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INTRODUCTION

Welcome to the Artemis ILS New York 2017 conference report, which provides insight into some of the debates that took place on the day during the first Artemis event in the region.

The event was held in New York at purpose built event space, Convene, on West 46th Street, and was attended by 215 delegates, with the waiting list for spaces nearing 90 by day of the conference.

Attendees were treated to insightful and thought provoking discussions surrounding the evolution of ILS, its expansion into both existing and emerging peril regions and what the future of the market looks like.

The need for, and ability of ILS capacity and structures to help narrow the growing international protection gap was one of the day's burning issues, and speakers were keen to explore how ILS can play a part and help to improve global resilience.

In today's marketplace technology is viewed as a disruptive yet innovative force, and the Insurtech panel explored the rise of technology, the change it could facilitate and how this might translate into the expansion of ILS into new risks and regions.

Speakers debated the niches within the ILS space and where the next wave of investment might focus, with areas like casualty, run-off, and longevity, to name a few, being highlighted.

To end the day the four panel moderators took to the stage, and attendees were treated to an in-depth discussion covering all topics explored throughout the event, from leading ILS market experts and executives.

Artemis ILS New York will be back in February 2018. We hope to see you there!

Steve Evans
Founder & Editor, Artemis.bm



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The first panel of the day, moderated by John Seo, Co-Founder, Managing Principal, Fermat Capital Management, LLC, focused on the evolution of ILS and speakers were keen to rubbish noise of an ‘untested’ marketplace. Panellists noted an ongoing transition in the ILS sector away from capital efficiency towards operational efficiency, a trend that could define the industry in the years ahead.

The benefits of diversification and low correlation that ILS investments offer have always been among the most attractive qualities of the asset class, supported by its continued expansion in the global re/insurance industry during challenging operating environments.

Nevertheless, sceptics have often questioned the permanence of the ILS investor base in the face of a large loss event and a rising interest rate environment, but speakers on the ILS Evolution panel disagreed with such a notion.

The 2008 U.S. financial crisis, epitomised by the collapse of Lehman Brothers, was an interesting shock test for the ILS market, especially the catastrophe bond space, explained Seo.

“It was an incredible test and to this day it’s still a reference to people entering this market, they know that no market’s perfect, but from what I hear there is no other asset-backed asset class that had that type of performance in 2008, so we turned a bad thing into kind of a good thing,” said Seo.



A notion supported by Bruce Lucas, Chairman and Chief Executive Officer (CEO) of Heritage Insurance, who said one constant from the great recession is that reinsurance pricing was truly a non-correlated asset class, where pricing increased year-over-year, while everything else was faltering.

“Despite the shockwaves that asset class still appreciated in value, pricing went up, performance was better. And I think as you look back now at pension fund managers, why has there been so much capital that flowed in, really starting in 2012/2013 that massively plummeted reinsurance pricing? It’s because they looked back and said ‘I’ve got to be a little more diversified, and if I just take the 1% and put it to work over here, in a non-correlated asset class, I have at least a systemic hedge that’s in place that’s been tried in the worst financial market,’” explained Lucas.

The strong performance of ILS when compared with other alternatives during the financial crisis, said Lucas, is a hallmark of the industry’s “massive staying power” and, “that’s not going to go away.”

But it’s not just the performance of ILS in 2008 that shows how it’s evolved from a capacity provider for peak catastrophe risks to an attractive, diversifying investment for capital market players, suggested the panel.

In the 15 months after hurricane Katrina, Fermat’s assets under management (AuM) tripled, said Seo, and while the event resulted in some significant losses for Fermat it didn’t lose a single investor. In fact, Seo said that on average, the firm’s existing investor base doubled its commitment to ILS in the 15 months following Katrina.

Panelist Cory Anger, Global Head of ILS Origination and Structuring at GC Securities, was keen to put to bed the idea that it’s not a tested marketplace, saying that ILS has paid claims in all formats, so it’s unfair to say it’s untested.

“And frankly, I would argue there are some traditional reinsurers who have been set up since the severity losses stopped, that I don’t think have been tested in the same way. So I think when you have a market that’s 20 years old and has paid claims, and the litigation rate is relatively low, I think it’s remarkable and testament to how diligent people are at putting these transactions together,” said Anger.

Opening speakers felt the marketplace has been tested numerous times since its inception, but the evolution of the space over the last 20 years has largely focused on capital efficiency.

