



How to write an academic piece of work

This document is intended as a guideline for students writing an academic piece of work (seminar, bachelor or master thesis) with the Financial Accounting and Auditing team.

General recommendations

1. Structure yourself

We recommend establishing a timetable of your work for the thesis. In particular, do not underestimate the time required for writing the final text and formatting it for submission.

2. Language

- In our team, thesis can only be written in English. American or British English is accepted, but not a mixture of these.
- To avoid unnecessary errors, you are advised to use the “spell-check” and “grammar-check” functions of your word-processing software.
- Please use non-discriminatory language.
- Spell out numbers zero through nine.

3. Text

- Regardless of the type of thesis, the academic requirements are in principle identical. You are expected to address a given topic/research question using scientific methods. You should address the topic using a critical discussion, which is based on relevant literature and on sound theory.
- Please write the thesis in line with the topic and avoid deviations from it.
- Especially important is a systematic, logical and consistent structure of the text. The structure should be in line with the content of the work.
- A clear and concise sentence structure helps in understanding your representation and reasoning. Avoid stringing together nouns that leads to “monster words”.

4. Layout and formatting

- The thesis should be typewritten (using a word-processor) on A4 white paper.
- Please use normal page margins: on the left and right side 2.5 cm; at the top of the page 2.5 cm and at the bottom 2 cm.
- The main text should be double-spaced. Footnotes and table/figure descriptions should be single-spaced.
- The text should be aligned to both the left and right margins (“justified” or “Blocksatz”)
- Font: For the whole text choose one of the following fonts and font sizes: Arial (11), Times New Roman (12) or Verdana (11). Footnotes should be smaller than the main text, e.g. Arial (9) or Times New Roman (10) or Verdana (10).
- With exception of the title page, all papers should be numbered. For text pages, the reference list, figures and tables use the Arabic numeration (1, 2, 3...) and for all other pages (table of contents, list of abbreviations, figures and tables) use the Roman numeration (I, II, III...).
- Most word processors allow for an automatic creation of the table of contents, lists of figures and tables, and the reference list. Use these features to lower the potential for mistakes. Furthermore, a

final check of the whole text helps to avoid a faulty page layout, such as headlines at the end of a page or half-empty pages.

5. Submission

- Before submitting the thesis, you should check whether
 - Literature references in the text are correct and match the information in the reference list.
 - The reference list does not contain any entries which are not used in the text.
 - The entries in all lists (e.g. list of figures and tables, list of abbreviations) and in the table of contents are complete and correct.
- The thesis has to be submitted before the deadline in the form of a printout and an electronic copy. The printout should be handed to the Audit Office (“Prüfungssekretariat”) or the Service Center. The printout should be double-sided. Bachelor and seminar theses may be submitted in a simple office binder. Printouts of master theses must be bound in hard or soft cover. The electronic copy should be submitted in PDF format and should contain: the written thesis, electronic copies of the literature which is cited in the thesis (as far as it is available electronically), the data used in the thesis (if any) and the code used to conduct statistical analysis (if any). Please submit the electronic copy on a USB-stick, through Sciebo, or via an e-mail to your supervisor.

Recommendation for structure and contents of a thesis

Here is an example for the structure of an empirical thesis:

1. Title page
2. Abstract, keywords
3. Table of contents
4. If necessary: List of abbreviations, list of symbols, list of figures, list of tables
5. Introduction
6. Motivation, related literature and theory
7. Data and sample selection process
8. Method and results
9. Summary and conclusion
10. References
11. Figures
12. Tables
13. Appendices (if necessary)
14. Declaration of Authorship

However, you should adapt the structure to best meet the requirements of your content and help the reader in understanding the content. The text below provides recommendations for some of the above-mentioned points. For further guidelines regarding content and structure, you are advised to look at published papers in the area of your topic.

1. Title page

Appendix A gives an example of a title page. It should include:

- Title: it should be concise and informative. Titles are often used in information-retrieval systems.
- Avoid abbreviations and formulas where possible.
- Type of thesis: bachelor thesis/master thesis
- Course of studies
- Author’s name, matriculation number, address, phone number and email address
- Name of the supervisor
- Date of submission

2. Abstract

A concise and factual abstract of no more than 200 words is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is presented separately from the thesis, so it must be able to stand alone. For this reason, references should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

3. Keywords

Immediately after the abstract, provide a maximum of 6 keywords, avoiding general and plural terms and multiple concepts (e.g. avoid “and”, “of”). Be careful with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes. Please refer to published academic papers for examples.

