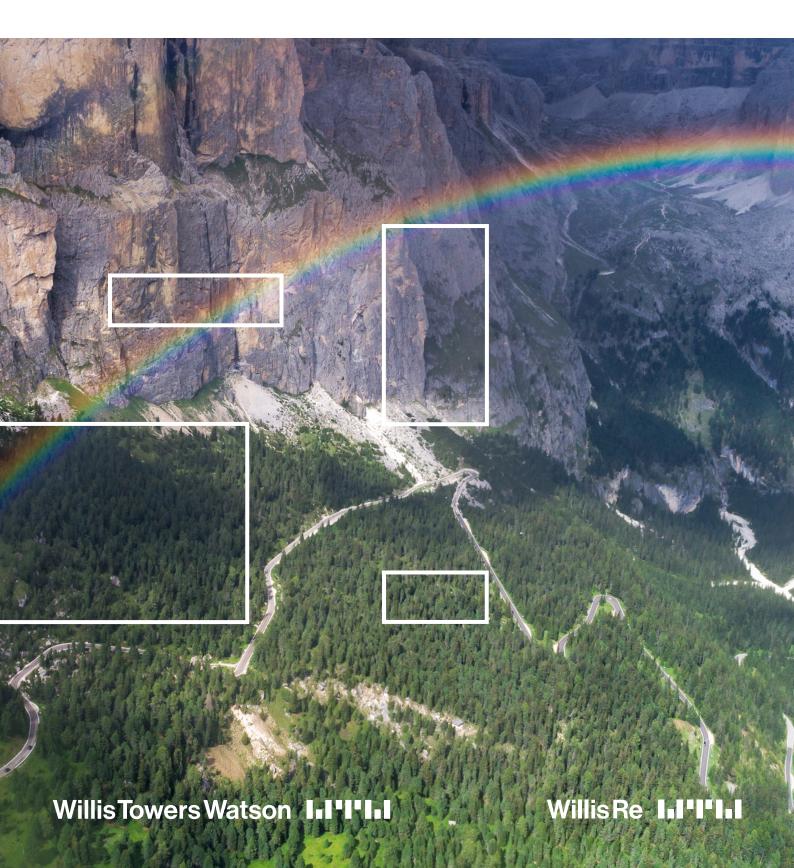
After Big Tests, ILS Market Shows Resilience

2020 Global Insurance-Linked Securities Market Survey Report



Willis Towers Watson conducted a global survey to provide a snapshot of the views of the ILS industry. Participants represent four segments: end investors, ILS funds, insurance and reinsurance companies, and corporate risk managers.



After Big Tests, ILS Market Shows Resilience

2020 Global Insurance-Linked Securities Market Survey Report

Table of contents

Survey highlights	4
End investors	4
ILS funds	4
Insurance and reinsurance companies	4
Corporate risk managers	4
About the survey	5
ILS today: Setting the scene	6
ILS survey response summaries	8
End investors	8
ILS funds	ĉ
Insurance and reinsurance companies1	11
Corporate risk managers1	2
Conclusions: Framing the big ILS picture1	3
Glossary	4



Survey highlights

Key findings from the constituents of the ILS market

End investors

- A large majority of institutions have been investing in ILS for at least five years; based on that experience only 5% are slightly dissatisfied with investment performance to date.
- Just over three-quarters of end investors allocate between 1% and 5% of their assets to ILS, with a further 9% exceeding 5%.
- Beyond natural catastrophe risks, weather insurance and life, accident and health are seen as the most acceptable areas for investment; cyber is less so.
- Market disruptions from catastrophe losses in 2018/2019 and COVID-19 have not significantly dented enthusiasm for ILS investments. Over 80% of end investors either expect to increase their ILS allocation in the next 12 months or expect it to be unchanged.
- About a third of participants indicated that due to COVID-19 they had to postpone planned new investments.
- End investors cite transparency as the most important characteristic of a good ILS manager. Flexibility to invest across a full range of ILS opportunities and low management fees also rank as key desirable characteristics.