This was the view of Frank Majors, Co-Founder of Nephila Capital, the largest ILS investment fund manager in the world.

“The first 20 years of this story has been about capital efficiency, getting the risk and bringing more efficient capital to bear, and I think in the market we’ve kind of accomplished that.

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**Frank Majors –
 “The next leg
 of the story is
 about operational
 efficiency”**

“It’s a game of two halves and I think the next leg of the story is about operational efficiency, which means excellence as well, handling the claims process efficiently because that ultimately is something that people pay for. And I think it’s a very different challenge and a different story, and it’s going to be interesting,” said Majors.

Whether a traditional 144A cat bond, cat bond lite, collateralised reinsurance arrangement, sidecar vehicle or similar, investors now have a variety of mechanisms at their disposal. Parametric trigger structures as well as more traditional payout structures, have also helped to expand the remit of the space throughout its evolution.

But perhaps the capital efficiency element of the ILS space has been accomplished, although it can always be improved, and the future of the market will focus on driving greater operational efficiency to support further growth and drive the sector forward in a rapidly changing risk landscape.

Anger explained that while diversification is a driver of ILS investments, some of the capital in the market could be a strategic recognition of a window for response when the next severity event strikes, “that they need to be set-up on a platform and they need to understand what the manager’s sourcing of risk that they can deploy it in extremely quickly.”

“For every dollar of money that you see in the market right now, I think there is roughly 10 dollars on the sidelines waiting to come in if the market hardens,” said Seo, suggesting further growth and highlighting the ease at which ILS capital can enter re/insurance markets.

Unsurprisingly, the global protection gap and the potential role of ILS was mentioned throughout the day, but it was explored in depth during the Global Resilience panel, moderated by Rowan Douglas, CEO, of the Capital, Science & Policy Practice, Willis Towers Watson.

Organisations like the World Bank and the United Nations (UN) recognise the importance of insurance in strengthening the resilience of international and local economies against man-made and natural disasters, including the impact of climate change.



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**John Seo –
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But for ILS to play a meaningful role and really show its value, Douglas told attendees “it’s time for us to take this market out of frankly the back office and the engineering department, and into the showroom.”

Quentin Coolen, Senior Political Coordinator at the UN Development Programme (UNDP) echoed Douglas’ thoughts, stressing the need for educating governments and individuals about both the benefits and limitations of ILS.

From developing countries there is demand for coverage, said Coolen, but he was quick to add that this might not be the main problem.

“The issue I see that is more problematic is the translation around what the industry does. And on the side of the developing country, better understanding what are the positives but also the limits of the mechanism,” said Coolen.

Douglas agreed, “Most governments in the developing and emerging countries, do not feel comfortable, or confident, or even understanding of our marketplace, including intermediaries.

“So we need to create a major facility to provide technical assistance to governments and sub-sovereigns to enable them to overcome their lack of confidence and actually engage with the marketplace.”

The need for increased awareness of ILS solutions and their benefits were raised throughout the panel, and Dario Luna, Socio Director, Managing Partner at Akua Capital, one of the few private equity firms focused on re/insurance industries in Latin America, offered some insight.

“One would hope that with all the developmental capital, smart capital going into countries right after the disasters would make more and more countries want to take advantage of that, and more and more countries want to use that capital.

“But unfortunately in emerging markets in my region of the world it has been a very slow process.

“I would like to stress why demand hasn’t come. It’s because understanding internally the public policy, on a long-term, permanent basis, so that countries feel comfortable with the markets, are still not there. They still really have to be built up,” said Luna.

Ultimately, stressed Luna, “the demand has to be taught” in parts of the world hindered by underinsurance and a lack of education and, or awareness.

Drawing on the CCRIF and the African Risk Capacity (ARC), Luna explained that by interacting with the government and increasing the understanding of the risk and how to manage that risk, the private sector can have an influence, and the CCRIF is an example of a successful public/private partnership.

Crucial to both the CCRIF and ARC, among other catastrophe risk insurance pools is parametric insurance, which enables rapid payout post-event and mechanisms can be developed with less granular and comprehensive modelling capabilities.

“I would say in all my dealings, and they’re reasonably universal in developed and developing countries, all the discussion, all the action is around parametric-type insurance,” said Douglas.

