# Climate-Adaptive Supervision in Insurance Markets

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**Abstract**

This paper introduces a novel supervisory tool to enhance resilience in insurance markets faced with climate change uncertainties. I develop a theoretical model simulating an insurance market with non-cooperative insurance experts who set premiums based on subjective risk modeling. I present a supervisory tool that relies on inter-temporal changes to pool expert opinions and identify fast-learning leaders who can accurately classify extreme climate-induced events. This tool addresses the challenge of insurability with a changing climate and helps supervisors anticipate shifts in risk parameters. The robustness and utility of the proposed tool are validated through a series of simulations where it demonstrates superior performance compared to conventional pooling methods.

**Keywords:** Climate change, insurance market stability, opinion pooling

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