UNIVERSITÄT MANNHEIM

M.Sc.-Thesis
Introductory Session

Chair of Risk Theory, Portfolio Management and Insurance
Prof. Dr. Peter Albrecht

Fall 2020

Contents

Thesis Structure

1. Cover Page
2. Table of Contents
3. List of Figures
4. List of Tables
5. List of Abbreviations (optional)
6. Text
7. Appendices (optional)
8. List of References / Sources
9. Affidavit

Formatting

- Page limit: **50** (+/- 10%)
- Font: Times New Roman
- Font size: 12pt, justification and hyphenation
- Line spacing: 1.5

upper margin: 2.5 cm

left margin: 3 cm right margin: 2.5 cm

lower margin: 2 cm

- Pagination: Text Arabic, pages prior to text Roman
- Submission:
  - two printed versions (hard cover)
  - CD,DVD or USB stick containing
    - digital version (PDF-file)
    - code, Excel files, data (processed in a way, that we can reproduce your results quickly)

Outline

- The outline should reflect the logical structure of your thesis

  1. (Only) use sections

     1.1. subsections

        1.1.1 and subsubsections

- Sections should be equally long and equally important
- Minimum of two (sub)subsections per (sub)section.
- Titles should suit the content
- No text between (sub)sections and (sub)subsections.

Literature & Citation

- Show that you have read and understood the right literature:
  - Relevance: Find all papers with a similar research question as yours. Helpful: cross-citations, specific journals
  - Quality: use primary sources, focus on peer-reviewed journals
  - Up-to-dateness: focus on recent studies, especially when discussing your empirical findings
- Clearly identify the intellectual property of others
- Two citations styles are possible (mutually exclusive application in the thesis)
  - In-text citation
    - Integrated: ‚Farny (1987, p. 1005) finds that'
    - End of sentence: ‚[…] (Farny 1987, p. 1005).'
  - Footnotes
    - Start the citation with "Cf." or "See"
- Include page numbers in your citations, where applicable
  - Use footnotes, for example: See Acerbi/Tasche 2002, p. 1489.

List of References: Example

Acerbi, *Carlo*; *Dirk Tasche:* On the coherence of expected shortfall, in: Journal of Banking and Finance, Vol. 26, No. 7, 2002, p. 1487-1503.

Albrecht, *Peter*; *Edmund Schwake*: Risiko, Versicherungstechnisches, in: *Farny, Dieter* (Hrsg.) u.a.: Handwörterbuch der Versicherung, Karlsruhe: Verlag Versicherungswirtschaft, 1988, p. 651-657.

Gutenberg, *Erich*: Grundlagen der Betriebswirtschaftslehre, 2. Band: Der Absatz, 13. Aufl., Berlin-Heidelberg-New York: Springer, 1971.

Common Mistakes

- Content-related mistakes
  - Research question is not motivated
  - Research question is not stated concisely
  - Methods are described incorrectly, errors in formulas
  - Theoretical concepts are not defined
  - Empirical study is inappropriate to answer the research question
  - Complete passages are translated
  - Thesis misses a running thread
- Formal mistakes
  - Page references in the outline are incorrect
  - Formatting requirements are not satisfied
  - Formulas are not numbered
  - Formulas are not punctuated

Common Mistakes

- Literature
  - Nonscientific sources are used
  - Only textbooks are used as sources
  - Reference list contains unused sources
  - Reference list is incomplete
- Figures
  - Figure is inappropriate to display a problem
  - Axes are formatted incorrectly (e.g., date axes)
  - Figures are not described
  - Figures are not numbered
  - Figures are copy-pasted

Guidelines for Scientific Writing

- Detailed information on writing a scientific paper (e.g. Master Thesis) can be found on the chair website (Information sheet on writing a scientific paper)
- Further helpful information / tips are available, such as
  - *Theisen, Manuel R.*: Wissenschaftliches Arbeiten, Technik – Methodik – Form, 13. Aufl., München: Vahlen, 2006.
  - Websites of the top finance and insurance journals (e.g. *The Journal of Finance, The Review of Financial Studies, The Journal of Financial Economics* and *The Journal of Risk and Insurance*)

MATLAB

- The empirical analysis should be implemented in MATLAB.
- Free MATLAB licenses are available here
  - Please also download the toolboxes from the following categories:
    - Math, Statistics, and Optimization
    - Computational Finance

Topics Fall 2020

1. Tail Risk and the Cross-Section of Expected Returns
2. Market Tail Risk during the COVID-19 Pandemic
3. Multi-Asset Portfolio Selection with Heuristic Methods