11 October 2024

Cat Bonds: No disaster!

The recent hurricanes “Milton” and “Helene” have brought the importance of catastrophe bonds into the public eye. At the end of September, Hurricane Helene devastated large parts of the south-east of the USA and claimed 230 lives, making it the deadliest storm to hit the US mainland since Hurricane Katrina in 2005. It was followed just a few days later by Hurricane Milton, which temporarily developed from a tropical storm into a category five hurricane.

Even though “Milton” ultimately caused less damage than feared, the insurance industry could be faced with losses of up to 100 billion dollars. “Milton” could thus become one of the most expensive hurricanes to date. Hurricane Katrina, which devastated the USA, particularly New Orleans, in 2005, remains at the top of this inglorious ranking. Insured losses at the time amounted to 99.8 billion dollars, while total economic losses reached as much as 201 billion dollars. Such events highlight the need to insure against losses from natural disasters. Catastrophe bonds are a financial instrument that insurance companies use to pass on this risk to the capital market. But can and should investors also invest in cat bonds?

What are cat bonds?

nsurance-linked securities (ILS), which include catastrophe bonds, are special financial instruments issued by reinsurers or insurance companies. They offer protection against natural disasters such as hurricanes, earthquakes or floods. Insurance companies that have to cover the risk of a hurricane in Florida, for example, protect themselves through reinsurance. However, if the reinsurer also wants to minimize the risk, cat bonds are issued to pass on the risk of loss to the capital market.

Cat bonds work in a structurally similar way to conventional bonds. The issuer - in this case the insurer or reinsurer - receives capital from investors and pays them regular coupons, i.e. interest, based on the issuer's credit rating. However, these bonds have a special risk profile: in the event of a defined natural catastrophe event, such as a hurricane that causes damage above a defined threshold (e.g. 500 million US dollars), investors can lose some or all of their capital. This capital is then used to cover the insurance losses.

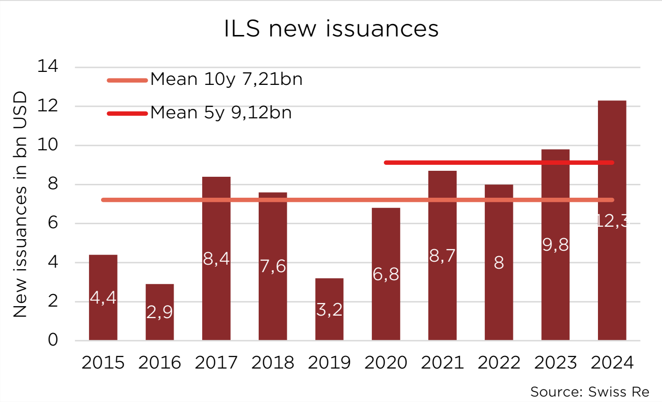
What distinguishes cat bonds from other debt instruments is their dependence on natural events, the occurrence of which jeopardizes the repayment of the capital. If no major catastrophe occurs, investors benefit as they receive the coupons and get their capital back at the end of the term. However, as there is also a risk of total default, investments should never be made in individual cat bonds, but always in a portfolio of very many broadly diversified bonds.

The ILS market

The market for catastrophe bonds has doubled in the last ten years to over 40 billion US dollars. A key factor behind this growth and the now broad range of fund solutions is the increased occurrence of natural disasters, exacerbated by rising population density and growing prosperity in the affected regions.

The market for catastrophe bonds grew strongly again in the first half of 2024. According to Swiss Re's August “ILS Market Insights” report, with primary issues of over

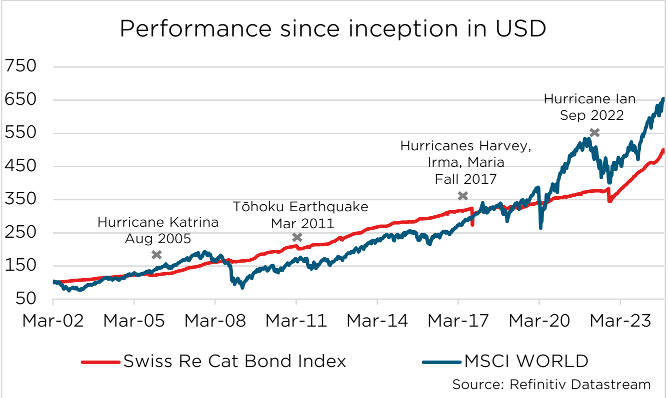
USD 12.3 billion, 2024 is the highest year in the history of this market and is also well above the five- and ten-year averages of USD 9.12 billion and USD 7.21 billion respectively.



