Catastrophic Risks and Real Estate Markets Flood Zone Pricing Across Borders

A Project for the Course on Catastrophic Risks

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Abstract

This thesis examines the relationship between flood risk, insurance systems, and property pricing through a cross-country comparative analysis. Using comprehensive real estate transaction data and flood risk maps, a detailed dataset of every cadastral parcel exposed to flood risks in France was developed. A simple hedonic pricing model highlights significant differences in how flood-prone properties are valued under France's CatNat system and the UK's FloodRe scheme. While the UK market penalizes properties in at-risk zones with lower prices, France's solidarity-based approach mitigates these negative effects. These findings raise concerns about the long-term sustainability and efficiency of the CatNat system, a framework that has provided universal coverage for over 40 years but now faces mounting challenges in addressing the growing risks associated with climate change.

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