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### Executive Summary

Twelve Capital believes that, in the first half of 2019, the insurance sector will remain attractive for investors:

- Many of the key drivers of markets seen in 2018 are likely to feature prominently in 2019, including the future path of global growth and the unresolved issue of Brexit in the UK.
- The insurance industry's financial strength and resilience, however, should offer comfort to investors. With capital markets increasingly willing to invest in a wider range of insurance risk, reinsurers and speciality line insurers have to rethink their business models. Strengthened balance sheet and upgraded regulatory standards also mean that the industry's restructuring and merger and acquisition (M&A) momentum remains firmly in place in 2019.
- On the natural catastrophe front, insurers saw an active Q3 and Q4 2018 after a benign H1, with Atlantic hurricanes, Pacific typhoons and California wildfires. While reporting on the 1 January renewal season is still ongoing, increases in rates have been modest. The reinsurance contracts from Japan and Florida renew later in the year and, at that point, Twelve Capital would expect rates to increase there. Retrocession rates, meanwhile, have increased, too, particularly on loss-impacted business.
- In Cat Bonds, meanwhile, spread-widening in late 2018 (despite the 2018 hurricane season having ended) offers an attractive entry point, in Twelve's view.
- In Insurance Bonds, despite the reassurance provided by recent industry stress tests carried out on European insurers and reinsurers, the risk/reward compensation versus other sectors reveals a healthy complexity premium is still available.

### Macro viewpoint from Twelve Capital's analytics team

In Twelve Capital's view, growing global macro uncertainty was the dominant theme of 2018 for both the insurance sector and wider investment markets. Rising concern over the US economy's strength, the impact on global growth of heightened global trade tensions, Brexit in the UK, increasing populist sentiment across Europe, among others, all helped to raise macro uncertainty and had a meaningful impact on investment performance in credit and equity markets during the year. Twelve noted two other standout themes in 2018 in terms of pure insurance industry fundamentals.

First, the implications of material industry restructuring are reflected in whole company merger and acquisition (M&A) activity as well as via partial acquisitions and disposals. The factors supporting this trend include competitive trading conditions, investment returns remaining low (by historical standards) and widespread regulatory change. Broker Willis Tower Watson reported in October 2018 that, with a total deal value of EUR 37bn, global insurance M&A in H1 2018 was at its highest level since the financial crisis.

Second, while less severe than 2017, the impact of another year of material natural catastrophe loss for the sector in aggregate has had implications for equity and insurance-linked securities' (ILS) strategies. Munich Re recently estimated that 2018 saw USD 80bn of industry insured losses from natural catastrophes, with the Californian wildfire losses the largest single contributor at circa USD 12.5bn loss. While lower than the estimated USD 140bn aggregate industry insured loss for 2017, 2018's estimate is materially above the inflation-adjusted 30-year average of USD 41bn.

## 2019 – more of the same?

Many of the key issues that drove markets in 2018 are also likely to feature prominently in 2019, in Twelve’s view. For credit and equity markets, no clear signals indicate that the global macro picture will become any less uncertain. There is increasing debate on whether the US Federal Reserve (Fed) will continue to raise interest rates in the US during 2019 - if so, by how much? Meanwhile, in the UK, Brexit remains unresolved. The drivers behind industry restructuring would seem to remain firmly in place. In equity and ILS markets, clear signs of momentum have been noted with new consideration given as to how natural catastrophe risk is priced in the wake of the two recent heavy loss years.

## Sector financial strength and resilience provides comfort given uncertain macro backdrop

Given the uncertain macro outlook, Twelve Capital takes comfort from the financial strength and resilience embedded in the global insurance sector and believes this is still underappreciated by generalist investors. The sector’s position of strength has been established over a number of years, in Twelve’s view. A global upgrade of regulatory standards after the financial crisis (Solvency II in Europe and updates to variable annuity capital and reserving standards in the US) were major catalysts for this positive change. Companies within the sector have:

- Heavily invested in in-house enterprise risk management capabilities, e.g. via greater resourcing of risk management and actuarial functions;
- Strengthened their balance sheets, with stronger solvency buffers, improved capital quality, lowered debt leverage and more robust liquidity; and
- Improved earnings quality, e.g. through prioritising technical underwriting profitability over business volume and by reducing reliance on investment spread-driven earnings.

