

November 2020

# Twelve Insurance Fixed Income Strategy

## Cat Bonds and Insurance Bonds offer an untapped source of risk premium

### Executive Summary:

- Investors often pay dearly to access hidden alpha or an untapped source of risk premium. Often however, there is a previously overlooked solution that is more cost effective and delivers a desirable result.
- For instance, by combining Catastrophe Bonds (Cat Bonds) with Insurance Bonds, two fixed income asset classes are blended with vastly different risk exposures. Consequently, a source of risk premium can be earned over time that can be very valuable for portfolio diversification.
- In this paper, Twelve Capital examines the skills and knowledge required to successfully achieve this together with some elegant solutions for strategic asset and risk allocation in a post-Coronavirus world.

### Introduction

When two very different asset classes are blended together, it is possible to create more balanced and stable returns and mitigate undesirable risks that do not reward. This is, however, not easy to achieve. A portfolio needs to be constructed with exposure to a broad set of risk premiums.

During a bear market, when returns from most mainstream asset classes become correlated, diversification can decline significantly. This phenomenon was experienced during the Coronavirus pandemic, although not all asset classes were negatively affected.

Certain assets, such as Cat Bonds and Insurance Bonds performed well. Cat Bonds generally have a lower level of beta with the market. Meanwhile, within the insurance industry, issuers of Insurance Bonds did not appear to experience solvency issues from rising claims.

### What is the difference between the two?

Cat Bonds are a risk-linked high-yield form of debt, designed to raise money for the insurance industry in the event of a natural disaster. They function like a traditional bond with the bondholder receiving a stream of floating rate coupons, which can be seen as a healthy spread above Libor.

Insurance companies issue Cat Bonds to reduce the risk of catastrophe from their balance sheet. They place Cat Bonds in a clean SPV (Special Purpose Vehicle), which typically invests the principal in a triple-A money market fund. If a claim is made, it will only be against the principal, which is held in this highly liquid money market fund.

A claim would only be triggered if there is an insurance event e.g. a hurricane. Therefore, Cat Bonds have very low market risk, or beta. There is also no credit risk on the insurance company: the credit risk is on the SPV and its money market fund.

Insurance Bonds work differently. They are usually issued as Restricted Tier 1 (RT1) and Tier 2 bonds that fall under Europe's Solvency II framework. Their purpose is to ensure there is enough capital, even in extreme circumstances, to keep insurance companies solvent. Tier 2 bonds make up most of the investible universe, an area where Twelve Capital has a core competence.

These Insurance Bonds are higher yielding assets, rather than high yield assets, generally offering a higher yield due to their complexity and not because of a higher risk of default. In fact, the majority of Insurance Bonds are investment-grade rated. When considering the asset swap spread on these bonds – a measure used to isolate credit risk in fixed income – they are historically lower than high yield debt.

In short, Cat Bonds are affected by the low risk of catastrophe, while Insurance Bonds are influenced by financial solvency. When combined, these bonds can produce a hidden source of alpha and an untapped source of risk premium that can be very valuable for portfolio construction.

### Why should investors blend Insurance Bonds with Cat Bonds?

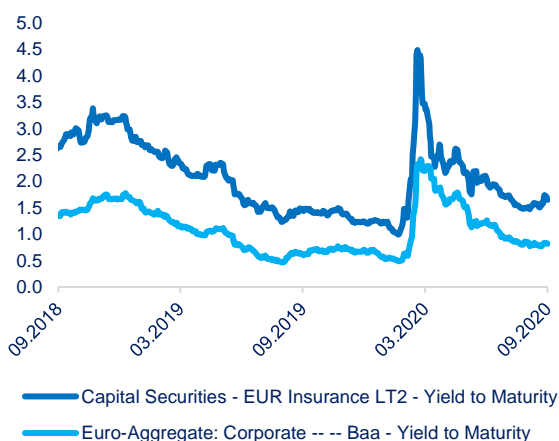
Overall Insurance Bonds generally offer less attractive yields than Cat Bonds, but they also have less exposure to default risk. Furthermore, they are considered highly liquid and can offer more stable returns. To summarise, they are a regulatory type of bond issuance which ensures the capital adequacy of the insurance company is met.

