Expenditure Risk and Household Wealth Dynamics

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Abstract

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Research Question

What drives household transitions from positive to non-positive net worth? Standard models attribute these transitions primarily to negative transitory income shocks, yet they struggle to explain their incidence and prevalence in the population. While prior research has focused on the persistence of low-wealth states—whether through asset-based means-tested transfers (Hubbard et al., 1995) or fixed heterogeneity in time preferences (Aguiar et al., 2024)—less attention has been given to the mechanisms triggering these wealth-depleting episodes. This paper aims to fill this gap by investigating the role of unpredictable expenditure shocks in driving households toward zero wealth.

Answer

I show that expenditure risk—persistent, unpredictable expenses—has a direct causal effect on household wealth dynamics, driving transitions from positive to non-positive net worth beyond what income risk alone can explain. Using a semi-structural approach, I estimate an expenditure policy function conditional on income risk and identify an idiosyncratic expenditure component that systematically induces wealth depletion. I further develop a structural heterogeneous-agent model where expenditure risk enters as a wedge in the Euler equation, shaping optimal saving decisions. The model confirms that expenditure risk operates as a distinct force in household wealth accumulation, complementing existing frameworks that rely on preference heterogeneity. These findings highlight the importance of incorporating expenditure risk into models of household wealth dynamics and challenge the notion that income fluctuations alone drive downward wealth mobility.

Positioning

This paper identifies an expenditure policy function based on income risk realizations (Blundell et al., 2008) and introduces a framework to capture persistent, unpredictable expenses as a key driver of zero-wealth transitions. While heterogeneous discount factors explain the share and persistence of low-wealth households (Krusell and Smith (1998); Aguiar et al. (2024)), they do not account for the mechanism triggering these transitions. I show that expenditure risk—modeled as a structural wedge in the Euler equation—fills this gap by directly influencing household saving dynamics. This complements existing models of household wealth accumulation by introducing an additional source of risk beyond income fluctuations, reshaping our understanding of wealth mobility and financial vulnerability.

References

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