

Finanzökonometrisches BA-Seminar

Sommersemester 2014

Proposed Topics:

(1) *Modeling Univariate Returns Distributions*

Advisor: Fabian Spanhel (fabian.spanhel@stat.uni-muenchen.de)

References:

- Ruppert (2011): *Statistics and Data Analysis for Financial Engineering*. Chapter 5.

(2) *Univariate Time Series Models*

Advisor: Fabian Spanhel (fabian.spanhel@stat.uni-muenchen.de)

References:

- Ruppert (2011): *Statistics and Data Analysis for Financial Engineering*. Chapter 10.

(3) *Univariate GARCH Models*

Advisor: Fabian Spanhel (fabian.spanhel@stat.uni-muenchen.de)

References:

- Ruppert (2011): *Statistics and Data Analysis for Financial Engineering*. Chapter 18.

(4) *Implied Volatility*

Advisor: Holger Fink (holger.fink@stat.uni-muenchen.de)

References:

- Hull (2012): *Options, Futures, and Other Derivatives*. Chapter 14.

(5) *Risk Management*

Advisor: Malte Kurz (malte.kurz@stat.uni-muenchen.de)

References:

- Ruppert (2011): *Statistics and Data Analysis for Financial Engineering*. Chapter 19.

- Tsay (2005): *Analysis of Financial Time Series*. Chapter 7.
- Kuester, Mittnik & Paolella (2006): Value-at-Risk Prediction: A Comparison of Alternative Strategies. *Journal of Financial Econometrics* 4(1), pp. 53–89.

(6) ***Introduction to Copulas***

Advisor: Fabian Spanhel (fabian.spanhel@stat.uni-muenchen.de)

References:

- Ruppert (2011): *Statistics and Data Analysis for Financial Engineering*. Chapter 8.

(7) ***Portfolio Analysis***

Advisor: Malte Kurz (malte.kurz@stat.uni-muenchen.de)

References:

- Ruppert (2011): *Statistics and Data Analysis for Financial Engineering*. Chapter 11.
- Markowitz (1952): Portfolio Selection. *Journal of Finance* 7(1), pp. 77–91.

(8) ***Capital Asset Pricing Model***

Advisor: Holger Fink (holger.fink@stat.uni-muenchen.de)

References:

- Ruppert (2011): *Statistics and Data Analysis for Financial Engineering*. Chapter 16.

General Requirements for 6 ECTS Credits:

- (1) writing a term paper (at least 40,000 words)
- (2) presenting the term paper at the seminar (about 30 minutes)
- (3) complete attendance

Modus Operandi:

- (1) Working language is either German or English (depending on participants' preference).
- (2) The topics and additional organizational matters will be addressed in the preparatory meeting at 04:00 pm s.t. on April 10 in room 245 (Ludwigstr. 33/II).

- (3) Every student must pick three topics, list them in a preferential ordering (highest to lowest), and send this list no later than noon of April 14 to one of the above organizers.
- (4) The organizers will assign topics according to (highest) preferences (if possible) or by lottery. Students will be informed about the outcome of this assignment process on April 14.
- (5) Every student is required to meet with the responsible advisor within the first two weeks after the assignment process is completed.
- (6) This seminar will be held as a one-day workshop on June 20 in room 144 (Ludwigstr. 33).
- (7) Term paper submission no later than noon June 11. No exceptions granted!