Financial Econometrics: Fact Sheet

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Course page:
http://www.wiwi.uni-tuebingen.de/cms/lehrstuhl-homepages/econometrics-statistics-and-empirical-economics/teaching/current-semester/financial-econometrics.html/

- lecture
- practical assignments & exercises uses GAUSS (matrix language)
- Revise 4h+ per week, additional (theory) assignments and exercises
- Exam: Material of lectures, reading list, open book exam
- Prerequisites : Sound statistics, intermediate finance, intermediate micro- and macroeconomics, introductory 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: (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
Chapter one Cochrane (2001) (or 2005)