Summary of important EViews-Commands

Import of data from EXCEL:
if the xlsx-format does not work, use File.xls

Choice of sample period:
Sample /
@all
@first @last
1990 2010
1981Q3 2005Q1
1960M1 2000M11

in command line e.g.: smpl @first 1990

Univariate statistics:
Click series / View /
Spreadsheet   data as numbers
Graph   Graphics
Descriptive Statistics&Tests   z.B. histogram, mean, etc.
Correlogram   autocorrelationen

Generation/Transformation of series:
Generate / x = 0   generates a series with zeros
Generate / pi = (pc - pc(-1))/pc(-1)*100
   Generates the inflation rate in % based on prices pc
Generate / x = log(y)   taking logs
Generate / dlx = dlog(x)   dlx = log(x) - log(x(-1))
   Growth rate in continuous time
Generate / y = exp(x)   exp(x)

as command: series x=0

Trend variable (linear):
Generate / t = @trend

Standard normal distributed realizations:
Generate / x = nrnd

Lags, lagged variables, taking differences:
Generate / x1 = x(-1)   x1(t) = x(t-1), Lag 1 of x
Generate / dx = d(x)   dx(t) = x(t) - x(t-1) = (1-B)x(t)
   first difference
Generate / d2x = d(x,2)   d2x(t) = dx(t) - dx(t-1) = (1-B)^(2)x(t)
   taking first differences twice
Generate / d12x = d(x,0,12)   d12x(t) = x(t) - x(t-12) = [1-B^(12)]x(t)
   seasonal difference for monthly data
Generate d12_1x = d(x,1,12)   d12_1x(t) = (1-B)[1-B^(12)]x(t)

Geneartion of dummy variables:
seasonal dummies: s=1,2,3,...
Generate / ds = @seas(s)

as command: series ds = @seas(s)

Generate / d1 = 0 and manually in View/Spreadsheet
use Edit+/-

p-value for x of a test statistic as command:

```
(N-, t-, Chi2-, F-distribution)
scalar p = 1 - @cnorm(x)                    1-sided, right
scalar p = 1 - @cnorm(abs(x))*2             2-sided
scalar p = 1 - @ctdist(x,df)                1-sided, right
scalar p = 1 - @cchisq(x,df)
scalar p = 1 - @cfdist(x,df1,df2)


df ... degrees of freedom
```

Determinant of correlation matrix: (as command)
```
group grpx x1 x2 x3 x4
matrix x = @convert(grpx)           group assigned to a data matrix
scalar det = @det( @cor(x) )        @cor(X) makes correlation matrix
```
Statistics for 2 or more series:
```
Correlation matrix:
Mark the series by klicking / right mouse  / Open as Group / View /
/ Covariance Analysis (z.B. Correlation)

as command e.g.: scalar corrxy = @cor(x,y)  bivariate correlation coeff
```

Estimation:
```
Quick / Estimate Equation / y c x1 x2          y = a1 + a2*x1 + a3*x2 + u
Option: LS ... OLS
Enter the estimation period

as command: ls y c x1 x2
with storage in equation "eq3": eq3.ls y c x1 x2

ARMA Model:
Option: LS
Model specification:
y c AR(1) AR(2) MA(1) MA(2) MA(3)        ARMA(2,3) with non zero mean

with heteroscedasticity robust standard errors:
Options: Covariance Coefficient Matrix / White (z.B.)
```

System estimation:
```
Open a multivariate equation system:
Object / New Object / System
Equations e.g.:
y1 = c(1) + c(2)*x1 + c(3)*y2
y2 = c(4) + c(5)*x2 + c(6)*x3
Instruments if needed e.g.:
inst x2 z7
Choose estimation method
```

Forecasting with LS, ...:
```
in LS Output (Equation) / Forecast
Forecast period, enter series name for forecasted values (e.g. yf) and
forecast error stdev (e.g. syf).
```

Plot of the forecast:
```
Object in Workfile menu / New Object / Group /
(or mark series with mouse / right click Open / as Group)
Enter the elements:
yf                              forecasted values
y                               observed values
(yf - 1.96*syf)                 forecast interval, lower border
(yf + 1.96*syf)                 forecast interval, upper border
```

Testing for structural breaks:
in Equation / View / Stability Diagnostics /
/ Chow Breakpoint Test / Enter: Start of 2., 3., ... period
/ Chow Forecast Test   / Enter: Start of 2.period, ...
/ Recursive Estimates / CUSUM

Statistics for residuals: autocorrelation, heteroscedasticity
in Equation / View / Residual Diagnostics / ...
                          Autocorrelation, Heteroscedasticity

Storing residuals:
in Equation / Proc / Make Residual Series

Testing for Unit Roots:
View / Unit Root Test (Augmented Dickey Fuller)

Testing for cointegration:
Collect the variables in a group /
View / Cointegration Test (Johansen)

Estimation of a VAR or CIVAR:
Mark dependent variables / Open as VAR
(with right mouse-button)