ILS funds

- In 2020, ILS funds have moved more investment to retrocessional reinsurance. On average, 37% of an ILS portfolio is now allocated to retro compared with 25% in 2018.
- ILS funds are rather less bullish in their expectations of market growth over a five-year period than in the 2018 survey but remain positive. The 92% of those who thought market growth would exceed 10% in 2018 has fallen to 60%.
- Property risk, aviation and satellite, and terror are the most attractive non-life risks for ILS funds' future growth. Over 70% of ILS funds report that end investors are supportive of investment outside property catastrophe risk.
- 80% of ILS funds expect climate change to create significant threats and opportunities for the ILS market over the next five years.
- Trapped collateral has been an issue over the past few years, although the amount at year-end 2019 was perhaps, on average, less of an issue than the industry buzz would suggest. At the end of 2019, two-thirds of ILS funds say their trapped collateral is in the 0% to 5% range. Note that the trapped collateral responses did not take into account the potential impacts of COVID-19.

Insurance and reinsurance companies

- The use of ILS remains stable over the past two years, similar to 2018, with over half (56%) of insurance and reinsurance companies accessing ILS capacity; however, only 17%, compared with 27% in 2018, still derive more than 20% of their capacity limit from ILS.
- 63% of North American insurance and reinsurance companies access ILS capacity, slightly more than their international counterparts (53%), while also typically originating more than 10% of their capacity limit. The majority (74%) of international insurance and reinsurance companies source ILS for less than 10% of their capacity.
- Use of collateralized capacity on traditional programs has increased from 53% of respondents in 2018 to 69% in 2020, while the use of capacity backed by cat bonds has also increased by 8%.
- Diversity of capacity is the primary attraction of ILS for 83% of respondents, but international insurance and reinsurance companies also widely cited the marketing/innovation aspect of ILS.
- Of the two-thirds of respondents that have recovered claims from reinsurance backed by ILS, 63% said the process was easier or no different from recovery from a traditional reinsurer.

Corporate risk managers

- Diversification of capacity is the most attractive aspect of ILS.
- While just over a third expect to use ILS in the next three years, most other risk managers remain open to accessing it (mainly for multiline covers) if they have more information.
- The main sorts of information they are looking for are the relative sustainability of (re)insurance capacity versus ILS capacity (73%) and relative claim payment history (64%).

About the survey

Willis Towers Watson's Global Insurance-Linked Securities (ILS) Market Survey Report offers a unique view of the ILS market given it tracks the perspectives of all the various ILS market constituents:

- End investors
- ILS funds
- Insurance and reinsurance companies
- Corporate risk managers

Survey objectives

- Understand the changing dynamics of the ILS market from multiple perspectives
- Measure respondents' engagement with ILS and growth opportunities
- Gauge market participants' views of the topic and usage
- Provide participants with a clear perspective on how other constituents view ILS

Survey participation

Our web-based survey of 122 global ILS participants was fielded between June and August 2020. This constituted 58 providers of ILS capacity and 64 capacity users including insurance and reinsurance companies and corporate risk managers. The survey captures global and regional trends with 44% of capacity users respondents coming from North America and 56% coming from the rest of the world.

Survey scope: A wide angle market lens

The survey provides a snapshot of the views of the broad constituents that make up the ILS industry.

The breadth and depth of expertise in Willis Towers Watson's Investment, Risk and Reinsurance business and Corporate Risk and Broking business allow us unique access to all these market participants (see diagram below).



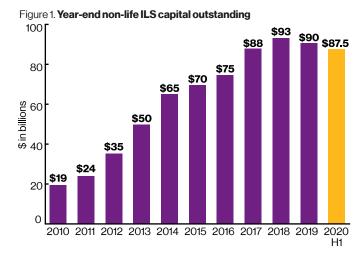
.........

Willis Towers Watson's 2020 Global ILS Market Survey Report brings together views from end investors, ILS fund managers, insurance and reinsurance companies and corporate risk managers.

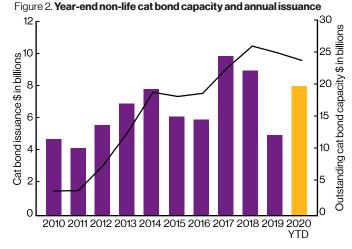
Securities business is conducted through appropriately licensed Willis Re Securities entities.







Source: Willis Re Securities



Source: Willis Re Securities transaction database (YTD calculated up to 10/30/2020)

Insurance-linked securities (ILS) have become an integral part of the risk transfer and alternative investment landscape. Notwithstanding loss activity and subsequent reserve development in recent years, new investment continues from institutions and other investors, roughly balancing inflows and losses on a net basis. Thus, non-life ILS assets under management (AuM) have remained roughly stable over the past few years (Figure 1), contrary to the growth predicted by 2018 survey respondents.