Cat bonds as portfolio component

Catastrophe bonds are often categorized as absolute return products due to their attractive diversification properties. As the valuation of cat bonds does not depend on economic or company-specific events, they hardly correlate with traditional markets. In addition, catastrophe bonds are typically floating rate bonds that dynamically adjust to a fluctuating interest rate environment and exhibit only minimal - if any - price fluctuations when interest rates rise or fall.

A look at the correlation matrix illustrates the diversification properties of cat bond portfolios: the performance of the Swiss Re Cat Bond Index is uncorrelated to typical equity market indices such as the S&P 500, the STOXX 6000 or the MSCI World/EM as well as to bond market indices such as the Iboxx € Sovereigns 3-5 years or Iboxx € Corporates 3-5 years. This independence from financial market developments makes catastrophe bonds a valuable alternative source of returns and a key strategic building block in a diversified mixed portfolio.



Cat bond funds offer investors access to a diversified portfolio of catastrophe bonds, which spreads the risk more widely. As the individual risks of cat bonds are largely uncorrelated (e.g. hurricanes and forest fires), the diversification effect within a cat bond portfolio is considerable, but must be implemented by a qualified team. The performance of cat bond funds depends heavily on the frequency and intensity of natural disasters. For example, the Swiss Re Cat Bond Index recorded a loss of 5.6% after Hurricane Ian in October 2022, but recovered quickly due to the high inflow of new trades after the disaster. This pattern can be observed regularly.

For a long time, the asset class was difficult to access, but since 2010 more and more asset managers have also been offering their cat bond portfolios as liquid UCITS-compliant funds. This opens up a regulated and attractive investment opportunity for both institutional and private investors. The funds use advanced risk modeling tools to assess the actual risks of the bonds and build broadly diversified portfolios.

Correlation Swiss Re Cat Bond Index with stock and bond markets since start in 2002

	Swiss Re Cat Bond	S&P 500	STOXX 600	MSCI WORLD	MSCI ACWI	MSCI Emerging Markets	Iboxx € Sovereigns 3-5yr	Iboxx € Corporates 3-5yr
Swiss Re Cat Bond	1,00							
S&P 500	0,30	1,00						
STOXX 600	-0,02	0,77	1,00					
MSCI WORLD	0,20	0,96	0,89	1,00				
MSCI ACWI	0,19	0,95	0,90	1,00	1,00			
MSCI Emerging Markets	0,09	0,66	0,75	0,76	0,81	1,00		
Iboxx € Sovereigns 3-5yr	-0,06	-0,08	-0,04	-0,05	-0,06	-0,06	1,00	
Iboxx € Corporates 3-5yr	-0,06	0,13	0,17	0,18	0,19	0,20	0,71	1,00

Source: Refinitiv Datastream and own calculations

Conclusion

The devastation caused by hurricanes "Helene" and "Milton" underlines the importance of catastrophe bonds as an instrument for hedging against extreme weather events. The cat bond market is growing rapidly and offers not only insurers an additional source of financing, but also investors an attractive opportunity to diversify their portfolios.

Cat bond funds have proven to be a stabilizing factor in volatile market environments, as they operate largely independently of traditional financial market movements. This makes them a valuable strategic building block in a balanced portfolio - especially in times of climate change and the increasing frequency of natural disasters. However, like almost every financial instrument, cat bond funds are not exempt from risk and are not immune to price setbacks. When selecting funds, it is therefore all the more important to look for a broadly diversified catastrophe bond portfolio that is managed by an experienced portfolio management team in a stringent investment process.

