Why Catastrophe Bonds Remain a Smart Investment

Catastrophe bonds, despite their promise, are often surrounded by hesitance. Several factors contribute: a relatively small market size, doubts regarding catastrophe models, the unnerving aura of the word "catastrophe", and perhaps the impact of recency bias. In truth, it is likely a combination of all these factors. At around $40 billion, a significant investment could mean taking up a sizeable chunk of the market. While catastrophe models are constantly being refined, they remain models, and as such they are not infallible. The very term “catastrophe” can be off-putting, especially to potential investors unfamiliar with the sector. And frequent news of climate related events can skew our perception towards believing that disasters are more common/severe than they are, at least those that are relevant to catastrophe bond investors.

Contrary to popular belief, understanding catastrophe bonds is probably simpler than navigating traditional insurance. Consider the mindset of a small business owner before the onset of COVID-19. Being told there would be a six to twelve month shutdown due to a global pandemic would have likely been met with disbelief. The widespread assumption would be that insurance policies covered such unforeseen circumstances. However, complexity and confusion prevailed rather than clarity.

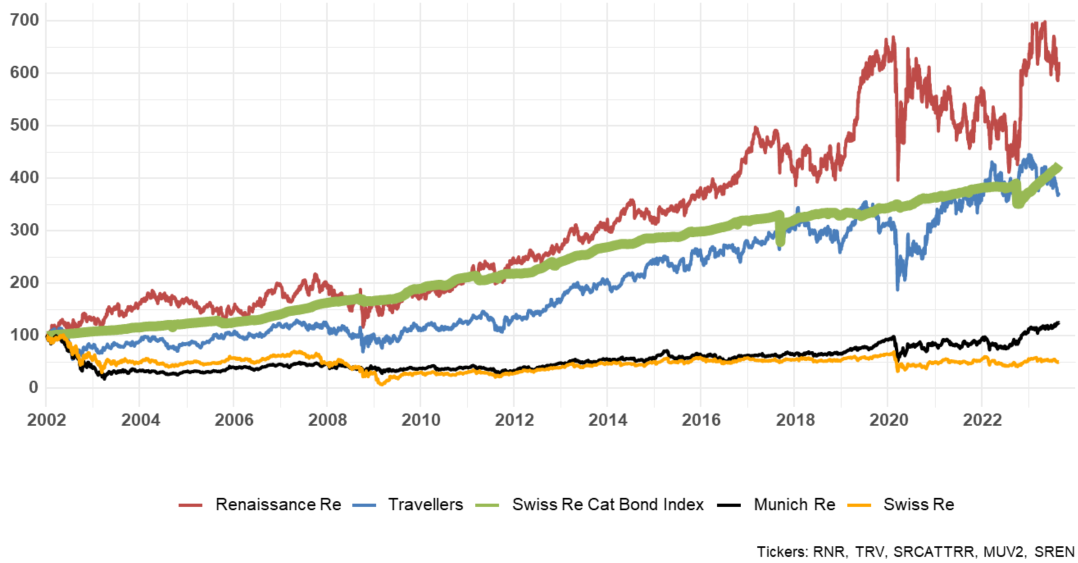
The pandemic redirected the conversation to intricate insurance wording and how they should be interpreted. Questions like which clause, LMA5393 or LMA5394, is applicable moving forward? How do we interpret contingent business interruptions wording? How do we interpret the denial of access wording? Would a judge in a remote jurisdiction set a precedent that someone coughing in your restaurant does in fact constitute physical damage, and therefore triggers the business interruption portion of your policy? A multi-strategy fund manager who dabbled in insurance companies might not have been aware of the tightrope that insurers were walking on at policy level. Had legal decisions gone the wrong way, their losses would, ironically, have been catastrophic[1].

On the other hand, the payout conditions for most[2] catastrophe bonds are straightforward, with losses to investors occurring only if specific predefined natural disasters take place. This eliminates ambiguity, protracted negotiations, and legal battles, ensuring transparency. Essentially, the risk is limited to specific natural disasters. In contrast, investing in the equity or debt of an insurance company exposes investors to broader losses from business lines like aviation, casualty, and cyber, as well as unexpected downturns from macroeconomic events. While such investments offer perceived diversification, this can be illusory. Some of these lines, especially those involving man-made claims, can be just as unpredictable as natural catastrophes, if not more so[3].

1 https://hsfnotes.com/insurance/2021/01/15/supreme-court-hands-down-judgment-in-fcas-covid-19-business-interruption-test-case/
2 The key element is the "Event Definition", such as "US Wind Only", which gives the bondholder certainty on the causation of the payout. Problems arise with broad definitions that cover “All Perils” and “Other Perils”.
3 https://www.gla.ac.uk/media/Media_219037_smxx.pdf

Is an investor fully aware of all possible drivers of loss when investing in an insurer's stock? Likely not, given that financial markets are prone to "unknown unknowns". In contrast, with catastrophe bonds, investors gain full transparency regarding the scenarios that may lead to losses. Comparing an investment in the equity of an insurance company to a catastrophe bond is not apples-to-apples. However, deeming catastrophe bonds as riskier or more volatile instruments is not supported by the data.

