Parametric Re/Insurance:

An alternative to uncertain foreign aid and donor capital in Asian members of the Global South.

Inver Re

The problem: Foreign aid is an uncertain proposition for disaster relief. Political conditions in mature economies have further impaired the availability and reliability of donor capital and other forms of aid. This potentially amplifies the effects of natural disasters in the Global South.

The solution: Increase the predictability, reliability, and velocity of relief through the use of parametric re/insurance. Pre-arranged capital is available as global reinsurers seek diversified growth, and parametric solutions make it easier to deploy capacity to regions new to re/insurance and featuring problematic political, economic, and social characteristics.

The risk of increased natural disasters around the world is particularly menacing for the Global South and Asia in particular.

The world's most vulnerable populations are not only exposed to greater natural threats, but they also lack the resources to best minimize human suffering after natural disasters and invest in accelerated recovery. Heavy reliance on foreign aid and donor capital may have worked in the past, but increased demand for those forms of capital could be frustrated by governmental and bureaucratic machinations in developed markets impeding the flow of capital from sources that have always been inefficient.

> "Parametric insurance and reinsurance is the key to resilience and economic security in the face of both increasing natural threats and greater uncertainty regarding both the availability and speed of donor capital and foreign aid."

Parametric protection is straightforward, streamlined, and simple – it pays out based on the magnitude of a particular type of event. Examples include tropical cyclones of a certain windspeed and earthquakes of a given magnitude. Without complex clauses and the need for preexisting insurance infrastructure, parametric solutions make it easy for reinsurers around the world to support the Global South, and Inver Re has found that global reinsurers are particularly interested in providing parametric protection to clients across Asia.

A window of opportunity has opened, and it is time to take action.

"[A] remarkably heterogeneous group of 130-odd countries, representing perhaps two-thirds of the world's population and spreading across vast expanses of Africa, the Middle East, Asia, Oceania, Latin America, and the Caribbean. Its ostensible members range from Barbados to Bhutan, Malawi to Malaysia, Pakistan to Peru, and Senegal to Syria. The category encompasses both major emerging powers, including aspirants to UN Security Council seats such as Brazil, India, and Nigeria, as well as small states like Benin, Fiji, and Oman."

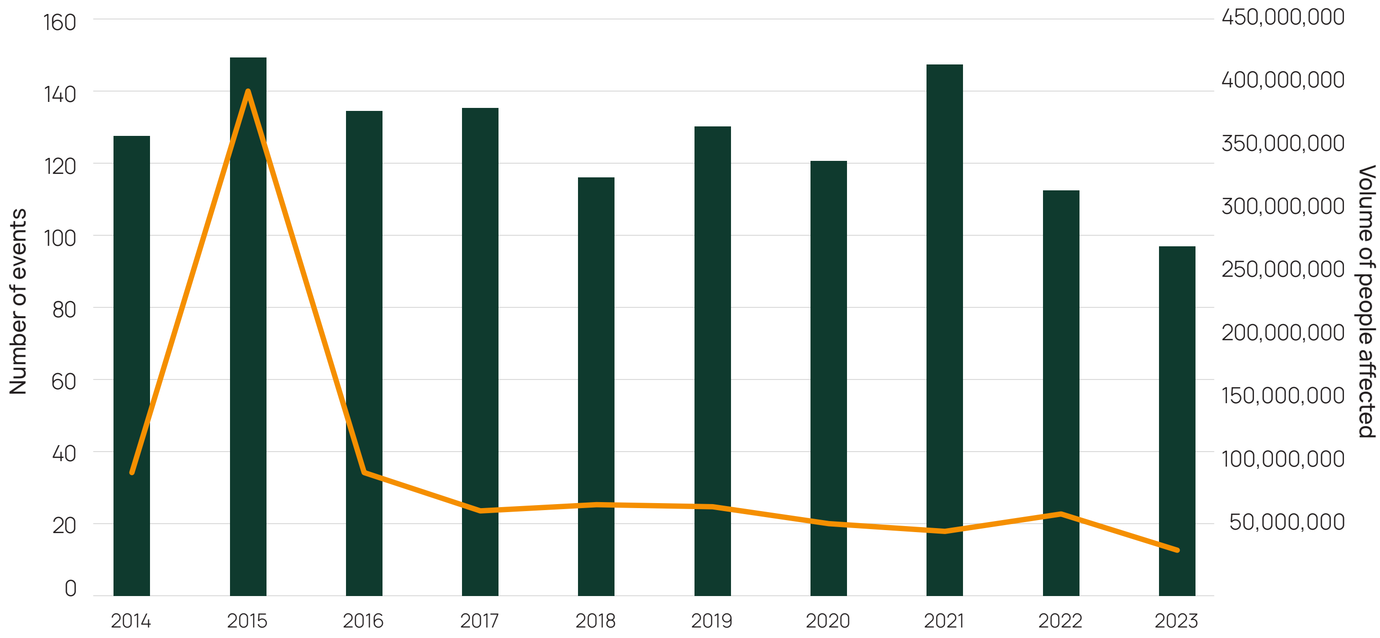
- Stewart Patrick, Alexandra Huggins
Carnegie Endwoment for International Peace[1]

