

## **Making Inferences about the Vulnerable: A Study Using the British Household Panel Survey**

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In this paper I examine the concept of 'vulnerability' within the context of income mobility of the poor. While the concept of poverty is well developed in the economic literature, the concept of vulnerability is less established and even less applied in the economic literature and policy fields. Vulnerability in this paper is defined as a significant association between changes in income and changes in consumption of a household or individual. A panel regression approach is undertaken, using mainly Feasible Generalised Least Squares to model the vulnerability dynamics. I test for the dynamics of vulnerable households in the UK using the British Household Panel Survey and find that of three different types of risks that I test for, household-specific shocks and economy-wide aggregate shocks have the greatest impact on changes in consumption, in comparison to shocks to the income stream. In short, households are found to be rendered vulnerable when exposed to certain risks in the economy and at the household level. In the empirical models I use three definitions of income, as defined in the BHPS, gross monthly income, net monthly income and net annual income, where net income is measured net of taxes and social transfers. The empirics derived in the paper reveal that most of the significant vulnerability is observed with monthly gross income (and some with net monthly income), suggesting that vulnerability is a short-term phenomenon in the UK. This is also the case when vulnerability is tested at specific income quantiles above and below the poverty line. Several income quantile definitions are used to locate the vulnerable above and below the poverty line. To further investigate the dynamic nature of vulnerability, I split income into its permanent and transitory components using standard methods in the literature. Vulnerability is found to be particularly significant for changes in transitory income. This is again suggestive that vulnerability in the UK is more a result of transitory shocks to the income stream. To identify potential consumption smoothing mechanisms, I also observe the vulnerability dynamics in light of coping mechanisms undertaken by vulnerable households – savings and having a tenured job, are revealed to be significantly associated with the vulnerability dynamics, particularly over the medium-to-long term. Finally, by tracking the vulnerable individuals' socio-economic characteristics in the British Household Panel Survey, I find that a large number of these individuals are single mothers.