Kathleen Faries and Scott Cobon

BEYOND THE FIRST CYBER CAT BOND:

The future for insurance-linked securities (ILS) in the Cyber risk market

Artex | Capital Solutions

With a steadily growing frequency of reported cyber attack events the prospect of a major cyber catastrophe event, once a hypothetical question for discussion at the board room table, is now not a case of “if,” but “when.”

In 2022, Cybercrime cost the global economy around $6 trillion. Based on current projections this could hit the $10 trillion mark by 2025. The probability of a cyber CAT event of global significance is within the next 18 months to 2 years. And while the scope of attack vectors brings new layers of complexity into the mix, the scale and magnitude of what may happen is cause of industry-wide concern.

The (re)insurance industry is not sitting on its hands. Rising claims losses, the drive to deliver more sophisticated claims loss modeling and the pressing need for coordinated action to combat cyber risk exposure at an international level has sent shockwaves through the market. As underwriters tighten their underwriting criteria and capacity challenges have sent pricing upwards, (re)insurance buyers have explored alternate placement channels to manage their balance sheet exposure and the investment levels required to build a more robust defense layer.

With cyber expected to become the largest (or at least one of the largest) single risk exposure, alternative markets and platforms such as ILS (Insurance-Linked Securities) have become a positive talking point within the insurance sector and business circles in recent months, providing much needed capacity and scope for investment to cater for cyber’s rapidly evolving risk profile. The concept of cyber CAT is not a new one, however, arguably emerging in the early 1990’s as a product of the rapid pace of tech innovation.

The Cyber CAT event profile

Over the past decade cyber has become a peak peril for corporates and a tangible threat for businesses of all shapes and sizes. Risk managers are acutely aware of the growing scope, scale and complexity and how technology and data has become increasingly weaponized during a period of geopolitical tension, with cyber attacks on Ukrainian infrastructure and businesses in advance of the Russian attack on the territory being one recent example.

As a systemic risk that would carry a connected claims loss of hundreds of millions of dollars (potentially exceeding $1 billion), conceptualizing the scope of cyber attack vectors and the ability to model the risk given the complexity and variables involved, is a challenge that the insurance industry is well positioned to respond. The rapid growth of tech-led modeling platforms will benefit insurance buyers and evolve underwriting capability.

Kathleen Faries, CEO – Capital Solutions at Artex, provides a perspective, “A pressing concern is the impact of a big, systemic loss such as a Cloud outage which would hit multiple businesses globally at the same time. That’s one major event scenario that the insurance industry is currently trying to solve for.

There has been significant discussion about how to deal with the potential for a large systemic cyber loss. One approach would be to build a public/private backstop as we have for terrorism risk. Significant work still needs to be done around modelling certainty and capacity challenges in order to progress towards a solution for large systemic losses.”

THE EMERGENCE OF THE ILS CYBER CAT BOND

ILS has an important role to play in looking at peak, concentrated risks such as the 50+ year type events that can be transferred across to a risk platform and offer corporate boards and business owners a degree of comfort over their balance sheet resilience in the event of a larger cyber event.

Market conversation and interest has been buoyed by the successful implementation of the Beazley CAT Bond in early 2023 and a supportive flow of investor commentary, which has motivated a sense of optimism and interest in the ILS platform.

For many years the ILS platform and prospective investors couldn't move forward because of the degree of Cyber CAT risk uncertainty and a general discomfort with pricing. The structure needed further modification to align with market / industry expectations regarding modeling and transparency. The Beazley Bond was a breakthrough moment where a structure and pricing model was delivered that aligned with investor appetite.

From an ILS perspective there are three risk transfer mechanisms currently available:

1. **Private and collateralized (re)insurance** – Where funds are sourced from private investors and funding is not undertaken in a public forum. This has similar characteristics to Treaty (Re)insurance with the exception of limits of liability being collateralized via a trust account funded by capital markets investors (normally as a shareholder in a segregated account of a non-rated reinsurance vehicle).
2. **Reg S/CAT Bond Lite** – This construct was used for the Beazley Bond, on a private placement basis. In this case, the bond was listed and settled through a clearing platform and the transaction was not publicly offered.
3. **Reg 144A CAT Bond** – This construct is viewed by some in the market as the real test for the peril and the catalyst for broader adoption and uptake of ILS cyber CAT bonds by institutional investors. Reg 144a placements are publicly offered to Qualified Institutional Investors (QIBs).

