closing the protection gap using risk data in a changing climate

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heightened California fire risk, superfast deepening of tropical cyclones, and increasing exposure to local flash floods, our awareness of climate trends, variability, and change is undoubtedly increasing. vulnerability to natural catastrophes has been decreasing in western countries where around 50 per cent of risk is insured. this is opposed to emerging -, frontier -, or developing - countries, that depict catastrophe insurance penetration around a few per cent, only. 20 per cent or around USD 80bn of over 350bn of annually expected natural catastrophe economic losses are insured globally, leaving most people in most of the emerging and developing countries alone with their catastrophe losses. ex-post solutions that pursue financing after a loss often lack well developed supply systems not thought of as long as there are no losses. International funds then help hasty replacement of existing structures not built to any relevant construction code. ex-post solutions hence often miss a unique opportunity for change. This contribution deals with using global hazard and risk data in order to create parametric risk transfer products as a form of insurance/derivatives that foster fast cash flow in order to pay for man-made and natural catastrophe losses. global data sources hence help creating superfast (around two weeks) payment after a loss with pools of capital that does not need to be locked for long and hence offers tight spreads. once established within the wider insurance and capital markets for the developing countries, these products have a chance to stimulate thinking towards ex-ante risk financing in the developing areas themselves. This contribution deals with how we use hazard and risk data in order to create parametric transfer products for central Asia and Latin America.