Economic Insecurity as a Socioeconomic Determinant of Mental Health

Daniel Kopasker, Catia Montagna, Keith Bender

1Department of Economics
University of Aberdeen

Comments by Nicholas Rohde - Griffith University
1 Economic Insecurity and Mental Health
   - Background/Theory
   - Implementation

2 Estimations and Discussion
   - Main Results
   - Discussion
Outline

1 Economic Insecurity and Mental Health
  - Background/Theory
  - Implementation

2 Estimations and Discussion
  - Main Results
  - Discussion
This paper is an empirical piece estimating the causal effect of economic insecurity on mental health.

Innovative measurement techniques mixed with IV for identification.

Clear policy implications of the work. Heavily market-orientated economies might be stressful for participants, especially for individuals with poorer skill bases.

This anxiety plausibly leads to mental health issues, which can create numerous other social problems.

Concern for economic insecurity is weighed against other issues (e.g. moral hazard).
Economic Insecurity

- Economic Insecurity is the stress associated with the possibility of adverse future economic events.
- It encapsulates job insecurity, financial insecurity, vulnerability to poverty, income volatility etc.
- Further it is both subjective (heterogeneity in the relationships between risk exposure and anxiety) and prospective (concerned with the future rather than the past).
- Both these factors raise challenges in inferring insecurity from historical data.
Survey evidence suggests that economic concerns are one of the major stressors in life.

Seems reasonable to attribute this (at least partially) to economic insecurity.

We know that excess stress has a range of psychological and physiological effects.

Economic Insecurity is therefore likely to be a determinant of health.
Outline

1. Economic Insecurity and Mental Health
   - Background/Theory
   - Implementation

2. Estimations and Discussion
   - Main Results
   - Discussion
Data

- Data are taken from BHPS 1993-2007.
- 18 waves are employed and panel structure is exploited.
- Obviously attrition and issues related to attenuation are possible.
- Focus on working age population (16-64).
- A number of objective and subjective indices are employed in order to capture different facets of insecurity.
Insecurity Measures

- The first measure is a thoughtful adaption of Hacker’s (2006) ESI.
- This is a binary indicator equal to one if household income declines by 25% and the household has limited liquid wealth (amongst other things).
- Assumption here slightly stronger than Hacker as the latter prefers to look only at the proportion of people affected.
- Uses lags rather than lead terms for incomes.
- Account for medical expenditures differently as per health insurance in UK.
Subjective indices are also used.

Individuals are asked about their sense of job security (scale 1-7).

Recoded as a binary indicator.

Obviously this only applies to those who are currently employed.

Index is implicitly forward looking (desirable).

However some well-known self selection issues with the variable that may affect the measurement of trends.
Also take an indicator on whether or not people expect their financial situation to worsen over the next 12 months.

And lastly a self assessed measure of current (rather than forward looking) material comfort.

Mental Health is measured with GH-12 - a 36 point scale of mental wellbeing.

MH is rescaled by its standard deviation to aid interpretation.
Outline

1 Economic Insecurity and Mental Health
   • Background/Theory
   • Implementation

2 Estimations and Discussion
   • Main Results
   • Discussion
Year-to-year estimates show economic insecurity to follow a u-shape over time.

This is pretty consistent over the basket of indices.

Turning point was around 2001-2003, with insecurity increasing slowly after this point.

This is similar to our finding for Australia.
Econometric Models

- Fixed Effects models are fitted with cluster-robust SEs.
- Instrumentation is used to try to get around simultaneity issues.
- Averages of measures by socioeconomic strata and regional area are more plausibly exogenous than individual-level scores.
- Together (FE and IV) represent a pretty solid effort at getting at causality.
Estimates

- Parameter estimates show significant impacts of economic insecurity on mental health.
- The impacts are of plausible magnitudes - becoming “insecure” lowers MH by about 0.1-0.3 standard deviations.
- The size of the impact varies by measure and by gender. Males seem more sensitive, perhaps due to breadwinner pressure.
- When instruments are used the results are similar but less frequently significant.
- Instrument strength seems ok (Cragg-Donald Statistics >10) but recall sample sizes are large.
- No problems with overidentifying restrictions.
- Results appear robust with respect to control variables.
Outline

1. Economic Insecurity and Mental Health
   - Background/Theory
   - Implementation

2. Estimations and Discussion
   - Main Results
   - Discussion
This paper adds to the volume of literature showing that economic insecurity is detrimental for health.

Modeling is very carefully done and a big effort is made to generate estimates that reflect causality.

Do exclusion restrictions hold? Probably not perfectly (not the fault of the authors though).

One option not considered is to lag the RHS insecurity measure. This may give better results than IV.

The authors may like to infer multidimensional index. E.g. job insecurity in the presence of a family to support and a small buffer of liquid wealth.

This may get closer to the heart of “economic insecurity”.
Discussion

- How substantial is the effect? Hard to say. Results seem to be in line with other papers (e.g. Watson, 2015) which show a detectable, but hardly overwhelming effect size.

- For this reason mobility in insecurity might be important - cumulative effects.

- If people are insecure for brief periods during their lives then the problem may be only small.

- If there is a subset of individuals who are constantly insecure then the problem may be very large (for these persons).

- Likely that insecurity is heavily concentrated amongst poorer and less educated individuals.