Information about how to create a seminar thesis

(As of 18.10.2024)

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1 Rough summary of the necessary working steps

1. Creation of a structure
   1.1. Discussion of the structure with the responsible supervisor
   1.2. Possibly revision of the structure
2. Literature research
3. Creation of a raw version of the seminar thesis
4. Revision of the raw version
5. Final correction
6. Printing and submitting the seminar thesis
7. Presentation

2 Detailed information concerning the working steps

1. Creation of a structure

- A structure is the division of a whole into several structural parts, which are largely self-contained, but cannot be removes from the whole as a unit without making it incomplete.
- The structure provides information about
    - how an overall topic is divided into sub-topics,
    - the relationship between the sub-topics, and
    - the order and relative importance in which the topics are dealt with.
- The structure appears as a table of contents before the body of the thesis.

Aim:

Clarification of the train of thought and the argumentation line. The focus of the content as well as the common thread of the thesis should already be recognizable in the structure.

Logic of the structure:

- consistent and coherent structure
- headings should not be overlapping (related items should be treated together)
- items on the same structure level should be on the same analysis level contentwise
- a subdivision should consist of at least two equal points.

Depth of the structure:

- As deep as necessary, but not as deep as possible.
- A division into “introduction”, “main part”, and “conclusion” is meaningless and not sufficient.
- A structure that is too detailed breaks the text down into no longer meaningful “mini-sections”.

Language of the structure:

- as short and concise as possible
- few fillers
- dominance of substantives
- avoidance of “sensational” captions

1.1 Discussion of the structure with the responsible supervisor

The structure should be discussed with the responsible supervisor by the announced date at latest. An appointment for the discussion of the structure should in any case be made before the latest possible date. It is often helpful to create a commented version of the structure to make it clear which content is to be dealt with under which section.

1.2 Possible revision of the structure

Any changes discussed may be made after the discussion of the structure.

2. Literature research

The provided literature serves as a starting point, but it is important to incorporate your own sources into the work. For defining technical terms, mathematical methods, or game-theoretical concepts (such as Nash equilibrium, cross-sectional regression, Cournot quantity competition, or arbitrage), independently researched literature should be utilized. These additional sources can be treated like a dictionary. The concepts should then be rephrased in your own words and appropriately documented with footnote citations.

Range of literature:

as basic literature for a broad overview and for definition:

- text books
- publisher's edition (manuals, anthologies, Festschriften, ...)
- contributions to economical encyclopedias
- internet

latest findings:

- articles from relevant professional journals (e.g.: Journal of Finance, Review of Financial Studies, Journal of Financial Economics, ...)

  Note: The quality of journals is heterogenous. Rankings such as VHB-JOURQUAL 3 or the Handelsblatt journal ranking can be used for an assessment.
- monographs (dissertations, state doctorates)
- working papers

Research tools:

- Google Scholar
- JSTOR
- WISO-data bases of the University Library
- UBBS of the University Library
- cross references in already available literature (backward search)
- homepages from relevant professional journals

Notes:

- literature that Is not freely accessible online can often be ordered from the University Library via interlibrary loan (e.g. Elsevier articles)
- cite primary sources if possible (backward research is helpful here)
- only cite literature you have available
- not every pucblication is reliable and correct
- a lot doesn't always help a lot
- every cited literature source has to be in the bibliography

3. Creation of a raw version oft he seminar thesis

Procedure:

- complete the argumentative framework of the structure with concrete thoughts
- first produce a relative detailed version of derivations, theoretical elements, and explanations and consequently compact and compress
- independent processing and presentation of the topic through independent formulations, additions, and explanations to the main source
- statements shall be justified (clearly, coherently, compellingly, evidently)
- academic standards (terminology, logic, consistency, completeness, transfers, references, ...), formal requirements and linguistic aspects (sentence structure, expression, spelling, punctuation, ...) must be observed

Extent:

12 pages plus max. 3 pages appendix (4 CP-seminar)

24 pages plus max. 6 pages appendix (8 CP-seminar)

Failure to comply with the extent has negative consequences on the assessment!

4. Revision of the raw version

After creating a raw version of the seminar thesis, it has to be revised. This aims mainly to compress and condense the thesis.