A closer look at the financial data for the US Life sector today compared to 2007 supports Twelve’s view. Equity metrics point to US life insurance stocks currently trading at a deeper discount to the wider S&P 500 Index<sup>1</sup> than was the case in 2007. This is despite fundamentals painting a very different picture. Twelve’s analysis in Table 1 below shows a group with stronger regulatory capital ratios (despite a more stringent calibration of the approach), significantly lower debt and balance sheet leverage and a much improved liquidity profile compared to 2007.

**Table 1: Summary statistics on the US life insurance sector**

	FYE 2007	Today	Difference	Today date
Average RBC ratio (equal weighted)	389%	465%	76%	31.12.2017
Holding company cash / short term debt	49%	200%	151%	Mixed
Total debt / total capital ex. AOCI*	50%	30%	-21%	30.09.2018
Next Twelve Months expected ROE x AOCI*	13.7%	11.0%	-2.70%	11.01.2019

Source: Twelve Capital. As at 11 January 2019. \*AOCI=accumulated other comprehensive income

Twelve does not believe that the global insurance industry will squander this hard-won position of financial robustness, for example, through uncontrolled growth or overly aggressive balance sheet management. Therefore, this picture is positive for both credit and equity insurance investors. The industry seems likely to continue focusing on improved operational efficiency and underwriting quality within core business portfolios. For some participants, non-core asset disposals and sensible acquisition activity will supplement this. This might be particularly significant for groups with new CEOs incoming during 2019, as a change in leadership often leads to corporate strategy reviews, in Twelve’s view.

<sup>1</sup> The S&P 500 index is a market capitalisation weighted index of the largest 500 stocks in the US.

### Heightened pace of industry restructuring likely to continue in 2019

A confluence of factors are driving heightened insurance sector restructuring activity; Twelve sees these as widespread and not restricted to a single sub-segment. These should be reflected in ongoing M&A activity as well as partial business acquisitions and disposals.

For 2019 and beyond, Twelve's belief is that much of restructuring activity could be attributed to two key sector 'mega-trends', namely:

- The long-term expansion of capital markets' direct participation in insurance risk as an asset class; and
- Market risk assumed by insurers being unrewarded by investors in most listed insurance groups.

### Alternative capital is here to stay

Short-term, there seems to have been a pause in capital markets' expansion into insurance. This reflects the disappointing returns some investors have seen over the past couple of years from investments in ILS. Longer term, however, Twelve sees a continuation of recent trends, with capital markets increasingly willing to invest in a wider scope of insurance risk. This raises material challenges for incumbents such as reinsurers and specialty lines insurers, pressuring them to rethink their business models and the means by which they remain relevant in a more competitive environment. Consolidation is an obvious option under these circumstances, providing an opportunity to generate substantial operating synergies and a broader product offering to clients.

### Disposals of capital-intensive parts of the business

The second mega trend is Twelve's belief that investors in most listed insurance groups do not place value on market risk being assumed, e.g. spread risk in traditional European life savings products or fixed annuities in the US. Instead, such risk is usually severely discounted in both credit and equity valuations. There is a home for such risk but this is at either specialist insurers, the value proposition of which reflects a core skill set designed to manage such risk, or, alternatively, within private markets.

Last year, this mega trend gathered greater momentum as a rising interest rate environment improved conditions for partial business acquisitions/disposals to take place. Notable transactions included Italy-based insurer Generali announcing the disposal of its traditional German life business, France-based insurer AXA listing its US subsidiary AXA Equitable and two US-based insurers, Hartford Financial and Voya Financial, completing sales of their closed block variable annuity businesses. Twelve Capital expects more transactions to proceed in 2019.

### Momentum expected to build in natural catastrophe risk pricing environment throughout 2019

After a benign H1 2018, European reinsurers, Bermudians and Lloyd's businesses all saw an active Q3 and Q4 2018, particularly due to Atlantic hurricanes, Pacific typhoons and Californian wildfires, leading to an above-average year for natural catastrophes. The outlook for (re)insurance pricing is important not only for ILS but also for equity valuations of European reinsurers, Bermudians and Lloyd's businesses, in particular.

Starting from low base expectations around rate increases at the Monte Carlo Rendez-vous<sup>2</sup> in September, after H2 2018's natural catastrophe losses, the pricing outlook improved heading into the 1 January renewal season. Twelve believes that significant drivers for this included a recalibration of risk appetite and lower levels of capital to deploy into the asset class by some segments of the ILS community after significant losses in 2018 (compounding others suffered in 2017).