Although the ILS market has not been growing as some had expected two years ago, within the overall figure, activity in the non-life cat bond sub-segment has rebounded strongly in 2020 as investors see increasing value in cat bonds relative to other forms of ILS investment (Figure 2). It is on target to attain previous record levels of annual issuance. The reach of ILS is also extending beyond property catastrophe into such areas as weather insurance and terror and even into areas not explicitly covered in our survey or these figures, such as mortgage insurance ILS.

The reach of ILS is also extending beyond property catastrophe into such areas as weather insurance and terror and even into areas not explicitly covered in our survey or these figures.

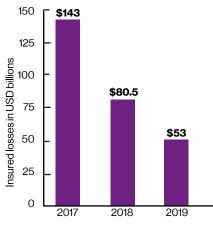


Our research suggests some regrouping has taken place in the ILS market in the two years since our last survey, influenced by lower annual natural catastrophe insured losses in 2018 (\$80.5 billion) and 2019 (\$53 billion) compared with 2017 (\$143 billion) (Figure 3) and resultant high levels of reinsurance market capacity. But it also shows that ILS use and investments to date have broadly met expectations and points toward further market growth and opportunities — albeit with the unpredictable factor of the impact of COVID-19 on market dynamics.

The two years since our last survey in 2018 have seen some modest rethinking of objectives across the market. This period has also coincided with a period of high or excess capacity in the traditional reinsurance market and the loss activity described above. Generally, satisfaction with the outcomes of ILS activity and participation has remained high; however, end investor allocations to ILS mostly stabilized and insurance and reinsurance companies largely maintained rather than increased proportions of ILS in overall capacity, with some regional differences.

Notwithstanding this reflection and the corresponding pause in AuM growth, almost across the board, ILS participants expect further growth with new factors such as environmental, social and governance (ESG) characteristics and the impact of climate change emerging as potential drivers of ILS activity. For the first time, this survey also takes some initial steps in assessing the potential direct impact of ILS in corporate risk management.

Figure 3. Insured losses from natural catastrophes



Source: Figures taken from Willis Re Summary of Natural Catastrophe Events

Survey response summaries

End investors

End investors are increasingly familiar with ILS investments, with only 4% of survey respondents saying they have been invested for less than two years. The largest proportion of end investors (45%) allocate between 1% and 2% of total assets to ILS, followed by 32% that invest 2% to 5% of total assets (Figure 4). Similar to 2018, most end investors continue to target 1% to 5% portfolio allocations for ILS.

Seventy percent of end investors say they are satisfied or extremely satisfied with ILS funds and investments to date, compared with just 5% that are slightly dissatisfied. And looking forward, even allowing for the possibilities of delays due to the COVID-19 outbreak, 41% expect to increase ILS participation in the next 12 months, including 9% that expect to increase it by more than 10% (Figure 5). In the short term, the COVID-19 outbreak hasn't resulted in significant redemptions or top-ups, with most investors adopting a 'wait and see' approach. About a third of participants mentioned delayed investments originally planned for the first half of 2020.

Investment criteria

Besides the attraction of an institutional quality alternative investment strategy, end investors have highlighted favorable ESG/ sustainable investing characteristics as a reason to be invested in this asset class. Thirty-eight percent of end investors listed these characteristics as their main reason for investing in ILS. Other attractive traits regularly mentioned are liquidity, cost and transparency of risks — with yield notably lower down the list.

Beyond natural catastrophe risks, which all survey participants regard as acceptable for ILS mandates, weather insurance (64%) and life, accident and health (46%) are seen as next in line (Figure 6). Support for cyber risk taking is low — a disconnect from the views of (re)insurers and corporate risk managers that would very much welcome cyber ILS capacity. This is possibly because end investors are less familiar with cyber risk as an insurance peril. Within the bigger picture of alternative investment opportunities, many end investors say they are also looking closely at alternative credit, hedge funds and infrastructure for new allocations. Figure 4. Strategic allocation to ILS funds/investments

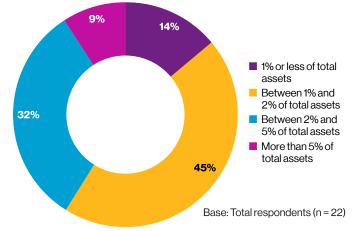


Figure 5. ILS investment intentions over the next 12 months

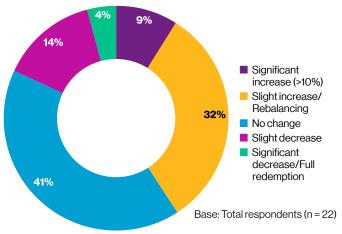


Figure 6. Risk areas that end investors consider suitable for ILS investment mandates

