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The Attractiveness of Insurance-Linked Securities for Investors John DeCaro, Portfolio Manager and Founding Principal Elementum Advisors, LLC

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ILS Overview

Insurance-Linked Securities ("ILS") are securities and derivatives that transfer catastrophic natural event risk from insurers and reinsurers to capital markets investors. Fundamentally, the market is predicated on investors assuming losses from natural catastrophes on behalf of insurance companies, in exchange for a risk premium. The ILS market emerged in the mid-1990s, following Hurricane Andrew and the earthquake in Northridge, CA. These events awoke the insurance industry to the significant financial impact that large natural catastrophes could have, especially with respect to the inadequacy and inefficiency associated with using on-balance sheet capital to fund such risks. Some of the investors that are currently allocating to ILS include pension funds, insurance companies, banks, asset managers and hedge funds. We believe that many of these sophisticated institutional investors may be attracted to ILS for two reasons: the absolute and risk-adjusted return potential and the diversification benefits of the asset class.

Return Potential

Many insurance companies that are looking to purchase protection in the ILS market will do so in the form of catastrophe bonds, which are floating rate, fixed income instruments that typically come in the form of 144A notes. The cat bond market, which sat at approximately \$22.4B of outstanding issuance at the end of 2016, makes up approximately 30% of the property catastrophe-focused ILS market and, we believe, serves as a good proxy for the market as a whole, given its exposure profile (it is worth mentioning, however, that the risks in the cat bond market tend to be more remote than those on offer in the private, collateralized reinsurance market). The Swiss Re Total Return Cat Bond Index ("SRGLTRR"), which tracks the aggregate performance of all cat bonds, has performed favorably compared to many asset class indices since its inception in January 2002. On a cumulative basis, the SRGLTRR has outperformed the HFRI Fund-Weighted Index by 94%, the S&P 500 Total Return Index by 51% and the ML US High Yield BB Index by 17%.

There is an additional benefit to ILS from the rising interest rate environment. When a cat bond is issued as a floating rate security, as they typically are, the proceeds of the sale are deposited into a collateral trust account. These collateral accounts typically invest in nearly risk free assets such as money market funds invested in US Treasuries or AAA-rated notes linked to LIBOR rates. The coupon amount paid to investors includes the stated risk spread as well as the investment return from the collateral account, or collateral yield. This collateral yield has been increasing as a function of both treasury and LIBOR rates

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rising, and cat bond investors are reaping the benefits in the form of additional risk free premium. There are 19 cat bonds outstanding as of January 31 that offer a collateral yield linked to 6-month LIBOR, which has risen from 0.36% at the end of 2014 to 1.32% at the end of 2016. This is up from just five cat bonds linked to the same rate as of December 31, 2015.

Diversification

We believe that the diversification benefits of the asset class are omnipresent, as the universe of risk on offer generally consists of short-tail, low frequency, high severity classes of business, while the exposure profile is inherently distinct from that of strategies that are more closely associated with the broader financial markets. For this reason, insurance risks have historically experienced low correlation with the broader capital markets. This is evidenced by the fact that since its inception, the SRGLTRR has had correlations of 0.24, 0.17 and 0.27 with the HFRI Fund-Weighted Index, the S&P Total Return Index and the ML US High Yield BB Index, respectively.

Further to this first order of diversification, there is also a generally low correlation within certain subsets of the ILS market itself (e.g. Florida hurricanes do not cause California earthquakes), as opposed to traditional asset classes where correlations tend to rise during periods of stress. It is also worth noting that the market's assessment of loss probabilities is grounded in science, via commercially available catastrophe models, which helps mitigate the level of information asymmetry that may be present in more traditional asset classes (e.g. counterparties issuing corporate debt have more information than potential debt investors, while a reinsurance buyer has no greater knowledge as to whether or not a catastrophic event will occur).

While investors in the asset class may suffer losses, including as a result of a catastrophic event, most catastrophe bonds are structured so the risk of loss from an event is remote. For example, in the past six months, there have been three clusters of earthquakes over magnitude 5.0 in central Italy. The most recent of these events occurred on January 18, during which strong shaking was felt in Rome, over 100km away from the epicenter, leading to the evacuation of the city's Metro system. Despite the significant damage that these events caused, the level of insured losses that have been incurred are nowhere near the levels necessary to impact the one Italian earthquake cat bond that is outstanding.