

Weathering the Storm? The Effects of Natural Disasters on Households under Universal Insurance*

Caroline Espegren^{a,b}, Sigurd Mølster Galaasen^a, Emilia
Garcia-Appendini^{a,c,d}, and Mathis Mæhlum^a

^aNorges Bank

^bBI Norwegian Business School

^cUniversity of St. Gallen

^dSwiss Finance Institute

December 19, 2025

Abstract

We study the indirect economic consequences of natural disasters for households using administrative data from Norway. A unique feature of this setting is universal natural disaster insurance, which fully compensates direct damages and allows us to isolate indirect effects. Linking a municipality-level measure of disaster severity to population-wide consumption data and administrative records on income, wealth and housing transactions, we estimate household responses using a matched difference-in-differences design. We find that disasters cause persistent and substantial declines in household consumption: four years after an event, the cumulative drop in spending amounts to as much as 40% of the average direct damages. Standard estimates of marginal propensities to consume imply that only a small portion of this contraction can be attributed to lower income, while the bulk is explained by a steep and persistent decline in housing wealth. These results suggest significant and long-lasting welfare costs of natural disasters on affected households, even when direct physical damages are completely insured.

JEL classification: D14, D31, E21, Q54

Keywords: Climate Economics, Natural Disasters, Consumption, Household Finance, Insurance

*All authors declare that they have no relevant or material financial interests that relate to the research described in this paper. We thank Steffen Andersen, Christian Brinch, Jon Frost, Martin B. Holm, Gazi Kabas, Carlos Madeira, Gisle Natvik, Parinitha Sastry, Christian Thomann, Ragnar Torvik, and participants in seminars and conferences at BI, CEPR, IBRN, NBER, Norges Bank, NYU Stern School of Business, and Riksbanken for useful comments and input. The views expressed are those of the authors and do not necessarily reflect those of Norges Bank.