0%	20%	40%	60%	80%	100%
Natural	atastrophe				
					100%
Weather	insurance				
			64%		
Life, acci	ident and healt	h			
		46%			
Casualty	/				
	23 %				
Financia	l guaranty, crec	lit insurance a	nd mortgage i	nsurance	
-	18%				
Terror					
9%					
Others					
9%					

ILS fund and manager selection

Survey participants have highlighted the level of reporting and transparency offered as the most important characteristic of a good ILS offering. ILS funds seem to have received the transparency message loud and clear in 2020 as reflected in their increasing interest in cat bonds relative to less liquid forms of ILS and increasing use of independent third-party valuation agents for illiquid ILS.

Fees and flexibility to invest in a full range of instruments make up the rest of the three most regularly cited factors. But when it comes to differentiators between ILS managers, end investors still value experience, analytical/modeling capabilities, networks and sourcing capabilities, while operational and other back-office functions were highlighted by more than a third of participants in 2020 compared with 16% in 2018. Also, compared with 2018, it appears that the size of the asset base is now less of a factor.

ILS funds Funds' allocations

Over 90% of ILS funds are more than 75% invested in nonlife assets, with most funds protecting third party (re)insurers through a trust-funded structure. Also on the rise is the amount of investment in retrocessional reinsurance risks. On average, 37% of an ILS portfolio is allocated to retrocessional reinsurance, which has risen from 25% two years ago. There has been a similar shift in geographical investment focus with, on average, 77% of an ILS portfolio being invested in multi-region and North American located-risks, an increase from 65% in 2018 (Figure 7). Notably, private ILS has increased in comparison with cat bonds since our last survey in 2018.

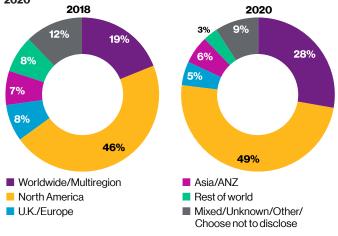


Figure 7. Average allocation of portfolio by location of risk, 2018 versus 2020



Market perceptions

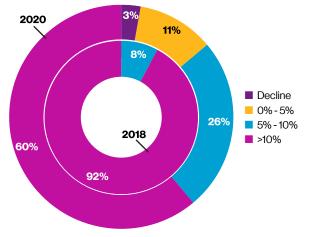
Funds are less bullish in their expectations of market growth over a five-year period than in the 2018 survey, but still remain positive. The 92% of ILS funds that thought market growth would exceed 10% in 2018 has fallen to 60% in 2020, although a further 26% expect growth to be in the still very healthy 5% to 10% range (Figure 8). An emerging factor in these perceptions is climate change. Eighty percent of respondents expect that climate change will create significant threats and opportunities for the ILS market over the next five years.

As part of the heavy concentration on non-life risks mentioned previously, property catastrophe remains the dominant risk for ILS funds. Nonetheless, over 70% of funds still believe that end investors are supportive of investment in other risk areas. The top five risk areas in perceived order of attractiveness, but with relatively minor differences between them all, are property, aviation and satellite (joint), terror, cyber and marine.

Fund governance

The number of ILS funds appointing independent third-party valuation agents for illiquid (Level 3) assets has increased from a third in 2018 to just over a half in 2020. This is probably not surprising, in light of the catastrophe events of recent years that have re-emphasized the need for continuing improvement in the areas of governance and transparency. End investors agree: They cite the level of reporting and transparency as the most important characteristic of a good ILS fund — above low fees. The ILS funds that use independent valuation agents also agree and see it as an opportunity to attract more investment; the common drivers for appointment are internal risk management (77%) and investors (64%) — essentially unchanged from 2018.

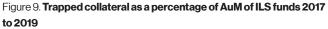
Figure 8. ILS market growth in the next five years, 2018 versus 2020



A subject of much discussion around the ILS market in recent times has been the issue of trapped collateral – by which we refer to the buffered amount of collateral above the loss pick or, for cat bonds, the unredeemed amount above the loss pick. Our survey findings suggest this issue has been decreasing over the past few years up to the end of 2019, as the recent catastrophe events continue to mature. The proportion of ILS funds reporting trapped collateral of 0% to 5% of AuM for the end of 2019 is 66%, compared with 50% for the end of 2017 and 46% for the end of 2018. Similarly, the proportion of funds reporting trapped collateral of more than 10% of AuM for the end of 2019 is 14%, compared with 25% for the end of 2017 and 26% for the end of 2018 (Figure 9).