Scott Cobon, Executive Vice President – Insurance Management at Artex, offers some thoughts on next steps. "We are at an interesting point in the ILS market discussion and the real test for the uptake and adoption of a fully-fledged Reg 144A CAT Bond would involve investors becoming more comfortable with the currently available risk modeling platforms and, in turn, risk modeling agencies/ specialists being comfortable with their modeling capability and sophistication. There is still a range of risk factors that need to be fully understood. Although there is further work to be done, given how quickly things evolve in the cyber risk space, it is possible that we will see positive developments within the next 12 to 18 months. We will continue to monitor the situation as industry and investor discussions progress throughout 2023 and into 2024."

DIGITIZATION AND GROWING DATA SOPHISTICATION IS FUELING THE PLATFORM FOR CYBER ILS GROWTH

In the start-up world we have seen a wave of new organizations moving into the data modeling and technology innovation space and the thinking and flow of investment is growing. Among other things, this generally signals a growing comfort amongst third-party capital providers and the historic ILS partnerships across the insurance and investor communities.

Investors outside of traditional (re)insurers that support the ILS platform are dipping a toe in and funding projects because the structure of ILS works well for them.

Underwriters, risk managers and investors are getting more comfortable with the data they can access and use to analyze and interpret specific cyber risk scenarios. A systemic cyber risk issue remains that needs to be resolved. When it's tight in terms of structure and exposure, investors are most likely to be supportive and the scale and scope of capital inflows will start to expand more rapidly.

MOTIVATING ILS INVESTOR APPETITE FOR CYBER RISKS

Asset managers and investors, generally, are ultimately looking for yield and the ability to channel growth and also to identify where untapped opportunity exists. Given the predicted growth trajectory of the cyber risk market and ILS platform credential generally, recent developments and prevailing cyber CAT bond discussions are likely to be of significant interest.

Property CAT risk has historically attracted investors due to the non-correlating dynamic of financial markets and insurance loss. It is different for the cyber CAT market where losses are likely to be more highly correlated with financial market performance, as with the earlier CAT event example of a major cloud outage that could impact stock prices and market confidence generally.

As property CAT performance starts to stabilize and improve following a round of extreme weather and catastrophe events, we may see a pattern where investors start to adjust portfolio allocations to incorporate cyber CAT bonds as they become more comfortable with the structure, pricing and market/risk correlation. This would generally trigger a consideration on the scope of allocation adjustment required to deliver the desired price and yield and investors will begin to test the waters in measured, incremental steps.

Do we think investors will jump to reallocate funds away from property CAT into cyber and other ILS-based risk lines? Unlikely. The most likely outcome will be a slow ramp up of capital flowing into cyber and more capacity following growing investor comfort.

Broadly speaking, investors currently fall into one of three camps:

1. **Family offices, private equity firms and other privately funded investors** using a dedicated ILS Asset Manager and funding in aggregate;
2. **Institutional investors and pension funds** with historic or existing involvement in the ILS space (primarily property CAT) who either directly allocate funds or utilize dedicated ILS Asset Managers and/or funds; and
3. **ILS Managers.** Depending on the level of sophistication required, investors may leverage the expertise of a specialist ILS manager to manage the end to end investment process.

Given the levels of uncertainty relating to cyber risks, institutional investors are cautiously reviewing their options. Historically investment strategies have focused on diversification and a base expectation that an asset class needs to be profitable and fit within a broader diversification strategy.

WHERE NEXT?

Taking all of the points raised into consideration, investors are generally knowledgeable and well educated on the ILS market and taking affirmative action to adjust their position to ride out current market performance fluctuations. In terms of cyber CAT Bonds, although it's relatively early days in the journey, solid progress and momentum has been achieved and growth is starting to happen. This is encouraging news and something Artex will continue to monitor closely as we partner with investors and other interested parties to explore the ILS market for cyber.

Kathleen Faries

As CEO of Artex Capital Solutions, Kathleen is responsible for all business operations and staff. She is an accomplished leader who brings 30+ years' experience in the (re)insurance and insurance-linked securities (ILS) markets. Her successful career spans property and casualty broking, captives, underwriting, insurance management and ILS. Kathleen cofounded ILS Bermuda Ltd. and is a cofounder and board member of WeSpeak Bermuda Ltd., a Bermuda nonprofit organization created by women, for women, to build public speaking skills.

