Measuring Economic Insecurity with a Joint Income-wealth Approach

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Economic insecurity has clearly a relevant impact on individual well-being: the anxiety that individuals feel when anticipating future economic distress reduces current quality of life. Nowadays, the COVID-19 pandemic and the uncertainty associated to its economic impact are likely to cause an unprecedented increase of individual insecurity. Disruptions in the labour market and the diverse measures adopted by public institutions to contain the disease have led to a larger unpredictability of future states and growing feelings of fear that are expected to cause a huge rise in the anxiety individuals feel regarding their future. It is only in recent years that social and economic researchers have become aware of the importance of economic insecurity, thus giving rise to several proposals on how to best measure this dimension. An ideal measure of economic insecurity must capture three fundamental elements: the probability of an unfortunate future event, a negative economic consequence in case this event takes place and the absence of protection to cope with distress (Hacker, 2018). The reference to future economic hazards as well as the psychological impact of negative financial expectations pose serious difficulties in designing indicators to assess this phenomenon. Unfortunately, we are still far from reaching a consensus on which is the best method to study insecurity in developed countries.

The selection of variables or dimensions is key to approximate economic insecurity properly. There have been several attempts to assess the exposure to objective economic risk with income and wealth, which allows to compare this notion with other low well-being dimensions in a more homogeneous manner. For instance, Hacker et al. (2010, 2014) measure economic insecurity as the percentage of individuals who experience a large income drop in their household income from one year to the next and lack enough liquid financial wealth to cope with that loss. With a different approach, Rohde, Tang and Rao (2014) approximate insecurity as downward income instability, whereas Watson (2018) uses the predicted individual probability of experiencing a large income loss. On the other hand, Bossert and D'Ambrosio (2013) believe that wealth is a more adequate variable to assess economic insecurity as it can be understood as an emergency buffer stock.

While income and wealth may be equally valid to measure economic insecurity from a theoretical perspective, empirical analyses reveal that results are highly conditioned to the dimension selected. Using information on changes in household wealth, D'Ambrosio and Rohde (2014) find that US households have more economic security than those in Italy due to a larger accumulation of financial assets. On the contrary, Rohde, Tang and Rao (2014) find that economic insecurity (measured as downward income instability) is the highest in the United States (US) when considering post-government incomes. These results evince that the use of a single dimension

limits the correct measurement of economic insecurity and cannot fully capture the diverse aspects in which insecurity is manifested.

In this paper, our main aim is to disentangle the dichotomy between income and wealth when assessing economic insecurity. We focus on unidimensional indices of economic insecurity and study if the selection of different variables delivers various results regarding the evolution and distribution of economic insecurity. We start from the conception of income as an indicator of individuals' standard of living and wealth as a buffer stock which could become an income flow in case a negative event takes place. Therefore, we follow Weisbrod and Hansen (1968) to convert current wealth stock into an income flow which is added to pre-tax income in a given period in order to obtain an extended well-being indicator. We estimate different measures according to the degree of liquidity of several assets that approximate the consumption possibilities of individuals in different time horizons and then construct a series of economic insecurity indices. These insecurity measures capture the likelihood of future economic distress which could result in large declines of the individuals' consumption capacity. The indicators proposed in this paper therefore reflect the absence of a sound safety net when an economic hazard takes place.

As an empirical illustration, we apply the resulted measures to US data to analyse the level, evolution and distribution of economic insecurity over the last two decades and compare our extended well-being approach with previous insecurity indices proposed by the literature. We find that more than 20% of the US population is economically insecure when considering income only, whereas a 46% suffer from large wealth variations. Conversely, 25% of US individuals are exposed to objective risk when using our extended well-being measure. This result is manly driven by income losses, as family income is the most importance source of well-being for most households while wealth is mainly own by rich individuals.

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