Dr. Rebekka Haller

Market data

Stock marktes	As of 18.10.2024 11:42	Change versus 11.10.2024 -1 week	17.09.2024 -1 month	17.07.2024 -3 months	17.10.2023 -1 year	29.12.2023 YTD
Dow Jones	43239	0,9%	3,9%	5,0%	27,2%	14,7%
S&P 500	5897	1,4%	4,7%	5,5%	34,8%	23,6%
Nasdaq	18374	0,2%	4,2%	2,1%	35,8%	22,4%
DAX	19618	1,3%	4,8%	6,4%	28,6%	17,1%
MDAX	27344	1,9%	6,1%	7,1%	9,5%	0,8%
TecDAX	3437	1,5%	3,7%	2,6%	16,9%	3,0%
EuroStoxx 50	4978	-0,5%	2,4%	1,8%	19,9%	10,1%
Stoxx 50	4489	0,0%	1,4%	0,4%	13,5%	9,7%
SMI (Swiss Market Index)	12320	1,4%	2,3%	-0,1%	13,9%	10,6%
Nikkei 225	38982	-1,6%	7,7%	-5,1%	21,7%	16,5%
Brasilien BOVESPA	130793	0,6%	-3,1%	1,0%	12,8%	-2,5%
Indien BSE 30	81333	-0,1%	-2,1%	0,8%	22,4%	12,6%
China CSI 300	3925	1,0%	24,2%	12,1%	7,9%	14,4%
MSCI Welt	3738	0,2%	2,7%	3,6%	29,4%	17,9%
MSCI Emerging Markets	1135	-2,1%	4,1%	2,1%	19,3%	10,9%
Bond markets						
Bund-Future	133,84	69	-97	135	575	-338
Bobl-Future	119,56	63	-15	285	408	28
Schatz-Future	107,00	27	6	124	211	45
3 Monats Euribor	3,22	-19	-45	-44	-75	-66
3M Euribor Future, Dec 2024	2,85	-8	-16	-40	-58	55
3 Monats $ Libor	4,85	0	-23	-69	-80	-74
Fed Funds Future, Dec 2024	4,52	1	13	-30	-33	68
10 year US Treasuries	4,10	2	46	-5	-74	23
10 year Bunds	2,19	-8	11	-18	-66	19
10 year JGB	0,97	5	13	-4	21	35
10 year Swiss Government	0,45	-9	2	-11	-72	-25
US Treas 10Y Performance	609,29	0,0%	-3,2%	1,4%	10,3%	1,4%
Bund 10Y Performance	569,77	0,7%	-0,3%	2,4%	8,4%	0,8%
REX Performance Index	452,88	0,3%	-0,7%	1,7%	5,1%	1,1%
IBOXX AA, €	2,95	-10	-9	-38	-111	-12
IBOXX BBB, €	3,45	-11	-12	-40	-147	-31
ML US High Yield	7,29	-9	-4	-48	-205	-50
Commodities						
MG Base Metal Index	427,46	-2,9%	1,8%	0,3%	16,5%	9,3%
Crude oil Brent	74,48	-5,9%	1,4%	-12,2%	-17,5%	-4,1%
Gold	2710,69	2,0%	5,3%	10,2%	40,7%	31,2%
Silver	31,68	0,2%	3,1%	4,5%	38,0%	30,6%
Aluminium	2516,39	-3,7%	0,1%	7,4%	16,6%	7,3%
Copper	9384,92	-2,8%	1,6%	-1,1%	18,8%	10,9%
Iron ore	105,36	-1,0%	14,5%	-3,3%	-11,7%	-22,7%
Freight rates Baltic Dry Index	1594	-11,9%	-16,1%	-15,7%	-22,5%	-23,9%
Currencies						
EUR/ USD	1,0836	-0,9%	-2,7%	-0,9%	2,5%	-1,9%
EUR/ GBP	0,8309	-0,7%	-1,5%	-1,1%	-4,3%	-4,1%
EUR/ JPY	162,38	-0,3%	3,6%	-5,2%	2,8%	3,9%
EUR/ CHF	0,9387	0,1%	-0,2%	-3,2%	-1,4%	1,4%
USD/ CNY	7,1067	0,5%	0,1%	-2,2%	-2,9%	0,0%
USD/ JPY	150,21	0,7%	5,5%	-3,8%	0,3%	6,5%
USD/ GBP	0,77	0,3%	1,1%	-0,2%	-6,6%	-2,2%

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