***EViews* Exercises for Chapter 7**

**EXAMPLE 7.1: ARIMA forecasting of the spread**

This example uses the workfile interest\_rates.wf1 and, as before, focuses on the spread, calculated with the command

genr spread = r20 - rs

To obtain forecasts of the spread out to December 2020, first click ***Proc/Structure/Resize Current Page…*** and change ‘End date:’ to 2020m12. This will increase the sample by 42 observations from July 2017. On running the AR(2) regression

ls spread c spread(-1 to -2)

click ***Forecast,*** insert ‘spreadse’ (say) in the S.E. box and change ‘Forecast sample’ to ‘2017m07 2020m12’. On OK-ing, the series spreadf and spreadse will be generated and a plot of the forecasts with 2-standard error bounds will be shown, which forms the basis for Figure 7.1. The -weights may be obtained automatically from the ‘mean-deviation’ form of the AR(2) regression:

ls spread c ar(1) ar(2)

Click ***View/ARMA structure…*** and then check ‘Impulse response’, change ‘periods’ to 42, check ‘Table’ for Display and check ‘User specified’ for Impulse. The -weights are then given in the resulting ‘Response’ column.

Forecasts for the ARIMA(0,1,1) model may be obtained by repeating the above commands using the regression

ls d(spread) c ma(1)

The final residual (i.e., for 2017m06) can be obtained either from the resid series or by clicking ***View/Actual, Fitted, Residual*** in the equation view.

**EXAMPLE 7.2: Forecasting global temperatures**

This example uses the workfile global\_temps.wf1 and the ARIMA(0,1,3) model estimated from

ls d(temp) ma(1 to 3)

Forecasts can be obtained in an analogous way to that of the previous example by increasing the sample to 2020m12.

**EXAMPLE 7.3: Forecasting the *All Share* index as a TS process**

This example uses the workfile ftse.wf1. The following commands produce the series used in Figure 7.3:

genr p = log(price)

ls p c @trend ar(1 to 2)

genr p\_tr = c(1) + c(2)\*@trend