Risk on the rise

Natural disasters across developing states in Asia are on the rise.

Natural disasters across developing states in Asia are on the rise. Focusing specifically on the Global South – for the purpose of this article, generally Asia excluding Japan, South Korea, and other wealthier states in the region – natural disaster database EM-DAT shows 1,267 natural catastrophe events during the ten-year period ending in 2023, with nearly a billion people affected[2]. Climate change stands to intensify this risk and amplify the impact in the years to come, exposing some of the most vulnerable people in the world to increased, more frequent and more powerful natural disaster events. In addition to the human toll, a surge in natural disaster activity brings further cost for remediation, a problem that threatens to extend the suffering associated with disasters and straining the economies least able to bear further expense.

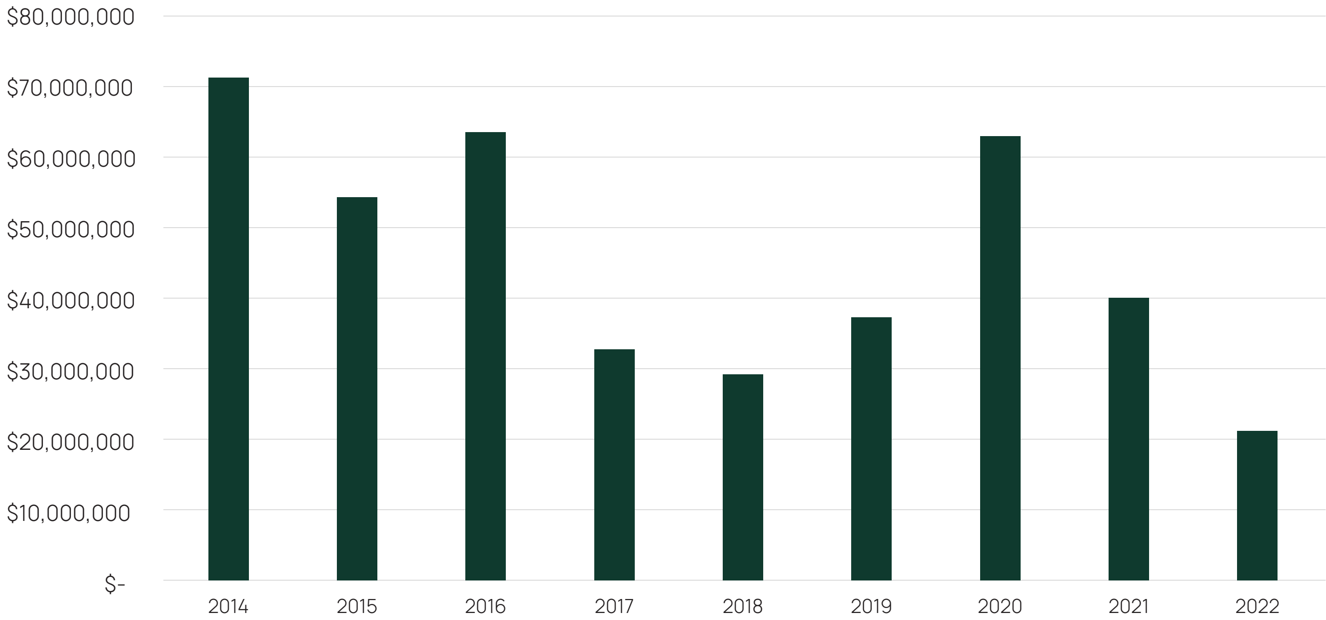
Natural catastrophes: Global South in Asia



Source: EM-DAT

Already, the costs of managing natural catastrophes are high. According to estimates in EM-DAT, the past decade has cost the Global South states in Asia more than US$400 billion, adjusted for inflation, and that's with no economic loss data available yet for 2023. If we simply take the 2014-2022 average and use that for 2023, then the ten-year total edges above $460 billion. Given the uneven economic development in the region, the losses from one year to the next will be volatile and not necessarily correlated with the number of natural catastrophe events, and the same can be said for the number of people affected. That said, economic maturation and population growth alone could mean greater losses from future events. If anything, the spike in 2015 for human impact overleaf and the most economically impactful years (below) suggest that potential losses could be much higher, depending on the states affected.