4. Table of contents

Subdivision into numbered sections: Divide your thesis into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). A subsection is only justified if at least one second sub-point follows. Use this numbering also for internal cross-referencing: do not just refer to “the text”. In general, internal cross-references should be avoided. Any subsection should be given a brief heading. Each heading should appear in the table of contents on its own separate line. Appendix B gives an example of a table of contents.

5. List of abbreviations, list of symbols

Prepare a list of specific abbreviations, which you used in the thesis. Do not list commonly used abbreviations (like et al. or e.g.) and list them in alphabetic order. This also applies to the list of symbols.

6. List of figures

You have to list all your figures with their header and the page where they are found in the text. Please provide the highest quality figure format possible. All figures must be numbered in the order in which they appear in the text (e.g. Figure 1, Figure 2) and have to receive a meaningful header. Figures can either appear in the main text or after the reference list and before the tables and appendices. In the latter case, you add a short notice in the main text: [Insert Figure X here]. In multi-part figures, each part should be labeled (e.g. Figure 1(a), Figure 1(b)). Below the figure should be a note containing a description (including the source of the figure if necessary). This means that the figures should be self-explanatory. A reader should understand your figure by reading the header and the notes you have provided with the figure. Please refer to published academic papers for examples.

7. List of tables

You have to list all your tables with their header and the page where they are found in the text. All tables must be numbered in the order in which they appear in the text (e.g. Table 1, Table 2) and have to receive a meaningful header. Similar to figures, tables can either appear in the main text or before the appendices. In the latter case, you add a short notice in the main text: [Insert Table X here]. Below the table should be a note containing a description (including the source of the figure if necessary). This means that the tables should be self-explanatory. A reader should understand your table by reading the header and the notes you have provided with the table. If a table covers empirical results, please explain the variables and the analyses depicted in the table in the notes above or below the table. If you already explained the variables in a separate table, you can refer to that table. Please refer to published academic papers for examples.

8. Introduction

The introduction should point out the topical problem of the thesis to the reader and motivate why it may be beneficial to work on this problem. It also provides the reader with an idea of the general structure of your thesis. After reading the introduction, the reader should know the whole story: what problem/research question the thesis is addressing, why the problem/research question is important, how the thesis addresses this problem/research question and what the main findings are. If the underlying problem is very general or too broad for a single thesis, it is also part of the introduction to sensibly and justifiably narrow down the topic and focus the thesis on a specific research question. The necessity to focus the thesis is in part due to the limited space available.

9. Motivation

State the objectives of the thesis and the motivation for your problem/research question. Provide an adequate background about the problem and state how the thesis addresses it. The following questions may help in motivating the thesis:

- Which practical problems or observations should be explained or analysed?
- Who may benefit from the explanations or analyses?
- To what extent are the problems discussed in your thesis present in the public, professional or political debate?

When narrowing down the topical problem to a specific research question and research plan, you should provide reasons for the particular focus and structure of your thesis. For example, the title of the thesis may be “Capital market reactions to corporate disclosure” and, after reading a broad range of related literature, you decide to focus on stock market reactions to voluntary disclosures by firms. This decision needs to be justified to the reader. Justification could be based for example on theoretical arguments, anecdotal evidence about the relative importance of this subtopic or the availability of academic literature (which can be seen as an argument about the academic importance of this subtopic).

10. Related literature

Work on the thesis typically starts with reading a broad range of academic papers and books which are related to the thesis’s topic. From these readings, you need to identify those sources that are relevant for the focus of your thesis.

The following questions may help to identify relevant papers:

- How close is the research question of this paper to the topic/focus of my thesis?
- What main arguments are used?
- What are the conclusions?
- To what extent is the paper breaking new grounds?
- What methods do the authors of this paper use?

The literature review allows to present a comprehensive overview of the related literature to the reader while staying within a reasonable scope (i.e. it should not be the main part of the thesis). The above questions may also help you to structure your literature review, for example by grouping the papers based on their main argument or based on their methodology. Then it suffices to cite only the most prominent or most typical papers in each group. Generally speaking, the extent of the literature review depends on the available space, the available literature and the type and objective of the thesis. In particular, the latter is important. The literature overview is not a means in itself. It should equip the reader with enough background information to understand the topic, relate it to the existing literature, and know the state of the art with respect to the topic.