When blended with Cat Bonds, Insurance Bonds aim to mitigate some of the tail-risk that Cat Bonds are exposed to i.e. the risk of catastrophe. They also offer on average, a greater yield-to-maturity than both their nearest comparables: bank capital adequacy bonds and high-grade European corporate bonds (Figure 1).

Historically, the insurance industry has experienced low default rates versus other sectors (Figure 2). Their yield is less connected with the credit risk that they are exposed to and more related to their complexity.

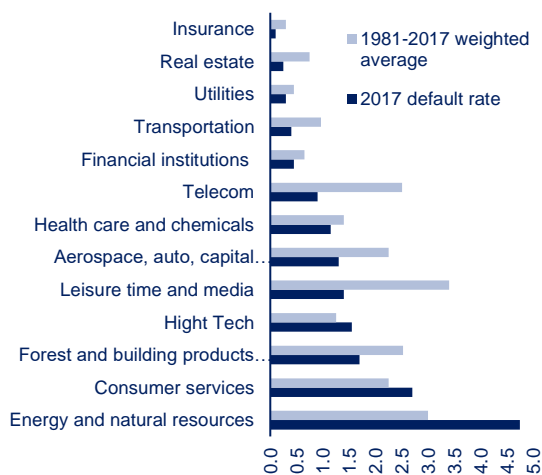
Investors are rewarded for having the patience to develop an understanding of how these bonds work, particularly as insurance companies are governed by a different regulatory framework. Typically, these investors are insurance market experts with decades of experience investing in this sector.

Figure 1: Comparison between yields to maturity



Source: Barclays Live. As at 30 September 2020.

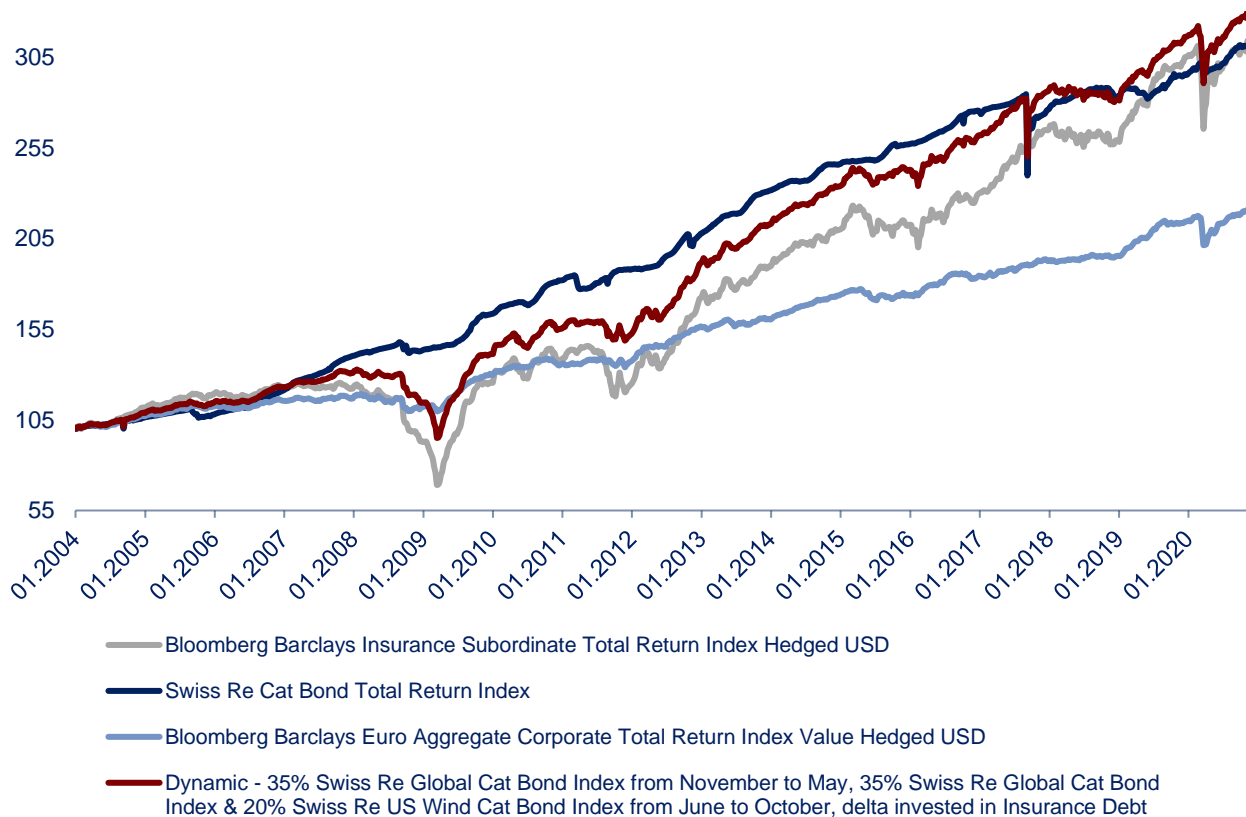
Figure 2: Default rates across different sectors