5. Final correction

The final correction should be made before printing and submitting your seminar thesis. This serves in particular to check formal aspects. The work should be inspected for grammatical and spelling errors. You should also go through the thesis on correct references, numbering, and page numbers. As part of the final correction, ,look again at the information about how to create a seminar thesis if the institute and check your thesis with regard to content and formal requirements.

Failure to comply with the processing instructions has negative consequences on the assessment!

6. Printing and submitting the seminar thesis

Depending on the supervisor, the submission takes place either in electronic form or in both electronic and printed form. If a printed submission is required, it does not have to be bound, and should be submitted to the secretariat of the institute of finance. The respective opening times must be observed. The submission must be made on time.

Note: The loss of data is no reason to postpone the submission date. Therefore, texts, data, and source codes should always be backs up.

Versions to be submitted on paper:

- as agreed by the supervisor
- 1x unbound version (black and white or color)
- in a staple

Electronic version:

- Preferably send the thesis to your supervisor via email attachment. Otherwise submission on CD or USB stick with the name and title of the thesis.

- Files to be submitted:
    - text-file in Word oder LaTeX format (*.docx oder *.tex mit *.dvi)
    - text-file in Acrobat Reader format or Postscript format (*.pdf oder *.ps)

For empirical theses:

- The source code of the programming must be submitted digitally; it is not required to be printed in the written draft.
- The individual programs are to be briefly explained in the appendix to the seminar thesis. In the case of several files, the purpose of the individual files must be explained in particular and it must be specified how the functions are to be called (with regard to the parameters/files to be transferred).

7. Presentation

In the end of the semester, you give a group presentation in a block course. A one-hour presentation and a subsequent discussion must be prepared. Each group member should talk for about the same time period. There is no template for the presentation slides.

3 Content related aspects concerning the creation of a seminar thesis

3.1 Key components of a seminar thesis

1. Introduction

Function:

- motivation of the topic
- classification of the topic in the literature
- description of the objective/problem and the lessons learned
- rough description of the procedure in the thesis

Extent: approx. 1 page

Notes:

- do not go too far afield
- avoid formulas and details
- creation after completion of the main part (possibly rough draft beforehand)

2. Main part:

Function:

- most important part of the thesis
- answering the research question of the thesis

Extent:

approx. 10 pages (4 CP seminar)

approx. 22 pages (8 CP seminar)

General Notes:

- concise and logical reasoning in the whole main part as well as in the single chapters
- clear and definite reference to the components of the topic of the work
- the problem of the seminar thesis shall be in the main focus
- not only presentation, but also critical discussion
- formulation of transitions

- usage of paragraphs as a structural element
- for clarification it is sometimes reasonable to use figures and charts
- try to work out an intuitive interpretation of the formal results of the cited original texts
- all the reasoning must be expressed in own words, in no case just copy or translate
- bring in your own thoughts

Depending on whether the seminar thesis is a literary work, a theoretical model or an empirical work, the following notes apply:

Zusammenfassung von Ergebnissen aus nicht ausführlich behandelten Quellen (für Arbeiten und Kapitel mit reiner Literaturwiedergabe):

- Resultate aus anderen Quellen möglichst präzise angeben. Bei der Verarbeitung von modelltheoretischen Arbeiten ohne Wiedergabe von Beweisen unbedingt die Voraussetzungen nennen, unter denen theoretische Resultate hergeleitet worden sind.
- Bei der Darstellung von empirischen Ergebnissen möglichst genau die verwendeten Methoden nennen und auf eventuelle Probleme hinweisen.
- Auf Konsistenz in der Darstellung achten. Widersprüche unterlassen. Bei widersprüchlichen Ergebnissen in zwei empirischen Studien zum selben Thema auf mögliche Gründe für die unterschiedlichen Ergebnisse hinweisen.

Hinweise zu formalen Herleitungen:

- do not just copy from the original text
- make clear that formal derivations have been
- for example, complete left out proofs from the original paper
- explain proofs more accurately than in the original paper, for example comment on applied methods (for example look it up in a math book and try to understand it)
- Sometimes it is also possible to simplify the original model, as long as the main factors remain. This lightens up the depiction and a simplification of a model can be good personal contribution and show that you really have understood the main idea.
- detailed depiction of proofs should be moved to the appendix
- When using older papers it has to be questioned if the applied approach is in line with current economical standards.