Equity performance of the Swiss Re Cat Bond Total Return Index and a selection or re/insurers, normalised



TENAX CAPITAL LTD
Registered Office: Dominican House, 4 Priory Court, Pilgrim Street, London EC4V 6DE, United Kingdom
European Office: +44 20 7003 8700 Fax: +44 20 7003 8701 Url: www.tenaxcapital.com
Registered in England and Wales No.5193344 Authorised and regulated by the Financial Conduct Authority

Those who have invested in catastrophe bonds in recent years might argue that the returns have been easily forgotten. However, a broader perspective shows that this asset class has been a valuable addition to portfolios. Since 2002, their performance is comparable to high yield corporate bonds and boasts a far superior Sharpe ratio. The market has also displayed resilience, demonstrating rapid recoveries from intermittent volatility, as evidenced in 2017 and 2022. A Florida-based executive even claimed that Hurricane Ian in 2022 was the best thing to happen to the Floridian insurance market since Hurricane Andrew in 1992. One step back, two steps forward for investors with a longer time horizon.

Cat Bond historical performance Vs other asset classes

	Cat Bond	IG Bonds	Hedge Funds	Commodities	HY Bond	Equities
Ann Return	**6.64%**	4.29%	1.96%	8.58%	7.39%	9.44%
Volatility	**3.71%**	6.94%	5.13%	23.01%	9.96%	15.06%
Sharpe Ratio	**1.79**	0.62	0.38	0.37	0.74	0.63
% positive months	**89%**	62%	62%	59%	66%	67%
Cat bonds positive, if index negative	**89%**	89%	86%	91%	87%	87%
Worst month	**-8.99%**	-8.25%	-9.35%	-28.71%	-18.64%	-16.80%
Date of worst month	**Sep-22**	Oct-08	Oct-08	Mar-20	Oct-08	Oct-08
Correlation	**100%**	30%	26%	15%	30%	24%
Adjusted Beta	**1.00**	0.44	0.46	0.35	0.40	0.37

Cat Bonds: Swiss Re Cat Bond Index, IG bonds: Bloomberg Barclays Global Agg Corporate Total Return Index, Hedge Funds: HFRX Equally Weighted Index, Commodities: S&P Goldman Sachs Commodity Index, High Yield Bonds: Bloomberg Barclays Global High Yield, Equities: S&P500 Total Return Index. Cat bonds positive when index negative refers to the Swiss Re Index performance against other indices. Data as of August 2023.

The biggest misconception is that catastrophe bonds are simply a bet on the weather. This could not be further from the truth. Rather than predicting exactly when and where a hurricane will hit, the focus is on determining which risks to insure and at what cost - the same task undertaken by any insurance company. The emphasis should be on understanding the cost of risk for a particular exposure and managing risk within a portfolio, rather than solely on the catastrophic event itself. Catastrophe bond managers have the ability to regulate the risk level of their portfolios, but they can't control when or how severely a hurricane might strike. We do, however, know the typical hurricane season (June-November) and when hurricanes are less likely (the rest of the year).

Additionally, there are also known climatic conditions, like El Niño and La Niña phases, which influence hurricane activity. During El Niño, a warming of the Pacific Ocean, fewer Atlantic hurricanes tend to occur, while La Niña, characterized by cooler Pacific waters, often leads to more frequent hurricanes. While predicting the exact timing and location of a hurricane is a fool's game, this information is open to the public and easily accessible. Ultimately, the profitability of an investment in catastrophe bonds hinges not on the manager's ability to predict weather but on their understanding of the bond's structure and technical nuances.

Portfolio managers, if they were to take an extreme approach and use these climatic patterns as gospel, could take any action from divesting to doubling down on Atlantic wind ahead of the hurricane season. Of course, the same could be done for equity and liquidity will undoubtedly be better, but there's no defined period when surprises like a pandemic, war or a systemic cyber event might negatively impact earnings.

For investors interested in gaining exposure to the totality of the insurance industry risks and performance drivers, including potential unknowns, cat bonds represent a partial solution. However, for those in search of an asset class with proven low volatility, consistent performance, and a buffer against inflation, they present a compelling option.

TENAX CAPITAL LTD
Registered Office: Dominican House, 4 Priory Court, Pilgrim Street, London EC4V 6DE, United Kingdom
European Office: +44 20 7003 8700 Fax: +44 20 7003 8701 Url: www.tenaxcapital.com