

## Projecting consumption and expenditure shares

Consumption shares and expenditure shares are projected using using the AIDS model parameters and according to the following equations.

The dynamic AIDS takes the following form:

$$(1) \quad \Delta S_i = \alpha_i + \sum_j \beta_{ij} \Delta \ln P_j + \gamma_i \Delta \ln \left( \frac{x}{P} \right) + \lambda_i \mu_{it-1}$$

where  $\Delta$  is the first difference operator and  $\mu_{it-1}$  are the lagged estimated residuals from the static model, where  $S_i$  is the consumption share of good  $i$ ,  $p_j$  is the price of goods  $j$  to  $N$ ,  $x$  is final consumption expenditure (or budget).

$P_t$  is normally approximated using a Stone price index, which takes the form:

$$(2) \quad \ln P = \sum_i S_i \ln P_i$$

Shares are then multiplied by personal disposable income forecasts to get expenditures per category.

### References

Lyons, S., K. Mayor and R.S.J. Tol (2007), 'Convergence of Consumption Patterns during Macroeconomic Transition: A Model of Demand in Ireland and the OECD', *ESRI Working Papers*, No. 205, ESRI.