

## Introduction to TSA in EViews:

Data (D) and Programs (P): in Basic\_TSA-Directory

### Where do you find EViews?

#### Invoking EViews

Reading data into EViews (monthly, quarterly, yearly) D: ip.xls in Read  
?? weekly, daily  
Check data  
Workfile

1973, Oct 17, 1st oil crisis (Jom-Kippur war, Oct 6-24) to March 1974,  
1979/80 2nd oil crisis (islamic revolution Iran, Iraq-Iran war)  
1981 US bond yield almost doubles to 13.4% (Fed: Paul Volcker)  
1995 AT joins EU  
1999 Jan 1, Euro book money, AT  
2002 Jan 1, Euro notes and coins, AT  
2000 IT bubble bursts  
2008, Sept 15, Lehman Brothers bankrupt

#### Transforming data:

lag  
log  
growth rate (continuous, discrete)  
 $d(x, \dots): \quad 1-B = d(x)=d(x,1) \quad (1-B)^2 = d(x,2)$   
 $\quad (1-B^s) = d(x,0,s) \quad (1-B)(1-B^s) = d(x,1,s)$

#### Visualizing data

ts plot  
scatter plot  
histogram  
q-q-plot D: sp500.wf1  
  
seasonal-plots

#### Descriptive statistics

##### Autocorrelations

**Model-simulation:** P: stat\_ltrend\_i1.prg  
linear trend  
random walk  
AR(1)

**Cross-Correlation** D: saiber\_url.wf1 lcr lyr  
**Granger-Causality**

#### Test for unit root

**Test for cointegration** D: saiber\_url.wf1

#### Estimation:

lin Reg (Trend) D: saiber\_url.wf1 lyr  
ARMA D: ip.wf1  
VAR  
VEC/CIVAR D: saiber\_url.wf1 lcr lyr