While the survey did not directly measure outstanding trapped collateral and is based on a sample of the market, it suggests an amount for year-end 2019 that could be somewhat lower than the \$15 billion often quoted. Another surprise in the data is that ILS funds with a strong retro focus were not significantly overweight in having trapped collateral issues, as ILS funds with a direct reinsurance appetite were also impacted. This may be partially explained by the differential impact on direct reinsurance relative to retro of the catastrophe events during the period.

In total, the survey responses suggest that the ILS market may have adapted more swiftly and effectively than generally reported to the trapped collateral challenges posed by Hurricane Irma and other events through year-end 2019. The story is not over, of course. COVID-19 and the continued uncertainty around propertyrelated losses has created additional challenges for end investors, ILS funds and insurance and reinsurance companies alike.



0%	20%	40%	60%	80%		100%
31 Dec 2017						
		50%	11%	14% 7%	6	14%
31 Dec 2018					4%	
		46%	21	<mark>%</mark> 18	8%	7%
31 Dec 2019					4%	4%
			66%	17%	6 7%	7%
						3%
📕 0% to 5%		<mark>=</mark> 5% to 10%	10% to 25%			
📕 25% to 50)%	50%+	C C	other		

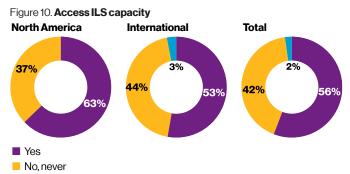


Insurance and reinsurance companies Trends in ILS use

The use of ILS has remained stable over the last two years, with over half (56%) of insurance and reinsurance companies accessing ILS capacity compared with 58% in 2018 (Figure 10). Outside of natural catastrophe, risk types that insurance and reinsurance companies would consider transferring are led by cyber (46%), followed by terror and casualty; however, the headline figure masks some regional and scale differences.

In North America, 63% of insurance and reinsurance companies access ILS, compared with 53% internationally (Figure 10). Moreover, North American companies originate more of their capacity from ILS than their international counterparts. Some 70% of North American insurance and reinsurance companies derive between 11% and 30% of capacity from ILS, while broadly the same percentage of their international counterparts say ILS is the source of less than 10% of capacity. Globally, firms seem to have decreased the proportion of ILS capacity bought since our previous survey – only 17%, compared with 27% of respondents in 2018, still derive more than 20% of their capacity limit from ILS (Figure 11).

Diversification of capacity is a key driver for ILS capacity use across all firms, regardless of geography, but the stronger commitment of North American insurance and reinsurance companies to ILS capacity appears to correlate with perceptions of pricing – 80% say pricing is an attraction compared with 53% internationally. Conversely, over a third of international firms cite marketing and innovation as an attraction of ILS, an attribute that barely registers with North American organizations.



No, we previously used to but discontinued

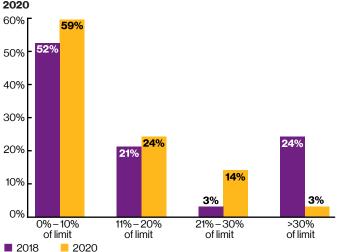


Figure 11: Comparison of ILS proportion of capacity limits, 2018 versus 2020

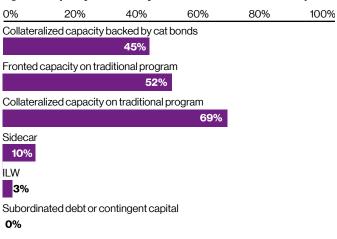
Size matters

Perhaps unsurprisingly, the bigger the organization, the more likely it is to access ILS. Over 70% of insurance and reinsurance companies writing more than \$5 billion of gross premiums do so, compared with about 35% of companies writing less than \$1 billion of gross premiums. Smaller organizations that do use ILS are more likely to use fronted capacity, whereas most of the larger firms are much more inclined towards collateralized capacity on traditional programs or backed by cat bonds. One effect of this has been an overall jump in use of collateralized capacity over the past two years — from 53% of respondents to 69% on traditional programs and from 37% to 45% when backed with cat bonds (Figure 12).

