

Household Financial Resilience and Well-Being under Climate Risk: Evidence from Germany

Climate change increasingly exposes households to income losses, housing damage, financial distress, and constraints on social participation following extreme weather events. While welfare states are expected to buffer such shocks, systematic micro-level evidence on household financial resilience in high-income countries remains limited. This paper examines how climate-related disasters reshape household financial vulnerability and well-being in Germany.

Using longitudinal data from the SOEP Core combined with household geo-coordinates and official flood maps, I identify exposure to two major flood events in Saxony: the August 2002 flood and the June 2013 Elbe and Mulde floods. Treatment status is defined based on spatial proximity to flooded areas. The empirical strategy follows an event-study difference-in-differences framework exploiting within-household variation over time, complemented by spatial specifications to assess spillover effects across neighboring households and regions.

The analysis proceeds in two steps. First, I replicate and extend the savings analysis of [Berlemann et al. \(2025\)](#), who document medium run reductions in household savings following the 2002 flood. I assess the replicability and robustness of the original findings and extend the empirical framework to the 2013 flood, examining whether the estimated effects are robust across disaster events and alternative distance thresholds defining flood exposure.

Second, building on the life satisfaction valuation framework of [Johnston et al. \(2021\)](#), I translate the well being effects of flood exposure into monetary terms. By exploiting within household income variation in the panel, I estimate the compensating income required to restore pre-disaster levels of subjective well-being. This approach allows me to express the total welfare cost of flood exposure in monetary equivalents and captures psychological distress and reduced perceived safety that conventional financial indicators do not measure.

By integrating financial resilience and well-being-based valuation, the paper provides a comprehensive assessment of the distributional consequences of climate shocks in a high-income welfare state.

► Johnston, D. W., Önder, Y. K., Rahman, M. H., and Ulubaşoğlu, M. A. (2021). Evaluating wildfire exposure: Using wellbeing data to estimate and value the impacts of wildfire. *Journal of Economic Behavior & Organization*, 192:782–798

► Berlemann, M., Haustein, E., Steinhardt, M. F., and Tutt, J. (2025). Do natural disasters affect household saving? Evidence from the August 2002 flood in Germany. *Economics of Disasters and Climate Change*, 10(1)