- If you have ideas to improve the models, "just give it a try".
- Sometimes it is possible to even expand existing papers. Prior to inclusion into your seminar thesis talk to your supervisor.

Empirical results:

- It should almost always be the objective to test theoretical findings with the help of empirical results and observations. This can be an economic study regarding the topic, but also a practical case study from a company.
- Make a difference between the empirical results (results from an estimate) and examples used for illustration (case study, anecdote). The examples are important and practical for a plausibility check, but do not have the same explanatory power.
- You have to understand applied statistical and econometrical methods at least from its concepts (e.g.: look up the Spearman's rank correlation coefficient in statistic books, look up the Probit model in econometrical books).
- here again: do not just copy the corresponding parts from the original text

3. Summary and outlook:

Functions:

- complement the thesis
- summarize results
- present open research questions and give an outlook

Extent: approx. 1 page

Summary:

- „look back"
- critical recapitulation of the main statements of the thesis with reference to the main part and the introduction
- summary of the main results

Outlook:

- „look ahead"
- presentation of open and unresolved research questions

- outline upcoming developments
- showing the implications for practice and research

4. (Mathematical) appendix:

Functions:

- derivation of basic results
- Presentation of tables, figures, and graphics which are helpful as additional information but which would hinder the flow of reading in the main part of the thesis.
- possibly additional empirical results that are not discussed in detail in the main part, as they confirm previous results
- In the case of empirical work, the individual programs and their purpose must be briefly explained in the appendix. In particular, it must be specified how the functions are to be called (with regard to the parameters/files to be transferred).

Extent:

max. 3 pages (4 CP seminar)

max. 6 pages (8 CP seminar)

Note: Not every thesis has to have an appendix.

Notes:

- Do not simply adopt formal derivations from the original, but show that they have been reproduced (e.g. add steps to the evidence omitted in the original; explain mathematical methods).
- In the text, reference must be made to the corresponding content in the appendix.
- In the text, reference must be made to the corresponding content in the appendix.
- The appendix should be marked alphanumerically (e.g. appendix A.1, A.2)

3.2 Argumentation in scientific theses

- accurately timed and precise definition of terms (possibly with help of literature)
- examination of the relevance of statements
- close and avoid gaps in your argumentation
- create a clear structure
- take care of consistency
- avoid overlapping statements (do not discuss the same statements in different parts of your thesis)
- underpin your statements (e.g. by generally accepted theorems, theorems of experts, …)
- avoid weakening statements like „I think", "it occurs to me", "it can be assumed"
- substantiated statements
- mark all foreign thoughts (this only applies for significant thoughts that are taken over, not for trivialities)
- critical distance towards statements (literature is not always correct)

3.3 Language and style

The language should be factual, sober, precise, clear, simple and plain. Use the new spelling and punctuation rules (see DUDEN).

Notes:

- uniform and consistent use of terms
- careful use of foreign words
- avoid empty phrases, casual speech, colloquial phrases, expressionless filler, very long combination of words, shortcuts
- avoid phrases as „generally known", "it is obvious", "there is no need to say"
- avoid "I" or "we", instead use: "it should be noted", "that implies", "it should be added"

3.4 Citing in a scientific work

All foreign thoughts should be marked correspondingly.

Following things have to be marked as a citation

- all abstract train of thoughts as well as explanations of connections derived from the literature,
- not only sentences but also phrases and (if concise or original) also single words.

The following does not have to be marked as a citation

- information which are part of general knowledge,
- definitions that are broadly introduced in the specific terminology (e.g. profit, gain, …)

Do not cite

- lecture notes,
- seminar, student, and diploma theses,
- daily or weekly newspapers.

Citing:

- avoid verbatim citations
- use corresponding citations: adaptions of arguments from other works in formulations

Verbatim quotations:

- are set in double inverted commas (“abc”)

References:

- for both verbatim and analogous citations as well as figures and tables that are based on the literature
- the footnote has to start with “cf”
- the first letter in a footnote has to be capitalized
- footnotes always end with a period
- footnotes are counted consecutively and do not start afresh on each page
- elements of the footnote: name of the author, year of publication, page number of the cited source

Examples:

[1] Cf. Gürtler (2002), pp. 168.

[2] Cf. Breuer/Gürtler (2001a), p. 1068.

[3] Cf. Breuer/Gürtler (2001b), pp. 612.

