

SEF Entropics Cat Bond Fund – Class I

Performance¹

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2017				0.05%	-0.06%	0.20%	0.43%	0.56%	-5.53%	1.35%			-3.13%

Manager's Notes

In October, the positions exposed to the severe hurricanes Irma and Maria have recovered significantly for the ones exposed to Irma and to a certain extent for the ones exposed to Maria. The month's performance is mainly a sum of the risk premiums and the market evaluation of the bonds exposed to Irma and Maria.

Furthermore, it was formally announced in October that the position in IBRD Mexico for earthquake is a total claim, due to the Chiapas earthquake. However, this outcome was already presumed by the secondary market and the effect on the portfolio was less than -0.1% in October.

Two new minor issuances of cat bonds were presented to the market during October. The first cat bond is a multi-peril bond sponsored by XL Catlin. It has two tranches and the size is 150 million USD. The second cat bond is a US multi-peril bond in three tranches sponsored by USAA, which seeks a protection of 225 million USD.

As these issuances are fairly small, we cannot draw any clear conclusions on future levels of risk premiums after the turbulent hurricane season of 2017.

In early October eight counties in California faced severe wildfires with devastating effects on property. The insured industry losses are at present expected to be between USD 2 billion and USD 3 billion according to AIR Worldwide, while other institutes have higher estimates. The fund has four bonds that to a certain extent are exposed to wildfire in the region and the outcome is far too early to foresee at this stage.

During the month, the fund purchased one position in the secondary market, which covers earthquake in U.S., Canada and Puerto Rico.

Portfolio Summary²

Yield to Maturity	7.72%
NAV	96.87
YTD	-3.13%
Last 3 months	-3.73%
Last 12 months	-
Since Inception 2/16/15	-3.13%
Volatility	-
Active Share	56.6%
AUM (SEK M)	219
Cash Allocation	7.9%
Number of Cat Bond positions	57
Solvency Capital Requirement (SCR)	12.51%

Maturity Profile

1) 0Mo - 6Mo Maturity	12.8%
2) 6Mo - 1.0Yr Maturity	13.5%
3) 1.0Yr - 2.0Yr Maturity	9.9%
4) 2.0Yr - 3.0Yr Maturity	46%
5) > 3.0Yr Maturity	17.8%

Annualized Risk Characteristics

Portfolio Expected Loss	1.93%
VaR (90%)	4.57%
VaR (95%)	10.33%
VaR (99%)	32.86%
TVaR (99%)	38.27%
Probability of 0% PL	56.39%

Historical Event Loss Analysis—

Most severe impact on the portfolio ⁴	
1906 San Francisco CA	26.4%
1926 Great Miami	19.3%
1700 Cascadia Subduction Zone Offshore of BC	11.4%
1812 New Madrid Seismic Zone-Scenario 4-3 Segments Rupture	9.6%
2005 Katrina	9.2%

Asset Class Financial Indicators⁵

	Annualized Volatility	Sharpe Ratio
Swiss Re Cat Bond Total Return Index	6.74%	1.03
Barclays BA US High Yield TR index value unhedged	8.49%	0.92
S&P 500	18.29%	0.50

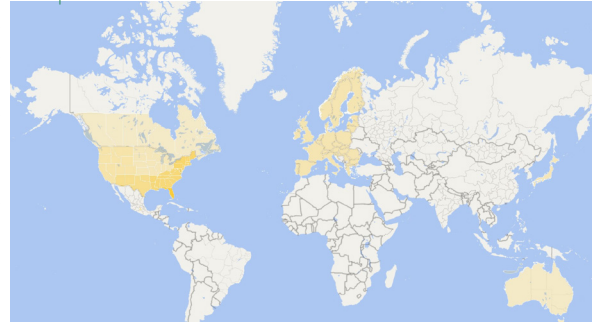
Portfolio Risk Profile³

Wind Exposure		Earthquake Exposure	
Australia	1.60%	Australia	0.24%
Canada	0.00%	Canada	0.62%
Europe	3.19%	Europe	0.85%
Japan	1.79%	Japan	1.15%
US Midwest	0.38%	US Midwest	0.44%
US Northeast	15.13%	US Northeast	0.36%
Florida	25.56%	US Southeast	0.70%
Other US Southeast	12.68%	US Southwest	0.00%
US Southwest	8.33%	California	16.03%
US West	2.78%	Other US West	1.74%
Mexico	4.78%	Mexico	0.06%
	Total 76.23%		Total 22.20%
Other perils	1.57%		

Wind Distribution Overview



Earthquake Distribution Overview



Responsible investment key indicators⁶

Purpose	% of positions	Problematic Entities	% of positions
Disaster relief	2.1	Sponsor	0.0
General property	65.9	SPV domicile	0.0
Insurer of last resort	19.5	Collateral currency	0.0
Public services	4.2	Collateral instrument	0.0
Mutual Insurance	3.1		
Problematic purposes	0.0		

SEF Entropics Cat Bond Fund

SEF Entropics Cat Bond Fund is an actively managed fund that invests in global reinsurance risks covering natural catastrophes (Cat Bonds). The Fund aims for a good risk adjusted return with very low correlation to other asset classes and good diversification among the underlying insurance risks.