Source: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro®.

Combining Insurance Bonds and Cat Bonds in an efficient asset allocation mix, by taking advantage of the US Wind season, reduces volatility and improves potential returns (Figure 3).

Figure 3: Complementary strategies & diversification opportunities



Source: Twelve Capital, Bloomberg. As at 13 November 2020. 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. Bloomberg Barclays Euro Aggregate Corporate Index is a benchmark that measures the corporate component of the Euro Aggregate Index. It includes investment grade, euro-denominated, fixed-rate securities. Bloomberg Barclays Insurance Subordinate Total Return Index Hedged USD: No official description available.

## How Cat Bonds and Insurance Bonds fared during the Covid-19 crisis

Both these asset classes fared comparatively well during the Coronavirus crisis for different reasons.

### Insurance Bonds

The risks faced by Insurance Bonds are governed by solvency. To assess this solvency risk, both the liability and asset side of the balance sheet need to be assessed.

On the liability side the insurance industry generally performed well. Life insurance companies, which focus on mortality, did not receive mass claims from deaths caused by the Coronavirus, as was initially anticipated.

Commercial insurance also did not see mass claims for business interruption. The base assumption in the insurance industry was that the pandemic is not typically included in business interruption: this type of policy is designed to cover property damage and in most instances the risk of a pandemic was excluded.

However, there were some commercial insurance policies that did not specifically exclude business interruption caused by the Coronavirus, potentially leading to possible claims of approximately USD 20-40

**Marketing material for professional/qualified investors only**

billion globally for both the primary and re-insurance markets. Although at a glance, this appears to be a large figure, it is relatively small when considered in the overall context of the insurance industry.

Event cancellation policies could also be triggered by the pandemic. A good example is the Olympic Games in Tokyo, which could lead to some policy claims. However, when potential claims are taken in total, the solvency of insurance companies is not remotely threatened.

On the asset side of the balance sheet, insurance companies typically hold investment grade corporate bonds and government bonds, due to the Solvency II regulations in Europe that deter insurance companies from holding riskier assets. Such bonds include real estate, equities and high yield bonds, which all need higher capital requirements.

The high-quality nature of the assets held by insurance companies suggests Covid-19 will have little negative impact on these assets. Overall, the insurance industry remains very solvent and the risk of Insurance Bonds defaulting remains extremely low, as it has been historically.

**Catastrophe Bonds**

Cat Bonds can offer a healthy yield of up to 6% in today's environment<sup>1</sup>. At present their risk exposure appears to be largely decoupled from the recent financial stresses caused by the Coronavirus. This is likely due to their returns being often driven by natural catastrophes such as earthquakes, which means their returns typically bear a lower level of correlation to traditional market risks: these risks include sudden interest rate moves or global financial shocks.

There are only a few Cat Bonds that could be negatively affected by the Coronavirus pandemic. In 2017, the World Bank, in cooperation with the World Health Organisation, issued a type of Cat Bond known as pandemic bonds. These bonds account for just a fraction of the overall Cat Bond market and have only USD 40 billion of notional outstanding.

Overall Cat Bonds have proved to be a resilient asset class during the Coronavirus crisis and have suffered little to no effects from the economic turmoil caused.

