

## Centre For Health Economics Seminar Series 2018

# PRENATAL ECONOMIC SHOCKS AND BIRTH OUTCOMES

Presenter: Nicholas Rohde, Griffith University  
Date: Wednesday, 4th April 2018  
Time: 12.00pm - 1.00pm  
Venue: RB Scotton Room  
Centre for Health Economics



### Abstract

This paper examines the effects of major prenatal economic shocks experienced by mothers on two indicators of newborn infant health - birth weights and head circumferences. We take microdata from the extensive and highly detailed ALSPAC survey from the United Kingdom and apply regression models to estimate effect sizes. Controlling for a wide variety of physiological and socioeconomic factors, we estimate that experiencing such a shock in the first 18 weeks of gestation lowers birth weights by around 50-70 grams and reduces head circumferences by about 2-3mm. Several potential transmission channels are explored including (i) worsening physiological health via absolute material deprivation, (ii) increased unhealthy coping behaviours such as tobacco and alcohol consumption, and (iii) the direct endocrinological effects of increased psychosocial anxiety. We find evidence in favour of hypotheses (i) and (ii) but (iii) remains unsupported. We also study the fragile male hypothesis - the idea that adverse in-utero shocks are more consequential for male fetuses. Our data suggest that males are more vulnerable in terms of reduced birth weights, but surprisingly female fetuses are slightly more affected in terms of head circumferences.

### Presenter

Nicholas Rohde is a researcher at Griffith University in Queensland. His work focuses on (i) the measurement of income inequality, (ii) panel data analyses of economic insecurity, and (iii) the relationships between economic outcomes and personal health. He holds a PhD in econometrics from the University of Queensland.

### VISITORS ARE MOST WELCOME

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