Natural catastrophes: Economic losses, Global South in Asia



Source: EM-DAT

With the future potential for both direct human impact and economic loss, disaster risk financing can only become more important in the near future and beyond. While resilience measures that minimize the human and economic toll are always preferable to post-event capital flows – it's better to protect and prevent than recover – no plan is ever perfect. Regardless of the protective measures in place, having capital available for remediation and recovery is a crucial component of any resilience plan. The decision to invest is not an easy one, particularly when foreign support has tended to be available. Access to that aid, though, is becoming more uncertain.

The hidden costs of foreign aid

For many countries in the Global South insurance is expensive, especially when compared to the vital day-to-day spend necessary to keep a country running.

With tax bases strained already, the extraction of further revenue for government use increases the risk of underlying economic instability. For this reason, investments in resilience – including insurance – tend to take a back seat to priorities that more directly benefit the population. For natural catastrophes and other emergencies, foreign aid fills the gap. This approach has clear benefits and hidden flaws. After all, relying on foreign aid is free – right up until you need it.

Negotiating from a position of weakness

The decision to rely on foreign aid involves no near-term expense. However, when an event occurs, the hidden costs of this risk management strategy become evident. Under the best of circumstances, foreign aid takes time to materialize and involves negotiating from a position of weakness. If there are conditions associated with the flow of capital, there is little room to contest them, and during a period of immediate need, there are few sources of capital to use in seeking improved terms.

The legislative processes

Even when the above issues are not present with such scale as to be problematic, the delivery of aid still can be uncertain. The legislative processes often required to secure allocations and deliver them to states in need are not always certain. A donor capital source eager to provide support may still be impeded by bureaucratic or legislative barriers, as evident in the United States in October 2023. Although not natural catastrophe events, the foreign aid discussions regarding the conflicts in Ukraine and Gaza were impeded by the U.S. Government's inability to act during the period where the Speaker of the House of Representatives role was vacant. In fact, there were several natural catastrophes in the United States during that period, and the U.S. Congress was unable to allocate domestic aid, as well.

Reliance on foreign aid

If the reliance on foreign aid for support in the aftermath of natural catastrophes was a fraught strategy before the October legislative lull in the United States, then it can only be seen as perilous today. Although other states and donor capital mechanisms do exist, the issue in the United States at least demonstrates the nature of a risk that could be visited upon any source of donor capital or foreign aid.

The time associated with the delivery of post-catastrophe aid, therefore, could be seen as being at risk of elongating, given the potential delays that could impede the flow of such capital.

Delays in the flow of capital

Delays in the flow of capital have direct implications for post-event recovery. In addition to extending the period of suffering and uncertainty for the people affected by natural catastrophes, time makes remediation more expensive. Damaged structures continually exposed to the elements after a catastrophe could suffer further damage, increasing the cost to repair. Businesses unable to operate as they usually do see an increased risk of further loss, not to mention the possibility of never reopening their doors. The speed of capital flows after a disaster, therefore, can be as important as quantum. Relief that arrives too late isn't relief any longer.

Inexpensive risk-transfer mechanisms may be far less expensive than they appear to developing markets among Asian members of the Global South. Even in small transactions intended to serve as a source of intermediate relief until donor capital and foreign aid can be marshalled in larger amounts. The use of parametric re/insurance to provide some certainty of relief in the face of major natural disasters could yield an immediate influx of capital to protect affected communities while larger and longer-term aid packages are negotiated.

22 days of silence

The U.S. House of Representatives spent 22 days paralyzed in October 2023.[3] During this period, the state saw several major natural and man-made crises to which it was not able to respond with its usual speed:

1. **Conflict in Israel/Gaza:** The outbreak of hostilities on 7 October 2023 went on for nearly a month before the United States first approved a military aid package.
2. **Conflict in Ukraine:** The stalled Congress was unable to respond to developments in the largest land war on the European continent in eight decades.
3. **Natural disasters:** Two U.S. natural disasters came during this period, according to PCS data. However, there have been eight October hurricanes since 2000, including Wilma (2005), Sandy (2012), Matthew (2016), and Zeta (2020).

