

Financial Econometrics: Fact Sheet

Lecturer: joachim.grammig@uni-tuebingen.de

TA: kerstin.kehrle@uni-tuebingen.de

Secretary: angelika.hutt@uni-tuebingen.de

Course page:

<http://www.uni-tuebingen.de/uni/wwo/Grammig/veranstaltungengrammig/>

- ◆ on avg 3 h lecture (occasionally we will use the 10-12 hour slot)
- ◆ 2h practical assignments & exercises
- ◆ Revise 4h+ per week, additional (theory) assignments and exercises
- ◆ Exam: Material of lectures, reading list, open book exam
- ◆ Prerequisites : Undergraduate math & statistics (easy pieces !), introductory finance, intermediate micro- and macroeconomics
- ◆ What is Financial Econometrics?

Agenda

- ◆ Principles of financial economics
- ◆ Basic pricing equation and GMM estimation
- ◆ Basic and recent asset pricing models
- ◆ Conditional estimation and scaled pricing factors
- ◆ Regression-based tests of asset pricing models
- ◆ Event study methodology
- ◆ Financial time series, volatility models (Engle's ARCH

Assignments

Review statistical basics: (your statistics undergrad. textbook or or e.g. J. Hamilton, Time Series Analysis, Princeton 1994, p.739 ff.

(download Econometrics Dictionary)

random Variables and distributions

(distribution function, density function),

expectation operator

(mean, variance, centered and uncentered moments, orthogonality)

joint distributions, independence, covariance and correlation

conditional probability/density and conditional distributions,

conditional expectation

models of convergence, esp. Weak Law of Large Numbers

and central limit theorems

Easy Pieces in Statistics (download from course page)

Hypothesis testing

Read preface page xiii-xv in Cochrane (2001) (or 2005)