[4] Cf. World Bank (2019). (for internet sources)

Positioning footnotes:

- If the footnote is related to a thought that is presented in a sentence or a part of a sentence, its footnote sign has to be placed immediately after the punctuation mark that follows the sentence respectively part of a sentence, i.e. the period respectively the comma.
- If, on the other hand, only a specific word is explained in more detail by the footnote, the footnote mark must be placed directly after it.
- In the case of verbatim citations, the footnote is placed directly after this (i.e. after the closing double inverted commas).
- If these are not your own thoughts, a footnote with a reference to the source should be placed at the end of the paragraph at the latest.

Excursus: Remarks

Footnotes are named remarks, if they do not contain a source note. Remarks are unnecessary for the understanding of the text.

Functions:

- short definitions that would disrupt the flow of reading in the text
- reference to further literature

4 Formal aspects concerning the creation of a manuscript

4.1 Basic aspects

- The extent of 12 or 24 pages (excluding the appendix) should be adhered to!
- Use white DIN A4 pages in portrait orientation.
- Use MS Word, LaTeX (or something similar).

4.2 Typeface

- A margin of 5 cm in total shall be left.
- Top margin: 2,5-3,5 cm, and bottom margin: 2 cm.
- font: „Times New Roman“, 12 point (10 point in footnotes)
- Line space 1.5 (in footnotes: line space 1.0)
  If LaTeX is used: adjust the line space to line space 1.5 from MS Word.
- justification with hyphenation
- paragraphs are characterized by an empty line
- Titles should be separated from the text and highlighted. They should not be isolated at the end of the page.
- A separate line of a chapter should not be placed at the top or the bottom end of a page.

4.3 Components of the scientific thesis

- title page
- possibly blank page
- task
- declaration of independence
- table of contents
- table of abbreviations (if necessary)
- table of figures (if necessary)
- table of tables (if necessary)
- table of variables (if necessary)
- text body (introduction, main part, summary)
- (mathematical) appendix
- bibliography

Use a different page for each of these tables.

Do not forget page numbers.

Front page

The front page should include the following information:

- name of university, perhaps even name of the institute
- information on the nature of the thesis (seminar thesis)
- title
- first and last name of the author as well as an email-address, course of studies, and matriculation number, introduced by the words “submitted by”
- name of the lecturer (*Prof. Dr. Marc Gürtler*), perhaps even name of the supervisor
- submission date

Declaration of Independence (Proposal)

I hereby declare that I have worked on this examination paper ["title of paper"] independently and without unauthorized outside help and only with the permissible aids previously announced by the teacher and that I have not yet submitted this paper for this or any other examination. I have given full details of all sources and aids used. I am aware that attempts at cheating - in particular proven plagiarism as well as incomplete information on sources and aids - can lead to the final failure of an examination and thus to failure in the course of study according to §11, Para. 4 of the General Examination Regulations.

[Signature], Braunschweig, [Date], [Address].

Table of contents

- two systems are possible:
  - decimal numeric (hierarchical structure by the use of combinations of numbers) or
  - alpha numeric (combination of Latin characters plus Arabic and Roman digits)
- Stick to your chosen numbering system!
- Lower ranking sub terms should be independent to provide a better overview.
- Titles given in the text and in the table of contents should be identical.
- Page numbers given in the table of contents should be correct.
- Page number should be right aligned.
- The respective other tables (abbreviations, etc.) also have to be denoted in the table of contents.
- Title page, task, and the table of contents itself do not belong in the table of contents.

Table of variables

All mathematical symbols used in your thesis have to be summarized and defined in the table of variables. This does not mean that these symbols can be assumed to be known in your thesis.

Table of Abbreviations, Figures and Tables

If the paper includes abbreviations, figures or tables, they must be listed in the respective directories (table of abbreviations, table of figures or table of tables). Additionally, abbreviations must be explained upon their first mention in the text (e.g.: Emerging Markets (EM)).

Bibliography

- Representations of the used literature (irrespective of their genre) in alphabetical order by the author.
- If there are more publications by the same author, they should be listed in chronological order. If they have the same year of publication they should be marked with a small alphabetic character after the year of publication (e.g. 2002a).
- Bibliographic details should be precisely expressed.
- Do not indicate academic degrees.
- Text lines should be indented or the name of the author should be written in italics or a better readability of the text.
- At the end of every entry has to be a period.