Potential barriers

Another result probably attributable to wider insurance market forces is the percentage of insurance and reinsurance companies that don't currently use or have ceased using ILS because of reluctance to use ILS out of loyalty to traditional reinsurers or because they want to take advantage of excess capacity. This has risen from 33% of insurance and reinsurance companies in 2018 to 57% in 2020. Beyond that, around a third of respondents still harbor concerns about complicated documentation and ILS set-up costs. On the other hand, pricing has become less of a concern, as the percentage that perceive that ILS is unable to accept the current program pricing has decreased from 22% in 2018 to 13% in 2020.

Figure 12: Capacity form used by insurance and reinsurance companies



Note: (Re)insurers source multiple forms of capacity, resulting in numbers adding up to more than 100%.

One market stereotype that our survey findings challenge is that ILS claims are more complex than traditional reinsurance. Of the 65% of insurance and reinsurance companies that have recovered reinsurance claims backed by ILS capacity, 21% said they were easier to collect than when backed by traditional reinsurance capacity and 42% said there was no real difference.

Corporate risk managers

ILS is still in a nascent phase in corporate risk management. Larger companies, especially those with a captive insurer (75% of organizations in our moderate sample) are the most likely to be taking a closer interest, based primarily on the potential for diversification of insurance capacity. Notably, a third of companies say they expect to use ILS in the next three years. Indeed, of those respondents that don't expect to use ILS in the next three years, three quarters would be willing to consider it with additional information — with multiline covers mainly in mind.

The main barriers to participation up to now, according to respondents, have been perceptions of a mismatch in pricing, terms and program structures, together with loyalty to current markets (Figure 13). This suggests there is more room for the ILS industry to grow the corporate market with appropriate outreach and education.

Figure 13. Main barriers to using ILS

0%	10%	20%	30%	40%	50%			
ILS unable to accept current program pricing, terms and/or structure								
				42 %				
Loyal to	current market	S						
	17%	6						
	Documentation and process is too complicated 8%							
Unaware	of full suite of I	LS options						
		25%						
Others								
	179	6						
Not applicable - nothing has prevented us from using ILS 33%								

Conclusions: Framing the big ILS picture

The market snapshot our ILS surveys provide wouldn't be possible without the participation of respondents from all four segments – end investors, ILS funds, insurance and reinsurance companies and corporate risk managers. We're grateful to them for taking the time to answer our questions.

The survey was fielded between June and August 2020, as the impact of the COVID-19 outbreak continued to spread, so an element of caution in all investment markets might be expected. Certainly, there are hints of this in the 2020 results, but the responses suggest an overall air of optimism about the opportunities that exist within the ILS market.

Market participants remain loyal to ILS

After a period of difficult years, ILS capacity providers and ILS capacity users alike remain committed to the market. The total nonlife ILS capacity remained roughly stable over the past three years and so did the proportion of insurance and reinsurance companies who are accessing ILS.

A sense of measured optimism

Only a very small percentage say they've been dissatisfied to date and almost all ILS funds expect the market to grow although at a slower rate than previously anticipated. And issues that are sometimes raised by ILS's detractors, such as supposed difficulties in claims or concerns about trapped collateral, don't seem to always merit the attention they occasionally receive.

An expanding risk panorama

End investors, ILS funds, insurers, reinsurers and corporate risk managers alike see growth opportunities for risks other than property catastrophe. They may not all agree precisely on the exact mix, particularly on cyber, but the appetite to continue to make ILS work outside its default risk sphere is undoubtedly there. The challenge for the industry is to bring the right investors to the right risks.

Investor motivations

ILS continues to provide an important source of non-cyclical investment for many investors, with yield typically being a secondtier consideration. Where we are seeing movement though, in terms of relative importance, is in investor requirements for strong governance and transparency, including increasingly, interest in investments that enhance ESG credentials. Funds and ILS capacity users should take note.

New horizons

Corporate risk managers have barely scratched the surface of ILS. Our admittedly limited results don't suggest this will change in the near term, but it is on the radar of some larger companies with their own captives. Knowledge, or lack of it, among risk managers appears to be a hurdle, but the thirst for knowledge about how ILS might help them better manage an ever-changing set of business risks is also evident. The industry should aim to satiate that thirst.

With the market on target for another bumper year in terms of new money coming into ILS, the backdrop to develop these opportunities is clearly there.