**Constructing a portfolio of Cat Bonds and Insurance Bonds**

By dynamically allocating between Cat Bonds and Insurance Bonds, investors can create a strong insurance focused strategy that forms part of their investment portfolio. This is because both asset classes are driven by different risk factors, which bear lower levels of correlation to each other. Furthermore, the risk exposures from some Cat Bonds are highly seasonal and are dependent on annual risks, such as the US wind season – the period when the US is most at risk from hurricanes.

Investors can also adjust their exposure based on the relative value, or attractiveness, of each asset class. If for instance Cat Bonds spreads are extremely tight, investors can easily reduce their exposure and increase their allocation to Insurance Bonds if they have a better risk-return profile.

There are three components within such a strategy: Cat Bonds that are exposed to the US wind season, Cat Bonds that are exposed to specific earthquake risks and Tier 2 Insurance Bonds.

The allocation to wind season related Cat Bonds rises sharply between June and October. This is to earn the risk premium available during this period by carefully selecting the right wind season Cat Bonds that bear lower default risk (Figure 4).

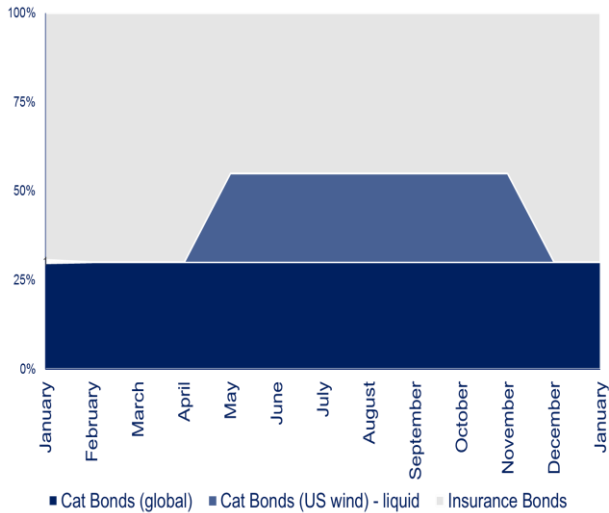
During wind season, the overall allocation to Cat Bonds usually rises up to 60%. Once the wind season is over, the portfolio's exposure to these bonds tends to fall sharply to just over 35%. This remaining allocation is often

---

<sup>1</sup> Gross yield (USD) for a Cat Bond fund managed by Twelve Capital.

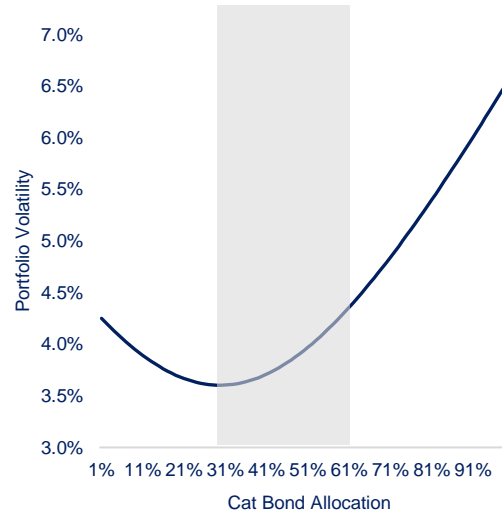
invested into what the investment team considers to be attractively priced Cat Bonds, which focus on specific earthquake risks.

Figure 4: A typical seasonal allocation strategy between Cat Bonds and Insurance Bonds



Source: Twelve Capital. For illustrative purposes only.

Figure 5: The level of volatility based on Cat Bond exposure



Source: Twelve Capital. For illustrative purposes only.

## Conclusion

Cat Bonds and Insurance Bonds performed well during the recent Coronavirus crisis. Both are governed by risk factors that are, to a large degree, distinctive from the financial distress currently affecting the global economy. However, even after the Coronavirus pandemic has passed, the investment case for blending these two very different asset classes remains compelling.

Insurance Bonds can be used to reduce the tail-risk of catastrophe that impact Cat Bonds. Conversely, Cat Bonds may offer an attractive risk-premium during certain times of the year i.e. US wind season. When combined, they offer a portfolio component that offers the potential for an attractive risk-return profile that bears a lower correlation to other parts of an investment portfolio.