“On a parametric basis the advantage is you know exactly if there’s a loss or not, so I think that’s a huge advantage. Especially in markets where data quality is not the same, and in some of the emerging markets there is still a huge issue on the data side, where we as investors on an indemnity basis still struggle a little because you don’t have any models, you don’t have a lot of experience of development factors in those areas. There’s still some way to go but on a parametric basis it’s easier,” added Andreas von Reitzenstein, Senior Member of the Investment Team at Credit Suisse Insurance-Linked Strategies.

The Global Resilience panel was eager to remind the audience that a substantial volume of risk sits on government balance sheets in developed markets, too. And while emerging regions clearly have vast growth potential for ILS, some risks in parts of Europe and the U.S., for example, remain woefully underinsured.

von Reitzenstein highlighted this; “What ILS has shown in the past is that we can help to take over some of the peak, peak risk. And I think Northeast New York area is one of the peak zones in the world, and I think in this respect the ILS community can come to that and

Rowan Douglas –
**“All the action is
 around parametric-
 type insurance”**





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is happy to take over risk from the peak, peak perils. The MTA is a good example of where the public sector uses the ILS community to offload the risk, and that's probably a good way to transfer the risk to the capital markets."

MTA, or the New York Metropolitan Transportation Authority, utilised the capital markets in 2013 for the issuance of a \$200 million cat bond called MetroCat Re Ltd. (Series 2013-1). The transaction provided MTA's captive insurer with cover for storm surge as a result of named storms.

A similar deal was issued in 2015, in PennUnion Re Ltd. (Series 2015-1), which also saw a transportation corporation in Amtrak, utilise the capital markets and a parametric trigger structure to provide it with \$275 million of protection against multiple U.S. exposures.

Daniel Zarrilli, Senior Director, Climate Policy & Programs and Chief Resilience Officer at the NYC Office of the Mayor, echoed the opportunity for ILS to play a deeper, and more valuable role in protecting New York's huge financial exposure.

"The financial exposure is enormous here in New York city. When we ran with some of our partners in the industry some modelling in the future, just changing the simple variable of climate, and we ran a hurricane Sandy in the year 2050 over today's city with today's population, today's assets in today's dollars, that \$19 billion loss was projected to be at \$90 billion in the 2050s. And that's largely driven by the increase in sea levels that we can expect," explained Zarrilli.

The protection gap is both a huge challenge and opportunity for the risk transfer landscape in developed and emerging markets. But examples of the ILS community working with the public sector and other private sector entities to expand protection and build resilience are coming to fruition.

"We finally recognised that insurance can be a very effective risk management tool, its not just about transferring risk, it's also about reducing risk by incentivising change in behaviour.

"It's really not about selling insurance to the poor, this is not what it is. It's about empowering societies, vulnerable communities and countries to be more resilient, and insurance has finally been recognised as part of the solution.

"ILS can be a great part of that because otherwise, if you have traditional insurance products that would work in developing countries we wouldn't be having this conversation. You need innovative thinking and you need public/private partnership. I really think there has never been an opportunity like we have now, for your industry to expand so dramatically. Because governments now are really pushing for insurance," said Coolen.

As governments increasingly appreciate the value insurance solutions can bring, the rise of technology in the industry, known as Insurtech, while an industry disrupter, can help to drive innovation and ultimately the expansion of ILS.

The rise of technology and its role within ILS, and the broader risk transfer landscape was explored during the Insurtech panel.

Hemant Shah, Co-Founder and CEO of catastrophe risk modeller RMS, said that RMS has been labelled an Insurtech firm, but regardless of its label it's really about understanding how your core competencies align with the value creation, stressed Shah.

"Where I have the most passion and I see perhaps the fastest rate of change that supports the growth of this marketplace, it's around how tech analytics and data can help us understand and bring more underlying risk to market," said Shah.

If the ILS market is serious about expanding its remit and wants to move away from competing over the same pie, utilising tech to understand and access new risks could prove invaluable.

Samir Shah, CEO of Ledger Investing said insurance companies have a huge opportunity, through technology, to transform themselves and the industry, "and it's very much coupled with ILS."

"For the market to really grow in a meaningful way, and I think it could get to a trillion dollars reasonably, the critical thing is standardisation and transparency," said Shah, adding that technology is in a great position to both standardise structures and make risk more transparent.

Michael Ian Coles, Chairman and CEO of technology-focused investment firm, Cedent, moderated the Insurtech panel and underlined shortcomings with modelling certain risks, suggesting that technology, such as satellite imagery, could facilitate advancements.

