

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 / $dlx = d\log(x)$ $dlx = \log(x) - \log(x(-1))$
 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 / $d2x = d(x,2)$ $d2x(t) = dx(t) - dx(t-1) = (1-B)^2x(t)$
 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 $d12_1x = d(x,1,12)$ $d12_1x(t) = (1-B)[1-B^{12}]x(t)$

Generation of dummy variables:

seasonal dummies: $s=1,2,3,\dots$

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 grp 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 clicking / right mouse / Open as Group / View /
/ Covariance Analysis (z.B. Correlation)

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

Estimation:

Quick / Estimate Equation / y c x1 x2 $y = a_1 + a_2*x_1 + a_3*x_2 + u$
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.:

$y_1 = c(1) + c(2)*x_1 + c(3)*y_2$

$y_2 = c(4) + c(5)*x_2 + c(6)*x_3$

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)