Further information

For more information about survey results, or to discuss the findings and our observations, contact your Willis Re client advocate or Willis Towers Watson consultant or insurance broker.

You can also learn more at willistowerswatson.com/ILSmarketsurvey2020.



Glossary

Assets under management (AuM): The total market value of assets that an investment company or financial institution manages on behalf of investors.

Catastrophe bonds (Cat bonds): A liquid form of ILS linked to non-proportional reinsurance contracts.

Collateralized reinsurance: A reinsurance contract where the reinsurer puts collateral in a collateral account at inception to secure its obligation to pay the ceding company. Collateralized reinsurance has also come to refer to situations where a ceding company faces a fronting reinsurer and the front in turn enters into a collateralized risk transfer with an ILS investor.

Corporate risk manager: The function within a corporation responsible for identifying risks and managing them through various techniques including insurance.

End investors: Institutions like pensions, endowments, life insurers, and sovereign wealth funds as well as wealthy individuals and family offices that tend to invest in ILS indirectly through ILS funds rather than directly on their own behalf.

Fronted capacity: The use of a licensed insurer to issue an insurance or reinsurance policy backstopped by someone else. For example, ILS investors may back up a fronter with either direct ILS investment or collateralized reinsurance backed by ILS.

Industry loss warranties (ILW): ILWs are protection contracts based in part (or in their entirety if a derivative) on the total loss arising from an event or events to the entire insurance industry rather than the ceding company's own ultimate net loss.

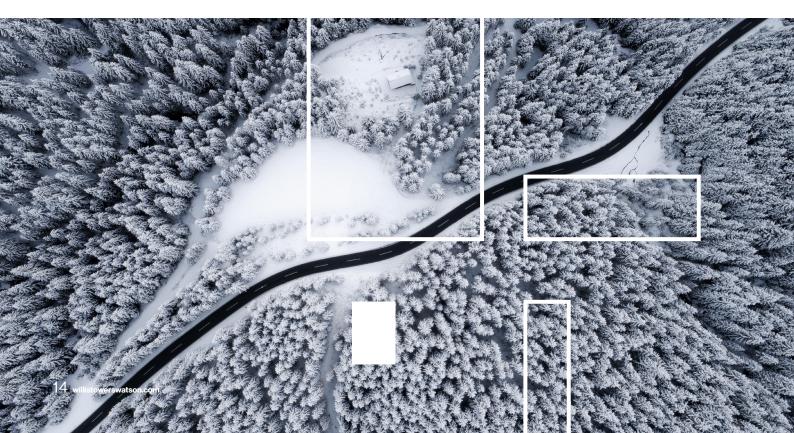
Institutional investors: A financial institution, such as a bank, pension fund, mutual fund or insurance company, that invests large amounts of money in securities, commodities and foreign exchange markets, on its own behalf or on the behalf of its customers.

Retrocession: Retrocession is reinsurance for reinsurers, where reinsurance firms purchase coverage for their own portfolios of risk.

Sidecar: A sidecar refers to an ILS investment linked to a proportional or quota share reinsurance arrangement. The sidecar recovery amount is capped by the size of the sidecar.

Subordinated debt: Liabilities, which in case of insolvency or liquidation, may only be fulfilled after the claims of other creditors.

Trapped collateral: Excess collateral held to protect against adverse development beyond the current loss pick. Trapped capital and trapped collateral are often used interchangeably.