Michael Ian Coles –
**"The world's risks
 are outweighed in
 the man-made"**



"The world's risks are outweighed in the man-made, like man-made cyber, terrorism, flood, and environmental risks, outweigh those in natural disasters, and our modelling around man-made risks, migration, epidemics, all these sorts of political risks, we're not there," said Coles, asking what firms like RMS are doing to facilitate ILS expansion.

"We are trying to significantly improve the efficiency of how the value chain operates. And efficiency is about operating efficiency, it's capital agility and it's the entire value chain.

"We are hearing from a lot of customers, established and start-ups, how do we use models not to measure what we have today but to use models, data, and analytics to understand new classes of exposure so that we can innovate and create new products, that creates new demand, and that we can provide new supply and scale this market up," said Shah.

Tom Johansmeyer, Assistant Vice President, PCS Strategy and Development, also discussed how Insurtech could facilitate operational efficiency improvements in ILS, highlighting the role of the intermediary.

"There are some transactions where the intermediary puts it together but doesn't add much beyond it, and there are others where without an intermediary it wouldn't get done.

"As an industry what we have to figure out, as we look at commoditisation of transparent risks in a liquid exchange traded environment, is how does everyone involved in this transaction play a specific role going forward, how do they get compensated," said Johansmeyer.

Insurtech has the potential to significantly disrupt the industry and Johansmeyer said that tech can either be used to streamline existing processes, or to turn the business on its head, ultimately disrupting and transforming the way the ILS and broader risk transfer markets operate.

Disruption, said Shah, RMS, "is going to be a series of disruptive micro-quakes that start happening across the industry, and they might coalesce and converge in ways we don't understand, because the underlying systems of information tech and capital will start wiring together in different ways. But it's going to be a series of micro-quakes over the next several years."

Insurtech has the potential to expand the remit of ILS and its ability to access emerging and existing niches, something explored and debated by speakers during the Niches within ILS panel.

Moderated by Michael Millette, Founder & Managing Partner, Hudson Structured Capital Management, who said, "ILS has been a bit of a niche, but in actual fact it's less of a niche than we think it is," and led a discussion around risks the sector both could be, and should be participating in.

"We always ask ourselves is this something that is scalable, can we replicate it?" said Judy Klugman, Global Co-Head of ILS, Swiss Re Capital Markets.

Michael Millette –
**"ILS has been a bit
 of a niche, but in
 actual fact it's less
 of a niche than we
 think it is"**

"We're not going to look for that big whale if it's already being very well served in the traditional markets, so I think what our perspective is, is that where are those protection gaps, where are there risks out there that aren't currently getting capacity, that should get capacity?" she continued.

Recently, the cat bond market has been fairly innovative, highlighted by PennUnion and MetroCat, and also Market Re Ltd. (Series 2016-5), just the second time weather risk has featured in the space, and not forgetting Horse Capital I DAC, which saw the securitisation of motor third-party liability losses, and Zurich's operational risk ILS deal.

On the theme of scalability and the ability to replicate deals, Millette asked panellist Luca Albertini, Founding Partner and CEO of Leadenhall Capital Partners, if the €225 million motor deal in 2016 was likely to be the first of many.

Albertini compared the 2016 deal with FCC SPARC 2007, the only other cat bond to feature motor liability risks, saying that the 2007 deal could be thought of as "investor friendly," while the 2016 deal was more complex and certain aspects "more cedent friendly."

"At the end of the day the more distance we put between what we offer and what the traditional market offers, of course the less product we have. It's the sustainability, which is the replicability and the sustainability, which is there. So long as we understand those elements which are not "investor friendly," then we can get comfortable with that," said Albertini.

Klugman and Albertini discussed the possibility for more operational risk coming to market. "I definitely think, from what we gather, intelligence has it that there will be. But I think, once



again to go back to the modelling, I think that that's a challenge. There's asymmetry of information and who knows more, so I think that that ultimately is going to be the challenge with those types of transactions," said Klugman.

"One of the difficulties there, apart from explaining the risk to investors which definitely is not straight forward, it was also finding the right balance between achieving an investor friendly transaction and something that can achieve the capital relief that the bank was targeting," added Albertini.