The information in the bibliography differs marginally depending on the type of source:

Books

Indicate: year of the edition, number of edition (if >1), place of publication (only one, if there are more add “etc.”)

Do not indicate: nature of edition (as “revised”)

Example:

Breuer, W. (2000): Unternehmerisches Währungsmanagement, 2. Auflage, Wiesbaden.

Magazine articles

Indicate: year, edition (ed.)/volume (vol.), page numbers
Do not indicate: place of publication

Example:

Breuer, W./Gürtler, M. (2001): Hedging in Incomplete Markets - An Approximation Procedure for Practical Application, in: Journal of Futures Markets, vol. 21, pp. 599-631.

Contribution from anthrologies

Indicate: analogous to magazine articles, place of publication and publisher

Example:

Breuer, W./Gürtler, M./Schuhmacher, F. (2002): Risikoverfahren, in: J. Coche/O. Stotz (Hrsg.): Asset Allocation in der Praxis, Köln, pp. 165-191.

Internet sources

Indicate: date of the download

Example:

Allianz Global Corporate & Specialty (2018): Allianz Risk Barometer 2018, https://www.agcs.allianz.com/assets/PDFs/Reports/Allianz_Risk_Barometer_2018_DE.pdf (03.08.2018).

4.4 Page numbering

- Place page numbers above the first text line in the middle or right side of the paper.
- The title page has no visible page number, but counts as page number “I”.
- Pages prior to the text body should be marked with Roman numbers.
- Pages oft he text body should be markes with Arabic numbers. The first page has page number „1“. The numeration will be continues in the mathematical appendix.
- The Arabic numbering can be continued in the bibliography or the numbering can be re-started with Roman numbers.

4.5 Equations/Formulas

- Equations should be printed indented in a separate line and continuously numbered (right of left)

Example:

$$D_i(R^j) = \overline{D}_i + \alpha_i \cdot \int_{\underline{z}}^{\bar{z}} R^j(q_j, q_i, z_j) f(z_j) dz_j \qquad (1)$$

- Computations are not enumerated.
- Equations and computations should be derived if necessary, but in any case they have to be explained (do not only specify the meaning individual symbols).

4.6 Tables, figures, and overview

- Figures which are neccessary for the understanding of your statements belong into the text not in the appendix.
- They should be inserted where the corresponding explanations are placed.
- Tables and figures should be numbered separately.
- Every figure must have a title above or below and a source note. Figures which are used in a modified form should be marked by "cf" or "according to …" (see example).

Example:

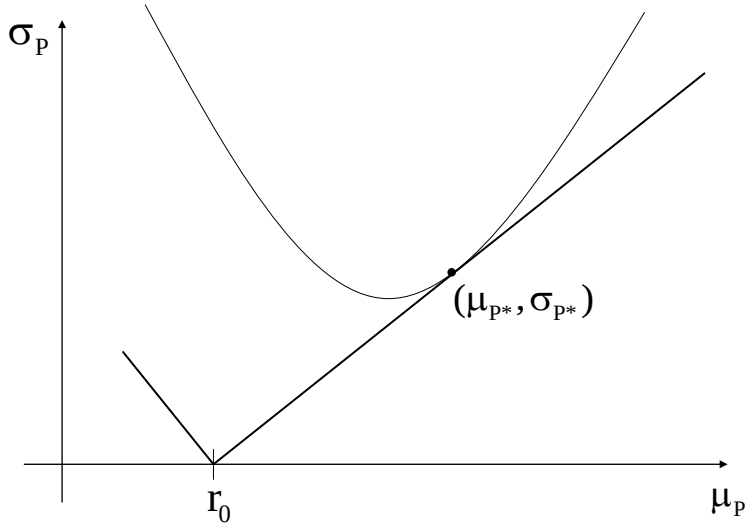

Figure 1: the tangential portfolio[1]

[1] According to Breuer/Gürtler/Schuhmacher (1999), p. 65.

5 Usage of artificial intelligence

The use of AI-generated texts or text modules (e.g., chatbots, automatic text generation) is not permitted in the writing of the seminar paper. This also applies to the research and summarization of literature. The work must be completed independently and without the use of such technologies. Exceptions apply only if the use of artificial intelligence has been explicitly approved as a methodological part of the work