Willis Re Securities disclaimer

Willis Re Securities is a trade name used by Willis Securities, Inc., a licensed broker dealer authorized and regulated by FINRA and a member of SIPC ("WSI") and Willis Towers Watson Securities Europe Limited (Registered number 2908053 and ARBN number 604 264 557), an investment business authorized and regulated by the UK Financial Conduct Authority and exempt from the requirement to hold an Australian Financial Services License under ASIC Class Order [03/1099] ("WTW Securities Europe"). Each of WSI and WTW Securities Europe are Willis Towers Watson companies. Securities products and services are offered through WSI and WTW Securities Europe. Reinsurance products are placed through Willis Re Inc. in the United States and Willis Limited in the UK, both also Willis Towers Watson companies. These materials have been prepared by Willis Re Securities based upon information from public or other sources. Willis Re Securities assumes no responsibility for independent investigation or verification of such information and has relied on such information being complete and accurate in all material respects. To the extent such information includes estimates and forecasts of future financial performance obtained from public sources, Willis Re Securities has assumed that such estimates and forecasts have been reasonably prepared on bases reflecting the best currently available estimates. No representation or warranty, express or implied, is made as to the accuracy or completeness of such information and nothing contained herein is, or shall be relied upon as, a representation, whether as to the past, the present or the future. The information contained herein is not intended to provide the sole basis for evaluating, and should not be considered a recommendation with respect to, any transaction or other matter. Willis Re Securities is not providing any advice on tax, legal or accounting matters and the recipient should seek the advice of its own professional advisors for such matters. Nothing in this communication constitutes an offer or solicitation to sell or purchase any securities and is not a commitment by Willis Re Securities (or any affiliate) to provide or arrange any financing for any transaction or to purchase any security in connection therewith. Willis Re Securities assumes no obligation to update or otherwise revise these materials. This communication has not been prepared with a view towards public disclosure under any securities laws and may not be reproduced, disseminated, quoted or referred to, in whole or in part, without the prior written consent of Willis Re

Securities. Information contained within this communication may not reflect information known to other employees in any other business areas of Willis Towers Watson and its affiliates

Willis Re disclaimer

© Copyright 2020 Willis Limited / Willis Re Inc. All rights reserved: No part of this publication may be reproduced, disseminated, distributed, stored in retrieval system, transmitted, or otherwise transferred in any form or by any means, whether electronic, mechanical, photocopying, recording, or otherwise, without the permission of Willis Limited / Willis Re Inc. Some information contained in this document may be compiled from third party sources and we do not guarantee and are not responsible for the accuracy of such. This document is for general information only and is not intended to be relied upon. Any action based on or in connection with anything contained herein should be taken only after obtaining specific advice from independent professional advisors of your choice. The views expressed in this document are not necessarily those of Willis Limited/Willis Re Inc., its parent companies, sister companies, subsidiaries or affiliates, Willis Towers Watson PLC and all member companies thereof (hereinafter "Willis Towers Watson"). Willis Towers Watson is not responsible for the accuracy or completeness of the contents herein and expressly disclaims any responsibility or liability for the reader's application of any of the contents herein to any analysis or other matter, or for any results or conclusions based upon, arising from or in connection with the contents herein, nor do the contents herein guarantee, and should not be construed to guarantee, any particular result or outcome. Willis Towers Watson accepts no responsibility for the content or guality of any third party websites to which we refer.

The contents herein are provided for informational purposes only and do not constitute and should not be construed as professional advice. Any and all examples used herein are for illustrative purposes only, are purely hypothetical in nature, and offered merely to describe concepts or ideas. They are not offered as solutions to produce specific results and are not to be relied upon. The reader is cautioned to consult independent professional advisors of his/her choice and formulate independent conclusions and opinions regarding the subject matter discussed herein. Willis Towers Watson is not responsible for the accuracy or completeness of the contents herein and expressly disclaims any responsibility or liability for the reader's application of any of the contents herein to any analysis or other matter, nor do the contents herein guarantee, and should not be construed to guarantee, any particular result or outcome.





About Willis Towers Watson

Willis Towers Watson (NASDAQ: WLTW) is a leading global advisory, broking and solutions company that helps clients around the world turn risk into a path for growth. With roots dating to 1828, Willis Towers Watson has 45,000 employees serving more than 140 countries and markets. We design and deliver solutions that manage risk, optimise benefits, cultivate talent, and expand the power of capital to protect and strengthen institutions and individuals. Our unique perspective allows us to see the critical intersections between talent, assets and ideas — the dynamic formula that drives business performance. Together, we unlock potential. Learn more at willistowerswatson.com.

About Willis Re

One of the world's leading reinsurance brokers, Willis Re is known for its world-class analytics capabilities, which it combines with its reinsurance expertise in a seamless, integrated offering that can help clients increase the value of their businesses. Willis Re serves the risk management and risk transfer needs of a diverse, global client base that includes all of the world's top insurance and reinsurance carriers as well as national catastrophe schemes in many countries around the world. The broker's global team of experts offers services and advice that can help clients make better reinsurance decisions and negotiate optimum terms. Learn more at willistowerswatson.com/Solutions/reinsurance.

in. y F willistowers

willistowerswatson.com/social-media

Copyright © 2020 Willis Towers Watson. All rights reserved. WTW508651/10/2020 willistowerswatson.com

Willis Towers Watson IIIIIII

WillisRe III'III