RE:bound to apply catastrophe bond tech to project financing

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A new initiative called RE.bound has been launched which will leverage catastrophe bond technology to design and structure new risk transfer solutions that provide a mechanism for resilient infrastructure project financing.

RE:bound, launched by re:focus partners, a design firm focused on developing integrated resilience solutions and innovative public-private partnerships, has joined together with The Rockefeller Foundation, Swiss Re, Goldman Sachs and RMS to design the new structures.

Clearly we're more used to seeing catastrophe bonds used for reinsurance or sometimes insurance protection needs, but the RE:bound project looks to use them for risk transfer and to encourage, indeed finance resilience as well.

The goal is to develop insurance-based products that can generate capital for risk-reduction projects and resilient infrastructure efforts around the world. It's a fascinating use-case of the catastrophe bond structure, a structure that has always shown a lot of promise for risk transfer outside of the insurance and reinsurance world.

Under the RE.bound program the partners will attempt to design a new catastrophe bond-like product that can promote project-based risk reduction solutions. This new cat bond-like structure would realise the potential insurance benefits from infrastructure improvements, as well as monetising both physical and financial risk reductions associated with investments in projects that aim to increase resilience, such as seawalls and green stormwater infrastructure.

We've seen catastrophe bond structuring technology used in a number of cases outside of the insurance risk transfer world, where other business risks can be packaged and held by investors. We've also seen use-cases where a cat bond securitised structure has been proposed for financing purposes as well. The nature of the cat bond structure and trigger makes them suitable to other uses than the most common one we see today in the ILS market.

RE:bound aims to leverage the cat bond to provide a source of resilience linked securitised financing that would recognise the risks that the resilience projects aim to reduce. Quite how that structure looks and how the issuance process would proceed is yet to be fully defined.

“RE.bound is an exciting next step to our work on the RE.invest Initiative,” said Shalini Vajjhala, Founder and CEO of re:focus partners. “This new program builds on the local resilient infrastructure solutions developed through RE.invest to create a global financing opportunity for cities around the world.”

If a resilience catastrophe bond can be developed, allowing the risk that infrastructure projects are aiming to reduce to be transferred, while assisting in securing some of the required financing, it could ultimately grow the available risk-linked investments market considerably.

As long as the risk embedded in the note is tied to clearly modelled data then they could appeal to insurance-linked securities (ILS) funds and institutional investors in ILS, in the same way as standard cat bonds.

If RE:bound can effectively package risks associated with the resilience projects that display little in the way of correlation, while helping secure the financing for these projects, it would be a very compelling investment. Combining the elements that make cat bonds attractive to investors inside a social impact investment opportunity.

It’s also worth considering that some of these risks will not be insured at the moment, so this type of initiative could bring incremental risk to ILS investors, rather than eating away at traditional insurance and reinsurance market premiums.

The RE:bound project aims to develop a catastrophe bond that will ultimately have its value tied to risk reduction and resilience. By doing this the hope is that the catastrophe bond will still transfer a specific catastrophe or weather risk, but while also generating the project financing for resilient infrastructure projects.

RE:bound will focus on modelling “large-scale project-based risk reductions that impact the probability of a cat bond trigger (and the associated sponsor premium) to generate a project cash flow stream,” Artemis was told by re:focus partners CEO and Founder Shalini Vajjhala.

“For example, the construction of a new seawall or flood barrier should measurably reduce total indemnified or indexed losses, and as a result reduce the probability of a loss-based trigger or the level of a parametric trigger over time,” Vajjhala continued.

The project will look at some real-world test-cases, using resilient infrastructure projects, to model the physical risk reduction potential to establish the potential financial value to both sponsors and investors in any cat bonds.

In any resulting catastrophe bonds that are launched under the RE:bound initiatives, investors would be compensated in the same way as in a normal catastrophe bond transaction, still benefiting from coupon payments and holding the risk that a bond could be triggered.

The main difference would be the use of the collateral for financing a resilient infrastructure project, and also the fact that as the project gets nearer to completion the bond value would change as the risk profile changes due to physical risk reduction.

“The overarching goal of RE.bound is to design and structure a replicable program of cat bonds for multiple classes of resilience projects,” Vajjhala told Artemis.

Artemis assumes that at the end of the project lifecycle, when the cat bond matures, the project sponsor would reimburse investors their collateral, as long as the catastrophe bond had not been triggered in during the resilient infrastructure build period.

The RE:bound initiative has the backing of a number of key players in the catastrophe bond market, who can clearly see the potential in developing a catastrophe bond specifically designed for resilience projects.

Given the nature of these as investments, we would imagine that large institutional investors like pension funds would be keen to support the initiative. Combining catastrophe bond investments with another alternative asset class, infrastructure, could be an extremely compelling prospect.

“Goldman Sachs has been involved in structuring catastrophe bond transactions for a variety of clients to provide efficient risk reduction,” commented Ali Al-Ali, Managing Director and Co-Head of Insurance Structured Finance at Goldman Sachs. “This program would use catastrophe bond technology to ultimately reduce site-specific insurance costs and promote investments in resiliency measures. We are proud to be collaborating on the program to explore this innovative direction.”

“Partnering on risk transfer solutions that not only make cities safer, but carry forward resilience more promptly as well, is an important priority for Swiss Re,” said Alex Kaplan, Swiss Re. “The value of building a more sustainable economic future is core to Swiss Re’s business. Developing solutions which generate funds for resilient infrastructure projects and produce rapid recovery funds will help society translate resilience from talk into action.”

“Catastrophe models are crucial to understanding risk and structuring robust catastrophe bonds,” said Ben Brookes, Vice President, Capital Markets at RMS. “Cat bonds can be powerful tools to encourage risk mitigation efforts, facilitate rebuilding after a disaster and create a more resilient society. We are excited to work with RE.bound to extend their use into new areas.”

“At The Rockefeller Foundation we recognize that in order to solve today’s challenges, communities need innovative tools, such as these new bonds, that have the potential to transform how they think and operate through a resilience lens,” added Judith Rodin, president of The Rockefeller Foundation. “RE.bound will use the expertise of leaders in

investment banking, reinsurance, infrastructure, and climate risk analysis. We are confident that well-structured risk transfer mechanisms can both help communities recover more quickly from severe shocks and make them more resilient ahead of potential disasters."

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