Cyber, terror, and flood risk in both developing and mature regions, as well as the aforementioned underinsured and underprepared emerging markets, are all areas that speakers on the niches panel, and other panels, highlighted as potential growth areas for ILS.

With respect to more immediate market growth, Albertini said there has been some investment in the marine and energy sector, and described casualty as "another big one."

"We absolutely do see more pandemic on the horizon," said Klugman, also noting the life run-off, longevity, and casualty arena as potential areas for ILS expansion.

Interestingly, Millette questioned if pandemic and other life risks, like longevity, are actually more tech risks. Explaining that you're actually shorting medical care and you're shorting medical technology, and to some extent you're shorting social welfare programmes. Suggesting that maybe 80% of longevity risk is actually tech risk, with the remaining 20%, per say, being actuarial risk.

Tackling underinsurance in emerging and developed markets with a view to improving global resilience and ILS expansion was an area that speakers throughout the day eagerly discussed. Embracing technology to improve modelling capabilities and drive operational efficiency was repeatedly highlighted, with an overall view of how ILS can continue expanding while providing valuable capital and solutions across the world.

To end the day, panel moderators took to the stage to debate the issues and ideas that were explored throughout the event, with each telling attendees what they would like to see happen in the ILS space over the next five years.

Seo said he was hopeful for insurance solutions to be sold in a way that the younger generation would buy. He said he was "looking forward" to when the NFIP issued a cat bond, and suggested that an "onshore-isation" of the ILS market could be a harbinger of things to come.

Adding that ILS is "ready to take over" some of the huge risk sat on government balance sheets. But for this to happen, further education and understanding of the asset class is needed, said Douglas.

"The real problem is actually how we express what we do in a much wider universe. And we've got to change the narrative; we've got to have different sets of expertise in our community who can help us do that. Otherwise, frankly, we'll be the same size in 10 years," said Douglas.

Continuing to explain that he would love to see ILS provide a “key element of the G7 400 million insured’s target for climate risk insurance in emerging and developing countries.”

Millette told the audience he would like to see ILS come out of the niches in the next five years, and increase flow and efficiency in natural catastrophe lines and elsewhere, such as casualty, legacy reserves, cyber, life, health, and so on.

Coles also highlighted a need for education, and underlined the potential for ILS to improve resilience with the use of technology, calling for growth to be “socially driven, in terms of how we can provide more value to the economy, across the world, through risk that we haven’t touched yet.”

To all our attendees, thank you for joining us, we hope you enjoyed the day and will attend again next year in February for ILS New York 2018.

To all our speakers, thank you for traveling so far to participate, for providing insightful and thought-provoking discussions and for engaging positively with event attendees.

Finally, we’d like to thank our kind sponsors of the event, without whom the day would not have been possible.

Artemis ILS New York will be back in February 2018. We hope to see you there!



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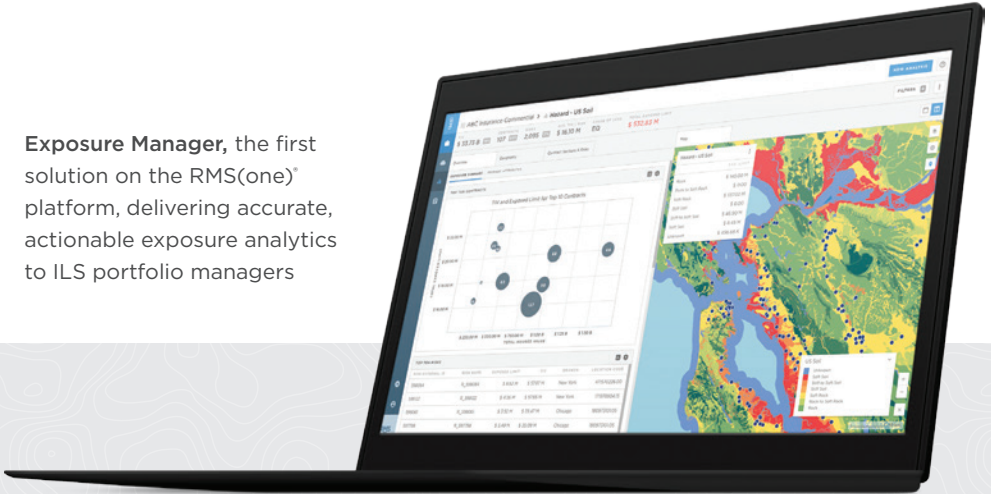
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