Industry reporting on this renewal season is ongoing and the mixture of business being renewed was not particularly skewed to the geographies, which were most loss-affected in 2018. About 60% of global reinsurance volume is renewed on 1 January each year. In 2019, this happened to exclude two of the worst affected regions in 2018 in terms of insured losses, i.e. Japan and the US. For Japan, which experienced significant insured losses, most treaties are renewed on 1 April, while many US programmes are only renewed on 1 June. Nonetheless, initial comments were supportive, with broker Guy Carpenter guiding in a recent report that its Global Rate on Line Index, increased by 1.1% at 1 January 2019, with the US increasing by 2.6% and EMEA decreasing by 2.5%. In Twelve's view, this

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<sup>2</sup> Annual international rendez-vous of insurance and reinsurance.

## Twelve Capital Perspectives

## H1 2019 outlook

improves confidence around possible further rate increases in relation to 1 April Japanese catastrophe market renewals - especially given the 'payback' nature of relationships in this market - plus US renewals scheduled for mid-year.

### Reinsurance renewals for Insurance-linked Securities (ILS)

For the second year in a row, the ILS market has seen capital trapped from the frequency of losses. A recently published report by Guy Carpenter estimates that the amount of collateral trapped could reach USD 20-25bn. This, coupled with the increases in rate expectations that have not materialised, as might have been expected after the significant natural catastrophe losses of 2017, has seen the amount of overall capital available reduce due to redemptions by disappointed investors. In addition to other events in the US and Japan, California wildfire activity in late 2018 generated a significant level of insured losses for the industry for the second year running.

The reinsurance sector has seen a varied degree of movement. Loss-free accounts in Europe and the US - with a good quality counterparty and good performance overall – have, in some cases, even seen decreases. In the US, however, programmes affected by the California wildfires have seen the largest increases along with the underlying coverage tightening. Retrocession<sup>3</sup> rates, meanwhile, have increased, particularly on loss-impacted business. The degree of increase varied depending on the riskiness of the transaction, with lower-attaching (i.e. riskier) transactions seeing increases that are more significant. At the top end (i.e. higher- attaching transactions) of both the catastrophe and aggregate placements, where Twelve Capital is involved, low single digit increases in rates were observed. Aggregate placements accumulate losses from various events over a specific time period. Once those accumulated losses exceed a certain threshold, the cover starts to pay out.

The focus of Twelve Capital's Private ILS strategy as at 1 January was on retrocession business. This is where Twelve has seen the most attractive compensation for the type of risk that is selected. Twelve was largely able to maintain the renewal portfolio for 2019 and, on renewals of prior year business, a positive rate movement was achieved. Within the strategy, not only were price increases achieved, portfolios were rebalanced to reflect current market conditions.

### Outlook for Cat Bond strategies

2018 ended with highly unusual price behaviour in the Cat Bond market. While Cat Bonds normally trade at a premium after the hurricane season ends, in 2018, intense selling pressure towards year-end was noted which led to significant spread widening. Twelve Capital believes this selling pressure stemmed from managers struggling to generate liquidity for the upcoming January renewals.

In Twelve's view, spread-widening represents an attractive entry point into the Cat Bond market. As 2019 progresses, Twelve Capital would expect the current opportunity to dissipate once renewals are fully settled.

Figure 1, below, demonstrates the scale of the current opportunity. By looking at the Swiss Re Cat Bond Total Return Index<sup>4</sup>, rather uneventful years, such as 2014 and 2016, show accumulated returns rising steadily throughout the year. The curve steepens during the hurricane season<sup>5</sup> when the risk is highest. In contrast, in 2018, negative price performance, possibly from forced selling, led to spreads tightening to levels that had been seen much earlier in the year, before the hurricane season.

