Is there correlation between major cyber events and broad equity market performance?

Guy Carpenter's Anthony Cordonnier and Erica Davis highlight new research which can help (re)insurers make informed decisions about capital deployment

Is there correlation between cyber events and stock market performance? The latest research conducted by Guy Carpenter and the Marsh McLennan Cyber Risk Intelligence Center sets out to answer this compelling question. The research addresses long-held scepticism among the investment community that a systemic cyber catastrophe event would result in a wide-ranging stock market downturn. This has been the reason behind many ILS investors' reluctance to deploy capital in cyber transactions for the fear of a "double-whammy" in the aftermath of a widespread cyber attack.

The report, titled "Double-Whammy? Examining the Correlation between Major Cyber Events and Broad Market Performance", evaluates four categories of historical major cyber incidents: a mass breach or vulnerability event, mass service outage, critical infrastructure compromise and stock market compromise. Our study demonstrates that the effect of a cyber event falling within the random noise in the market does not cause a lasting impact on stock market performance.

The report also considers the impact of cyber events versus natural catastrophes, as both types of events tend to result in large one-time financial costs rather than long-term strategic shifts in economic activity or investment. As historical performance on key stock indices reveals, both event types do not drastically impact companies' operations and future revenue streams to create a market sell-off. In fact, the average 30-day performance impact of the S&P 500 index after a cyber attack is very similar to the observed results following hurricanes.

Anthony Cordonnier and Erica Davis are global co-heads of cyber at Guy Carpenter

The nature and consequences of cyber and natural catastrophe events are in stark contrast with major historical events that have caused significant impacts on stock markets, such as the 11 September 2001 terror attacks, Lehman Brothers' bankruptcy, the Covid-19 crash and the Russian invasion of Ukraine. Such comparisons provide us with the foundation to conduct future research into the likelihood of any counterfactual cyber scenarios that might "escape" into the broader economy and impact investor confidence.

Our research indicates the lack of statistical significance between cyber events and stock market performance. This data-driven support, coupled with the continuous advancement in loss-mitigating technologies such as AI-enabled cyber management tools and risk transfer mechanisms including cyber catastrophe excess of loss structures, presents a prime opportunity for ILS investors to enter the ever-expanding cyber market and diversify their existing portfolios. The broader (re)insurance community can also leverage the research findings to make informed decisions about capital deployment, in order to support the sustainable growth of the cyber market.

Guy Carpenter's global cyber practice is a dedicated team of brokers, product innovators and analytic experts advancing the role of cyber reinsurance and retrocession. Guy Carpenter utilises our global footprint and insights across the Marsh McLennan network to bring superior placement design, peer benchmarking analysis, market intelligence and industry-transforming affirmative and silent cyber aggregation modelling.