Taking control with parametric protection

Insurance may seem like an imperfect alternative to foreign aid, but approach and structure can meaningfully reduce the expense of risk transfer while drastically improving the speed and certainty associated with post-catastrophe recovery.

This approach has been implemented effectively in Africa, the Middle East and Latin America, and early efforts in the developing markets across Asia have been largely positive. Today, we should learn from these successes and identify opportunities for scale. There is capital eager to support the development of Global South insurance markets, especially in Asia. The key is to develop the right approach.

Parametric insurance and reinsurance is a natural fit for the region. While traditional insurance typically requires historical data around penetration, premium spend and losses, parametric re/insurance is free of these constraints. The simplicity of this approach to protection is what makes it highly effective for developing markets. Unlike traditional insurance, parametric covers rely on an external source of data to indicate the magnitude of a triggering event.

For example, Inver Re has helped its clients in Türkiye secure parametric reinsurance protection for earthquake risk. The ultimate determinant of whether the cedent collects on such a cover is whether the U.S. Geological Survey or Kandilli Observatory reports an earthquake of a certain magnitude (usually at least 6.5Mw) within a predefined geographic zone. Our clients have done the same for earthquake, tropical cyclone, and crop risks in Africa and Latin America. Parametric covers have been used across Asia, as well, and the unique features of the Global South in the region support the rapid development of capital to support further parametric penetration.

For those laboring under the belief that these programs are too small or exotic for global reinsurers, the truth is that capacity providers around the world are eager to deploy to parametric risks in the Global South, with a particular focus on Asian markets. Unlike traditional insurance, the fact that parametric covers require a magnitude measure, as described in our previous examples, protects capital providers from such issues as political risk, moral hazard and adverse selection – all of which have been identified as causes for concern with regard to insurance in developing markets. Further, parametric risks are relatively easy to model and understand, which makes this approach easier for reinsures to accept than traditional re/insurance.

It's not just the flow of capital that's fast with parametric re/insurance. Access to protection is faster as well. Unlike traditional re/insurance, the fact that parametrics are easier to model can accelerate decision-making and reinsurers' appetite for diversifying risks – especially in Asia – provides further incentive to support the region. Investing in the Global South improves the productivity of global reinsurer capital, contributes to sustainable profitable growth and provides a foundation for future market expansion.

All it takes is one question

Parametric re/insurance is easy to understand and execute. Global reinsurers want to write more of it, especially across Asia. The market's appetite is as clear as its enthusiasm. Meanwhile, states across the Global South in Asia and beyond need access to cost-effective risk capital to improve resilience and protect them from the vagaries of foreign aid and donor capital. What I've found in working with parametric re/insurance clients in Africa and Latin America is that global reinsurers need help connecting with their future clients.

As part of our commitment to increasing insurance penetration in the Global South and improving the economic security for more than four billion people, Inver Re has invested specifically in its new and developing markets capabilities. Our efforts in Africa and Latin America show that the global market is ready to engage.

To access deep capital sources worldwide, re/insurers across the Global South just need to ask for access to the global market. It's that simple. Stepping forward to discuss risk-transfer alternatives quickly leads to conversations in a market where transactions are straightforward and designed for rapid execution. In fact, we've helped cedents complete broad parametric risk transfer deals – quota shares behind parametric reinsurers in the Global South – in only one hundred days. If you just ask the question, "How can the global reinsurance market help?" you'll find results come faster than you'd ever expected.

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Tom Johansmeyer is Global Head of Index Classes at reinsurance broker Inver Re. Focused on parametric and industry loss reinsurance, Tom has helped improve the flow of reinsurance capital to clients in the Global South for a wide range of natural perils.

Previously, he led industry loss reporting agency PCS, where he expanded the North America-focused institution into Türkiye, Latin America, and the Asia-Pacific region, as well as into various specialty lines.

Tom is working on a PhD in international conflict analysis at the University of Kent, where he is studying the cyber insurance protection gap as an economic security problem. He recently completed a Master of Arts in global diplomacy at the University of London's School of Oriental and African Studies (SOAS), where his dissertation explored the risk of disaster-induced civil unrest.

Sources

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