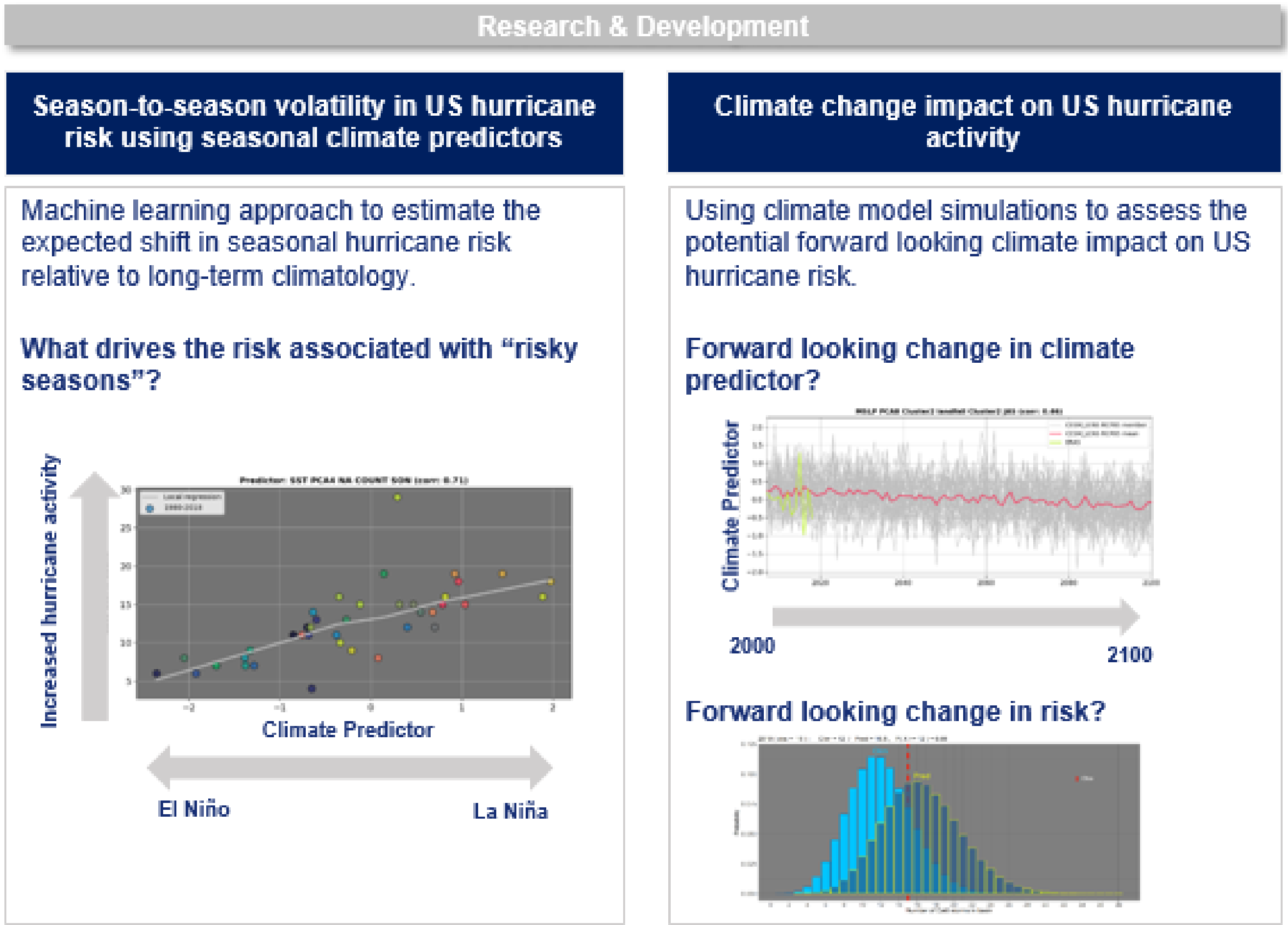

Figure 5: Overview of Twelve Capital's research into the season-to-season variability in hurricane risk and the potential impacts of climate change on hurricane activity.

Twelve Capital incorporates this climate focused research into its risk assessment to ensure that decisions on portfolio construction and pricing adequacy are made in a robust and responsible way over an investment cycle.

More detail on Twelve's climate change approach can be found in the recently released research spotlight on North Atlantic Hurricane Risk Variability in a Changing Climate.

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About Twelve Capital

Twelve Capital is an independent investment manager specialising in insurance investments for institutional clients. Its investment expertise covers the entire balance sheet, including Insurance Bonds, Insurance Private Debt, Catastrophe Bonds, Private Insurance-Linked Securities and Insurance Equity. It also composes portfolios of its Best Ideas. It was founded in October 2010 and is majority-owned by its employees. It has offices in Zurich and London.

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