



Behavioural Heterogeneity and Household Resilience to Shocks: Evidence from Rural Vietnam

Dien Huong Pham | Ho Chi Minh University of Banking

A three-wave TVSEP panel linking risk preferences, inequality and recovery

Why do households facing shocks experience different welfare trajectories?

588
rural households

3 waves
2008 • 2010 • 2013

66.5%
returned to ≥ 2008 consumption

1 | WHY THIS MATTERS

- Household resilience is dynamic: shocks can reduce welfare, trigger coping, and reshape future recovery (Barrett & Conostas, 2014; Tran, 2015).
- Resources matter, but similar assets do not guarantee similar responses to uncertainty (Aroui et al., 2015; Do, 2023).
- Risk preference may increase both short-run exposure and longer-run adjustment capacity (Do, 2023; Hardeweg et al., 2013).
- Perceived relative position can capture social comparison, aspirations, security and local opportunities.

2 | RESEARCH QUESTIONS

- How are shocks associated with welfare changes over time?
- Does pre-shock risk preference predict recovery?
- Does perceived relative status add information beyond objective wealth?
- How do behavioural heterogeneity and ethnic inequality intersect?

3 | CONCEPTUAL FRAMEWORK



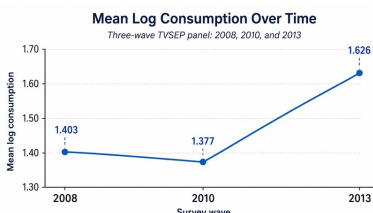
4 | DATA & MEASUREMENT

TVSEP • Vietnam component • balanced panel (Grote et al., 2026)

- Welfare: log daily consumption per adult equivalent
- Risk preference: 0–10 willingness to take risk (Hardeweg et al., 2013)
- Alternative behaviour: hypothetical risky investment
- Relative status: village-relative economic position (Grote et al., 2026)
- Structural inequality: ethnic-minority status
- Exposure: shock counts and income/asset losses
- Recovery: 2013 consumption ≥ 2008 consumption

588 households • 1,764 household-wave observations

5 | WELFARE TRAJECTORY



13 | FROM EVIDENCE TO CLIMATE-RESILIENT FUTURES

Protect recovery capacity

- Target liquidity, asset protection and rapid consumption support according to household exposure and productive assets.
- Pair post-shock compensation with prevention, insurance and livelihood diversification.

Reduce structural exposure

- Minority households enter shocks with lower consumption and wealth and greater agricultural exposure.
- Resilience policy should address market access, financial inclusion, infrastructure and social protection.

Use behaviour carefully

- Risk preference helps explain heterogeneous trajectories, but it should not become a policy label.
- Behavioural information can complement—not replace—structural interventions.

14 | WHAT THE EVIDENCE DOES—AND DOES NOT—SHOW

What is robust

- Relative status retains predictive information beyond objective wealth and baseline consumption.
- Minority status is strongly associated with lower predicted recovery.
- A parsimonious logistic model outperforms the neural network in this sample.
- High-risk households show a larger short-run decline but relatively strong medium-term recovery.

Interpret with caution

- Aggregate shock counts are coarse and do not recover all event-level mechanisms.
- Baseline risk preference may itself respond to shocks; causal behavioural identification remains limited.
- Returning to one's own 2008 consumption is a transparent benchmark, not a complete measure of resilience.
- Prediction and SHAP explain fitted models; they do not establish causal effects.

15 | NEXT EMPIRICAL STEP

Reconstruct an event-level shock panel to separate exposure, severity, duration, losses, coping and recovery—and test how behavioural heterogeneity operates within unequal opportunity environments.

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Data: TVSEP; long-term project No. 20220831434900116103, funded by the Deutsche Forschungsgemeinschaft (DFG). Predictive associations are not causal effects.