## Re-visiting the Health Care Luxury Good Hypothesis: Aggregation, Precision, and Publication Biases?

Joan Costa-Font<sup>a,b,c</sup>, Marin Gemmill<sup>b</sup> and Gloria Rubert<sup>c</sup>

<sup>a</sup>LSE Health, London School of Economics and Political Science, London, UK.

<sup>b</sup> Europan Institute, London School of Economics and Political Science, London, UK

<sup>c</sup>CAEPS, Universitat de Barcelona, Barcelona, Catalonia, Spain.

Contact Author: Joan Costa-Font, LSE Health, London School of Economics, London, UK. E-mail: j.costa-font@lse.ac.uk

Beginning with the seminal paper by Newhouse (1977), a contentious debate has raged over the income elasticity of demand, the central question being whether health expenditures increase faster than per capita income. The general finding has been that income elasticity estimates exceed unity, implying that health care is a luxury good. While a growing literature examining the relationship between income and health expenditures suggests that health care is a luxury good, this conclusion is contentiously debated due to heterogeneity of the existing results.

This paper tests the luxury good hypothesis using meta-regression analysis, taking into consideration publication selection, precision, and aggregation bias. We use standard meta-regression techniques developed in Stanley (2008, 2007 and 2005) including the FAT, PET, PEESE and correction for meta-significance testing too. Overall we download 167 studies published in peer review journals in social sciences and medicine from which an income elasticity estimate was reported.

Our findings suggest that publication bias exists, a result that is robust irrespectively of the tests employed. Precision and aggregation bias also appear to play a role in the generation of estimates. The corrected income elasticity estimates range from 0.26 to 0.84, although we cannot reject the luxury good hypothesis for some of the performed corrections. We also find that two study controls are consistently important predictors of the elasticity value. Studies using regional data yielded lower elasticity values, providing evidence for the existence of aggregation effects. Journal quality is also an important predictor, and it seems that journals with a better impact factor, namely more established journals, exhibit a systematic tendency to report higher elasticity effects. Other controls such as institutional and methodological factors did not appear to influence the elasticity estimates.

A longer version of the research may be found at: <a href="http://www.ere.ub.es/dtreball/E08197.rdf/view">http://www.ere.ub.es/dtreball/E08197.rdf/view</a>