Scott Cobon

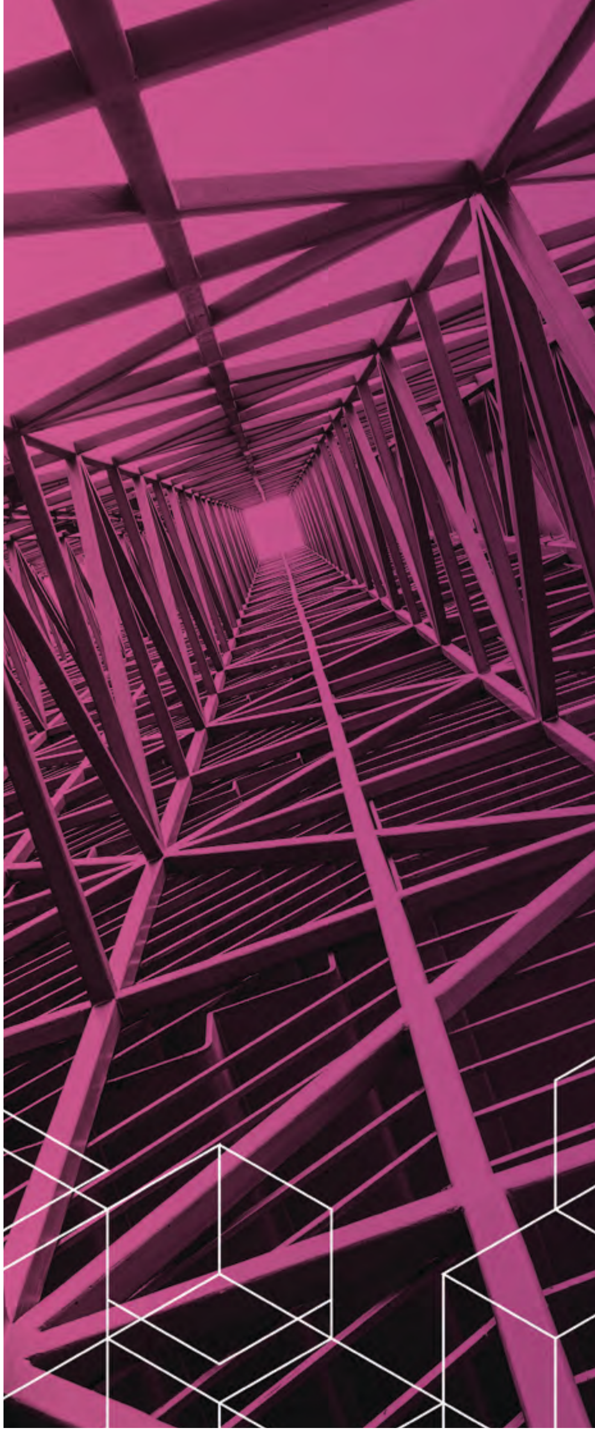
As EVP of Insurance Management Services at Artex Capital Solutions, Scott brings considerable expertise in structuring and managing (re)insurance transformation structures for the capital markets. With more than 13 years' experience in the transformation of risk, originally starting with Artex in 2008 (formerly known as HSBC Insurance Management, Kane ILS and Artex).

During this time Scott helped to facilitate the growth of the ILS segment in Bermuda and currently assists in developing various structures for the efficient deployment of capital. He has also worked as a treaty reinsurance broker in Sydney, Australia and originally started his career at PricewaterhouseCoopers in Brisbane, Australia. Born and educated in Australia and a graduate of Bond University, Scott is a member of Chartered Accountant Association of Australia and is a Certified Practicing Accountant in Bermuda.

THE ART OF RISK

At Artex, we believe there is more to alternative risk management. As a trusted leader and provider of diverse (re)insurance and ILS solutions, our global team operates at the intersection of art and science—where creative thinking meets expertise and superior outcomes are made. That's how we're able to fully understand our clients' needs and deliver the most comprehensive solutions available.

Established in more than 35 domiciles internationally, we're here to help you make empowered decisions with confidence, reduce your total cost of risk and improve your return on capital. At Artex, we believe in finding you a better way.



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