

TITLE: The (Insurable) Universe Is Shrinking

DECK: CATs, Hurricanes and the World on FIRE

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In the United States, there is a saying: ‘The Chinese word for crisis is composed of two characters, one representing “danger” and the other “opportunity”.’ Allegedly, it was John F. Kennedy who popularised this myth, canonising a pearl of ‘oriental wisdom’ that has been a mainstay for motivational speakers and business leaders ever since.

There is some truth beneath the falsehood, and nowhere is it better understood than in the American finance industry. The two-handed proliferation of danger and opportunity is the engine of the modern FIRE (finance, insurance and real estate) economy, which has grown to represent around 30% of U.S. business profits since the 1980s, peaking at a staggering 40% just before the crash of 2008. In today’s turbulent economic times, characterised by sub-zero bond yields and negative interest rates, capital investors are looking to increasingly risky horizons to boost their returns: natural disasters. As the world stumbles from one climate crisis to the next, whether in the form of storm surges in Florida or wildfires in Australia, catastrophes loom and opportunities await.

How do you turn a tsunami into a profit? Insurance has dealt in catastrophe since the earliest civilisations, but it was only in recent decades that insurers started putting a price on disaster losses that had not yet occurred—and where there is a price, there is money to be made. Insurers, meanwhile, need insurance too. This comes in the form of reinsurers, large investment funds who take a hefty premium in return for covering a major loss like an earthquake. For those outside the FIRE universe, it can be counterintuitive to consider risk (the possibility of loss) as a resource to be bought and sold. The link between climate modelling and finance was first made in the 1980s, when a Boston-based insurer named Karen Clark proposed that the modelling of historic catastrophe data could be used to predict and manage the insurance risks posed by so-called ‘Acts of God’. Emerging like a financial Cassandra, Clark’s predictions of ruin were met with little enthusiasm until 1992, when Hurricane Andrew struck the Bahamas, Florida and Louisiana, killing 65 people and leaving 125,000 homes damaged or destroyed. Clark’s model had accurately calculated the eventual tally of losses at 2-3 times the industry’s initial predictions. Out of the wreckage, the catastrophe industry was born.

As it happens, betting on the climate may be as old as the financial derivative itself. Thales, the pre-Socratic philosopher and astronomer, is said to have responded to the age-old challenge, ‘If you’re so smart, why aren’t you rich?’, by looking to the stars for a forecast on the upcoming olive season. Predicting a bumper crop, he paid a small deposit on the rights to the local olive presses, effectively exercising the first options contract. By harvest time, local farmers were forced to contend with Thales’s monopoly. Finance is a powerful instrument for shaping realities: working with time—and its perspectival counterpart, expectation—as its material. In the act of pricing a commodity or event that has yet to come to light, financial instruments bring possible futures to bear on the present, metabolising the inexorable contingency of the real while disclosing other futures in the process. Like all good science fictions, it changes the real world through the description of possible alternatives. Within the contemporary climate emergency, we are already in the midst of an eschatological narrative in which societal and planetary forces conspire towards a darkening existential horizon for humanity at large. Through insurance, the catastrophe industry opens a strange interface between contemporary financial and geophysical systems that binds our most concrete ‘facts on the ground’ (our homes, our cities, the weather) to our most abstract machinations of time and value. The contradiction is that the ability to liquidate and hedge catastrophes on global capital markets, themselves fuelled by speculative accumulation and no shortage of high-carbon investments, may nonetheless be instrumental to our earthly survival—at least for the time being. The ‘risk universe’, as the industry calls it, is currently the only one we have.

In *Politics*, Aristotle stresses that Thales was driven not by greed, but a desire to demonstrate the value of wisdom. Today’s players in a rapidly growing reinsurance market for catastrophe (CAT) bonds—climate risk congealed into a financial asset class—may not be quite so virtuous. The anatomy of a CAT bond or insurance-linked security (ILS) typically looks something like a Victoria sponge cake. The primary insurer takes responsibility for the cake’s top and bottom layers of catastrophic financial loss, while ‘special purpose vehicle’, typically based in Bermuda, takes care of the filling: through the issuance of billions of dollars’ worth of bonds to the global capital market. As the investment brochure of the Securis Catastrophe Bond Fund reminds its clients, financial rewards are ‘contingent on the non-occurrence of specific catastrophic events’ that are ‘inherently unpredictable’. A thirsty market and a turbulent planet collude to create powerfully contradictory conditions. With a pressurised real estate sector and sea-levels rising by

the inch triennially, the state of Florida alone accounts for over 40% of all the reinsurance capital in the world, a system that ‘protects’ a captive economy whose only real purpose is to build and sell itself. Zac Taylor, a Floridian researcher, has described how insurance companies are proactively ‘mining risk from the market’ by selling cheap policies expressly to securitise them for the CAT bond trade, while Bermuda-based funds are cutting out the middlemen by setting themselves up as Miami-based estate agents.¹

In a recent article published by *Bloomberg*, Kate Mackenzie reported that ‘climate change could shrink the “insurable universe”.’² What will become of the Anthropocene’s uninsurable hinterlands, climate-stricken former urban centres that find themselves beyond the calculus of financialised time and space? The insurable universe reveals a strange sort of cosmogram—historian John Tresch’s term for representations, objects and ‘performative assertions’ that intimate a cosmic order while ‘[keeping] us at the level of observable, material practices.’³ The proliferation of CAT bonds and reinsurance contracts within the era of climate catastrophe inscribes a story that cuts across the strata of everyday, geophysical and financial worlds, while operationalising their differences through temporal arbitrage—not only trading across time but across distinctive temporalities. As a researcher from Cambridge University’s Centre for the Study of Existential Risk notes, ‘where we start paying attention is where [the reinsurance industry] loses interest: when there’s no-one left to pay out. No legal system, no more society, the end of capitalism.’⁴ Perhaps the final destination for the catastrophe industry is the contract at the end of the world. Like a child defeating its parents in an argument for the first time, it’s the kind of win where everybody loses—the biggest short. The time of finance might run out only shortly before that of society as we know it, but long before the time of the planet. The typical reinsurance contract, meanwhile, lasts 2-3 years.

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¹ Conversation with the author, 2020.

² <https://www.bloomberg.com/news/articles/2020-01-30/arbitrage-won-t-stop-climate-change-kate-mackenzie>

³ John Tresch, ‘Cosmologies Materialized: History of Science and History of Ideas’, in *Rethinking Modern European Intellectual History*, Darrin M. McMahon and Samuel Moyn, eds., (Oxford University Press: New York. 2014), p. 163.

⁴ Conversation with the author, 2019

world of catastrophic risk, will be exhibited with Arts Catalyst and Bloc Projects in late 2020. He teaches at Parsons School of Design and is a 2019-20 [Film Study Center Fellow](#) at Harvard University.

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