Ultimately, this is an investment strategy that offers investors a very high degree of flexibility. Firstly, from a portfolio construction perspective. And secondly, in the form of defensive income that can be either drawn or reinvested, depending on the investor's objective. It is a source of risk-premium that can form part of any well-diversified investment portfolio.

**Twelve Capital AG**

Dufourstrasse 101  
8008 Zurich, Switzerland  
Phone: +41 (0)44 5000 120

**Twelve Capital (UK) Ltd**

Moss House, 15-16 Brook's Mews  
London W1K 4DS, United Kingdom  
Phone: +44 (0)203 856 6760

info@twelvecapital.com  
www.twelvecapital.com

**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.

**Disclaimer**

This material has been prepared by Twelve Capital AG, Twelve Capital (UK) Limited or their affiliates (collectively, "Twelve Capital"). This material has been furnished solely upon request and is intended for the recipient personally and may not be reproduced or otherwise disseminated in whole or in part without prior written consent from Twelve Capital. It is expressly not intended for persons who, due to their nationality or place of residence, are not permitted access to such information under local law as the product may not be authorised or its offering may be restricted in certain jurisdictions. It is the responsibility of every investor to satisfy himself as to the full observance of such laws, regulations and restrictions of the relevant jurisdiction. This information was produced by Twelve Capital. The information herein may be based on estimates. All information and opinions contained in this document are subject to change without notice. Twelve Capital's analyses and ratings, including Solvency II compliance analysis, Twelve Capital's Counterparty Credit Rating and Twelve Capital's Legal Rating, are statements of Twelve Capital's current opinions and not statements of fact. Source for all data and charts (if not indicated otherwise): Twelve Capital. Twelve Capital does not assume any liability with respect to incorrect or incomplete information (whether received from public sources or whether prepared by itself or not). This material does not constitute a prospectus, a request/offer, nor a recommendation of any kind, e.g. to buy/subscribe or sell/redeem investment instruments or to perform other transactions. The investment instruments mentioned herein involve significant risks including the possible loss of the amount invested as described in detail in the offering memorandum(s) for these instruments which will be available upon request. Investments in foreign currencies involve the additional risk that the foreign currency might lose value against the investor's reference currency. Investors should understand these risks before reaching any decision with respect to these instruments. The information does not take account of personal circumstances and therefore constitutes merely promotional communication, and not investment advice. Consequently, Investors are advised to take all necessary legal, regulatory and tax advice on the consequences of an investment in the product. Past performance is no indication or guarantee of future performance. The performance shown does not take account of any commissions and costs charged when subscribing to and redeeming shares.

Note to EU investors: when distributed in the EU, this information has been distributed by Twelve Capital (UK) Limited in accordance with the terms or its authorisation and regulation by the Financial Conduct Authority.

Note to US investors: Neither this information nor any copy thereof may be sent, taken into or distributed in the United States or to any U.S. person (within the meaning of Regulation S under the US Securities Act of 1933, as amended). The products and services described herein may not be offered to or purchased directly or indirectly by US persons.

Twelve Capital AG is licensed as "Manager of collective investment schemes" by the Swiss regulator FINMA. Twelve Capital AG is incorporated in Switzerland, registered number 130.3.015.932-9, registered office: Dufourstrasse 101, 8008 Zurich. Twelve Capital (UK) Limited is Incorporated in England & Wales: company number 08685046, registered office: Moss House, 15-16 Brook's Mews, London, W1K 4DS. Twelve Capital (UK) Limited is registered as an investment adviser with the U.S. Securities and Exchange Commission (the "SEC") and as a commodity pool operator ("CPO") with the U.S. Commodity Futures Trading Commission ("CFTC") and is a member of the National Futures Association (the "NFA") in such capacity. Such registrations and membership in no way implies that the FCA, the SEC, the CFTC or the NFA have endorsed Twelve Capital (UK) Limited's qualifications to provide the advisory services described in this document. Twelve Capital (US) Inc. is incorporated in the United States of America, incorporation number 6249536251, registered office: Little Falls Drive, Wilmington, New Castle County, Delaware 19808.

© 2020 Twelve Capital. All Rights Reserved.