Task 6.4 Cross-Sectional Model Calibration

Inputs
Data files.
LIMDEP calibration software

Processing
The calibration tasks are:

(i) through tabulation and preliminary statistical analysis check the model structure and household segmentation (variation in car ownership between household categories)

(ii) calibrate models for each level vs income (the α and δ parameters), and test for best income variable and saturation levels; use the non-linear optimiser in LIMDEP to calibrate maximum likelihood models (use parameter t-statistics and the log likelihood test to distinguish between models);

(iii) there is some doubt about whether we can estimate the saturation levels, so carry out some manual analysis of the data to identify likely levels and test alternative values in the model;

(iv) note that the calibration can group all household types together and simply allow the coefficient values to differ between them; and, on the basis of experience elsewhere, we would not expect both coefficients to vary with household type.

Outputs
Car ownership cross-sectional model specification.
Report.