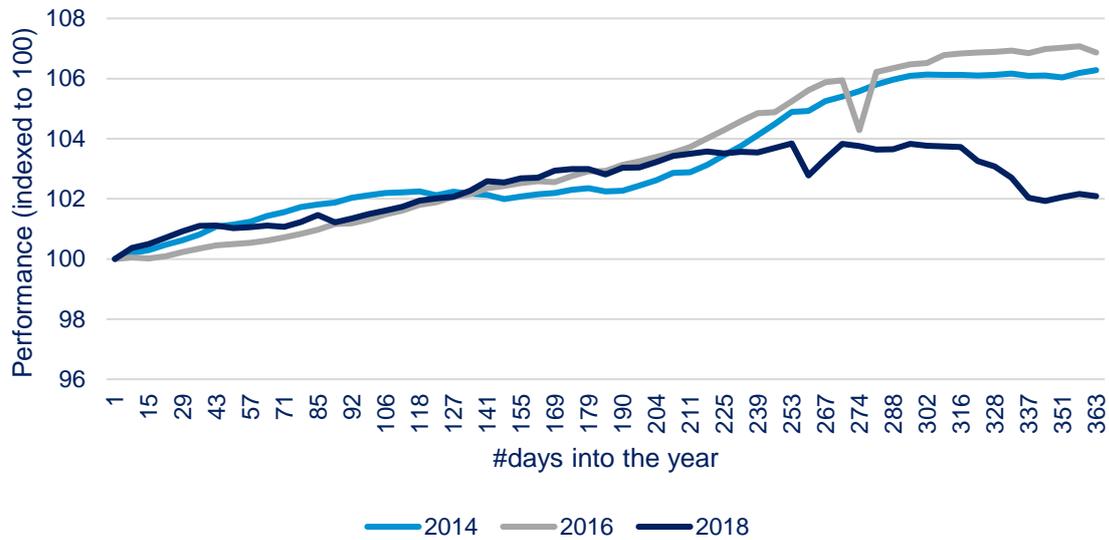
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<sup>3</sup> When a reinsurance company insures another reinsurer, the company that accepts the risk is called the retrocessionaire.

<sup>4</sup> 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.

<sup>5</sup> The US Atlantic hurricane season officially lasts from 1 June to 30 November.

**Figure 1: Performance development Swiss Re Global Cat Bond Index total return**



Source: Twelve Capital, Bloomberg. As at 31 December 2018. 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.

**Insurance debt: the insurance sector is demonstrating strength and resilience**

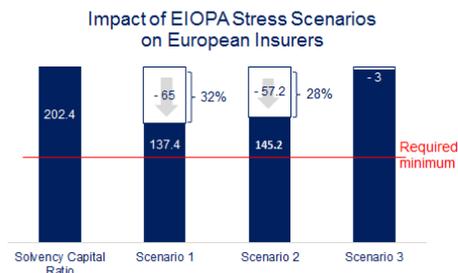
A fundamental aspect of the insurance sector is the regulatory oversight that exists in Europe. The European Insurance and Occupational Pensions Authority (EIOPA) published the results of an EU-wide industry Insurance Stress Test exercise in December 2018. This focused specifically on the most relevant and current risks within the sector as a whole rather than it being intended as a ‘pass or fail’ exercise for those insurance companies that participated.

The test was based on three scenarios:

- A yield curve up shock combined with lapse and provisions deficiency shocks, which means there is a sudden and sizeable repricing of risk premia and a significant increase in claims’ inflation.
- A yield curve down shock combined with longevity stress, which means there is a protracted period of extremely low interest rates accompanied by an increase in life expectancy.
- A series of natural catastrophes whereby European countries are hit in quick succession by four windstorms, two floods and two earthquakes.

**Figure 2: EIOPA stress tests**

<b>Scenario 1 “Yield Curve Up”: Abrupt rise in yields and risk premia + lapse and inflation shock</b>	
German 10-year bond yields: +119bps	Equities fall -39%
BBB non-financial corporate bonds spread increase +258bps	Lapses increase +20%
Claims inflation shock of 2.24%pts.	
<b>Scenario 2 “Yield Curve Down”: Prolonged fall in interest rates and longevity shock</b>	
German 10-year bond yields: -44bps	Equities fall -16%
BBB non-financial corporate bonds spreads: -23bps	Longevity shock
<b>Scenario 3 “Natural catastrophe shock”</b>	
4 European windstorms	2 Central European floods
2 Italian earthquakes	No time to change reinsurance coverage



Source: EIOPA. The reference data for the 2018 stress scenarios is as at 31 December 2018.