The web site en.entropics.se provides additional information on the SEF Entropics Cat Bond Fund, including the Key Investor Information Document (KIID) and the Fund's prospectus.

Historical return is not a guarantee for future returns. The money you invest in the Fund can increase as well as decrease and you cannot be certain to have the full investment returned.

Share Class	I
Currency Class	SEK
Base Currency	SEK
Inception	4/10/17
Performance Target	4-6%
Fund Domicile	Luxembourg
Fund Structure	SICAV
Fund Regulation	UCITS
Liquidity	Fortnightly
Minimum Initial Investment	SEK 20 000 000
Minimum Subsequent Investment	SEK 5 000 000
Current Entry Charge	0%
Performance fee	10%
Hurdle Rate	SSVX90, High Watermark
Management Fee	0.70%
ISIN Number	LUI138351504

Entropics Asset Management

Entropics Asset Management AB is the first Scandinavian asset manager specialised in Cat Bond investments.

The team has broad experience from asset management, underwriting, meteorology, underwriting, cat claims settlements and financial mathematics.

Entropics is licensed by and under the supervision of *Finansinspektionen*, the Swedish Financial Supervisory Authority.

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Information on Risk Metrics

The risk measure for Cat Bonds and thus for Cat Bond portfolios is closely linked to reinsurance terminology. The following terms describe, briefly, the central portfolio risk metrics used by Entropics.

PRINCIPAL (Π_0): The Principal of a Cat Bond is the amount deposited as collateral for the bond's reinsurance commitment. A portfolio's total principal (Π_0) is the total amount exposed to damage events and, thus, generating returns.

LOSS (L) AND LOSS RATIO ($x=L/\Pi_0$): The total loss (L) is a monetary value, and to the Loss Ratio $x=L/\Pi_0$ is a relative measure of the loss size, with a range of 0–100%.

PROBABILITY OF ATTACHMENT (P_{att}): P_{att} describes the probability that a portfolio will sustain any damage at all. This probability generally increases with the number of (uncorrelated) bonds in the portfolio.

PROBABILITY OF 0% LOSS (P_0): P_0 is simply the probability of no loss at all and its relation to P_{att} is thus $P_0=1-P_{att}$.

PROBABILITY OF EXHAUSTION (P_{exh}): Indicates the probability that the portfolio sustains a damage equal to the entire principal Π_0 . P_{exh} is only notable for portfolios with few bonds. For portfolios with many (uncorrelated) bonds, it is all but infinitesimal.

EXPECTED LOSS (EL): The mean loss of a Cat Bond or a portfolio of Cat Bonds. Actual losses will often be 0% (as described by P_{att}), but losses, when occur-

ring, will often be considerably larger than EL. The loss thus in general shows considerable variation around the mean loss EL.

STANDARD DEVIATION (σ): To express the volatility of loss around the mean EL, the standard deviation of the loss, σ , is used.

VARIATION COEFFICIENT ($\mu=\sigma/EL$): The variation coefficient describes the volatility in relation to the mean loss, EL. The coefficient increases with the volatility of the portfolio.

EXCEEDANCE PROBABILITY (EP): Though the EL generally is low and the probability of no loss is high, actual losses have a wide spread. $EP(x)$ is the probability that a loss is equal to or bigger than the loss ratio x . EP is usually on a yearly basis and is presented as a function of the loss ratio x .

LOSS DISTRIBUTION ($Q(x)$): $Q(x)$ is the probability distribution of the loss and is calculated as $Q(x)=-EP'(x)$.

VALUE AT RISK (VaR): $VaR(Y)$ is the loss that with the probability Y is not exceeded on a yearly basis.

TAIL VALUE AT RISK (TVAR): $TVAR(Y)$ is the mean of all losses exceeding $VaR(Y)$.

Mathematically, this means that $TVAR(Y)=\frac{\int_{VaR(Y)}^{\infty} x \cdot Q(x) dx}{\int_{VaR(Y)}^{\infty} Q(x) dx}$

Footnotes

1. Performance is reported by Swedbank AB and reflects the Fund's Net Asset Value after fees
2. Yield to Maturity is calculated before applicable fees. In accordance with the Solvency 2 directive, a cat bond investment is considered as an insurance risk on the asset side. The Solvency Capital Requirement, SCR (as a monetary amount) for this specific risk is calculated as a percentage of the Assets Under Management (AUM).
3. Risk distribution and profile are calculated by portfolio modelling in AIR CATRADER, being the industry standard tool used by asset managers and re-insurers worldwide to model and analyse catastrophe bonds and other insurance

linked securities. "Other perils" includes perils other than wind and earthquake, e.g. wildfires and flooding. The portfolio can also include unmodelled risks, such as volcano eruptions and meteorite impacts, with extremely low and uncalculable frequency.

4. The historical event loss analysis describes the loss as a percentage of the portfolio if these events were to occur today.

5. Financial key figures are based on ten years weekly data from Bloomberg.

6. A description of the RI indicators can be found at Entropics' blog:

<http://en.entropics.se/blog/how-to-interpret-entropics-indicators-for-responsible-investments/>