***EViews* Exercises for Chapter 12**

**EXAMPLE 12.1: An ARDL model for U.K. interest rates**

This example uses the workfile interest\_rates.wf1. First generate the differences of the two interest rate series

genr dr20 = d(r20)

genr drs = d(rs)

Click ***Quick/Estimate Equation…*** and select ‘ARDL- Autoregressive Distributed Lag Models’ as ‘Method’. Enter dr20 drs in the ‘Dynamic Specification’ box and change the ‘Trend specification’ to ‘1. None’. On OK-ing the estimated ARDL(2,1) specification will appear. Clicking ***View/Model Selection Summary*** will provide details of the alternative model fits in either graphical or tabular form. The alternative form of the ARDL equation is obtained with

ls dr20 dr20(-1) dr20(-2) drs d(drs(-1))

To obtain the long-run response, click ***View/Coefficient Diagnostics/Wald test – Coefficient Restrictions…***  and in the restrictions box type

c(3)/(1 – c(1) – c(2)) = 0

**EXAMPLE 12.2: ARDL modelling of global temperatures**

This example uses the workfile global\_forcings.wf1. The unrestricted ARDL specification in column (1) of Table 12.1 is obtained by following the procedure of the previous example for the dynamic specification

d(temp) d(trf) volc soi amo

with the trend specification set to ‘3. Const’. The restricted model in column (2) is then obtained by clicking ***View/Coefficient Diagnostics/Redundant Variables Test – Likelihood Ratio…***. This displays the restricted equation and also provides tests of the imposed restrictions. The (12.6) form of the model is estimated by

ls d(temp) d(temp(-1)) d(temp(-2)) d(temp(-3)) d(trf(-2)) volc soi d(soi) amo d(amo) d(amo,0,4)

The further restricted form in column (3) of Table 12.1 is obtained by deleting amo from this equation.

The specification with the levels of temperature and total radiative forcing uses the dynamic specification

temp trf volc soi amo

and restrictions can be imposed using a similar approach to that followed above.