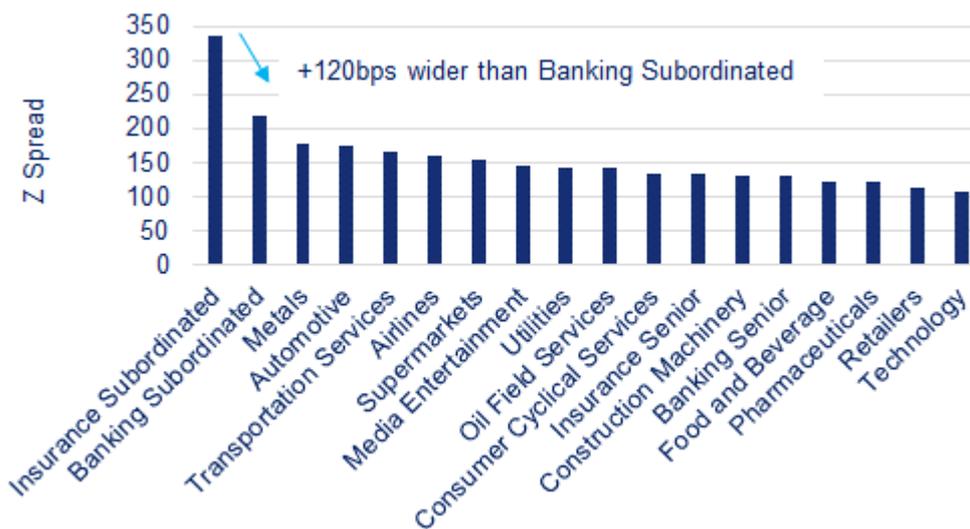
EIOPA tested 42 European insurers/reinsurers, which effectively represented 75% of the market. In the first scenario, ‘yield curve up’, insurers lost approximately one third (-32%) of their solvency capital ratio (SCR). The result for the scenario ‘yield curve down’ was not too dissimilar from the former, save that the impact was slightly less, with the impact on the SCR being -28.2%. The natural catastrophe shock showed minimal impact to European insurers’ balance sheets. The minimal impact of this scenario demonstrated, in Twelve’s view, the importance of reinsurance programmes in supporting the resilience of insurers’ balance sheets.

The stress tests demonstrated the overall strength of the insurance sector. More importantly, they provided much comfort to investors, demystifying any concerns with respect to insurers’ balance sheets, which were shown to be adequately capitalised to cope with shocks of this magnitude.

**The relative opportunity in Insurance Bonds**

Despite the affirmation that the stress tests provided, the insurance sector remains the single biggest outlier with respect to risk/reward compensation.

**Figure 3: European corporate sector Z spreads**



Source: Bloomberg and Twelve Capital. As at 31 December 2018.

Z Spread shows the spread of a bond when all cash flows are discounted with the spot rate of the treasury curve where the cash flow is received.

Figure 3 above illustrates the relative value of the sector versus all other sectors within the credit universe, with Insurance Bonds offering an excess spread versus subordinated bank debt of approximately 120 basis points. This demonstrates the structural complexity premium for which investors are compensated. The recent bout of market volatility has further added to the compelling nature of the sector.

**Figure 4: Asset swap levels Insurance Bonds**



Source: Bloomberg and Twelve Capital. As at 31 December 2018.  
Swap Spread=Asset Swap spread shows the yield to maturity of a bond above the Libor curve.

Insurance Bond spreads widened by approximately 200bps in 2018, as shown in Figure 4 above, reaching similar levels to those seen in 2016. From the point of view of Twelve’s Insurance Bonds strategy, markets were driven by the external macro backdrop. Despite this, Twelve sees value and opportunity in the asset class in 2019. From the stress test mentioned above, Twelve would emphasise that this spread-widening is not related to the fundamental credit quality of the issuers.

At the start of 2019, insurance companies in Europe have, on average, solvency ratios in excess of 200%. Their balance sheets remain robust and well-capitalised. In an environment where investors are growing ever more concerned with respect to a global economic slowdown, the insurance sector stands out as one of the most defensive and resilient in such an environment.

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### About Twelve Capital

Twelve Capital is an independent investment manager specialising in insurance investments for institutional clients. As at 31 December 2018, the firm had approximately USD 4bn in assets under management. Twelve Capital's investment expertise covers the entire balance sheet of insurance companies, including Insurance Bonds, Insurance Private Debt, Catastrophe Bonds, Private Insurance-Linked Securities and Insurance Equity. The firm also structures portfolios of its Best Ideas. Twelve Capital was founded in October 2010 and has offices in Zurich and London.

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