

6th set of assignments Financial Econometrics – solutions

pooled time series regression using avvwret

- Sample(adjusted)! 1947:2-1993:4
- *series factor1b = avvwret-avustret*
series factor2 = hml_r-1
series factor3 = smb_r-1
- Objects -> new objects -> pool: pooled time series regression
Dependent variable: decile?-avustret
Cross section specific coefficients: c factor1b factor2 factor3
No intercept, no weighting -> estimate
Make residuals
matrix varcovres6b = @cov(residuals6b)
- group factors: factors6b
- *matrix varcovfactor6b = @cov(factors6b)*
- create mean vector:
vector(3) meanfac6b
meanfac6b.fill @mean(factor1b), @mean(factor2), @mean(factor3)

0.018130

0.002613

-0.005883

- GRS statistic:

alpha: see assignment sheet

one: see assignment sheet

matrix grsb =

t@inverse(one+(@transpose(meanfac6b)*@inverse(varcovfactor6b)*meanfac6b))**

@transpose(alpha6b)@inverse(varcovres6b)*alpha6b*

GRS- Statistic: 10.545

- p-value :
matrix pavelgrs6b = one- @cchisq(grsb, 10)
p-value = 0.394