The literature review section can be combined with either the introduction or the hypotheses development section. But please avoid combining the introduction, the literature review, and the hypotheses development section.

11. Summary and conclusion

The thesis ends with a brief recapitulation of its content, its important results and their implications for the academic field, for practice or policymakers. It often contributes to a well-written thesis to repeat the initial motivation again in the conclusion. This allows you to remind the reader why the topic is important and how your findings help understand or solve specific problems related to the topic of your thesis. You may also point out research questions related to or following from the thesis, which are still unanswered. The summary usually also presents the limitations that apply to the generalization of results and suggests ways to overcome these limitations.

12. Appendices (if needed)

If the thesis has an appendix, it contains only such information that is not crucial to the understanding of the thesis but merely supports it. Everything necessary for the reader to understand the thesis and follow your line of arguments has to be put in the main text. Hence, the appendix contains supporting material, such as formal demonstrations, examples, extensive quotations and the like. Tables and figures, which illustrate important results and/or arguments need to be in the main text.

If there is more than one appendix, they should be identified as A, B, etc. Formulas and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc. Similarly, for tables and figures: Table (A.1); Fig. (A.1), etc.

13. Footnotes and acronyms

Footnotes should be avoided, but any short, concise notes making a specific point may be placed in numbered order at the bottom of the page. Footnotes have to be continuously numbered with the Arabic numeration (1, 2, 3...). They have to be separated from the main text by a short line. They have to be quoted on the same page on which the references are. You are advised to use the "insert footnote" function of your word-processor. A footnote is a complete sentence and therefore has to start with a capital letter and end with a full stop. Do not outsource important arguments to footnotes that are necessary for understanding the text. Basically, the text should be understandable also without the footnote. A similar reasoning applies to notes/comments that are in parentheses.

The first time an acronym is used it should be spelled out in full. If the acronym is not in English, it should be translated into English (e.g. IIRP - French personal income tax).

14. References

You have to build your work on the ideas and arguments which are available in the scientific literature. Foreign ideas and arguments have to be marked in the thesis using citations. Mention all sources of the arguments, regardless of whether you quote word by word or whether you only reproduce the spirit of an argument. Direct quotations (word by word) should be used only in exceptional cases. If you use a direct quotation, the in-text citation has to include the page(s). Always cite the primary source, not the secondary literature.

The following citation suggestions are based on the Harvard citation style. Generally, you can use any citation style that is common in the literature but make sure that you apply this style consistently throughout your thesis.

References appear in the text and at the end of the thesis in the reference list. In the text, the references are cited by the author's surname, the year of the work cited, and a page number if it is a direct quote and appear either in brackets, e.g. "Earlier studies (Pearce, 1989) showed..." or using the name as part of a sentence, e.g. "Pearce (1989) states...". For two authors the format is: (Huberman and Miles, 1998); for three or more authors the format is: (Dwyer et al., 2000). Groups of references should be listed first alphabetically and then chronologically, and separated by a semi-colon, e.g. (Crompton, 1979; 1999; Fakeye and Crompton, 1991; Gunn, 1988). For quoted material, a page number is required, e.g. [Pearce, (1989), p. 22].

All references (books, journals, newspapers and other documents) should be listed in the reference list at the end of the main text in alphabetical order by the author's surname. Where there is more than one reference from the same author(s) in the same year, references should be identified by suffix letters, e.g. (Pearce, 1995a). References should be made only to works that are published, accepted for publication, or available through libraries or institutions. Full reference in the reference list should include all authors' names and initials (or full first names), date of publication, title of article, title of publication (italics), volume and issue number (of a journal), publisher and form (only for books, conference proceedings) and start page and end page of the article. Full references in the reference list always end with a full stop. An important prerequisite is the completeness of the list: All references from your main text should be included in the reference list and vice versa. Some examples:

Book:

Hull, J.C. (2008). *Options, Futures, and Other Derivatives* (7th Edition). Upper Saddle River: Prentice Hall.

Article in collective work:

Merton, R.C. (1990). Capital Market Theory and the Pricing of Financial Securities. In: B.M. Friedman and F.H. Hahn (Eds.), *Handbook of Monetary Economics* (pp. 497–581). Amsterdam: North-Holland Publishing Company.

Journal:

Black, F., and Scholes, M. (1973). The Pricing of Options and Corporate Liabilities. *Journal of Political Economy*, 81(3), pp. 637–654.

Meek, G.K., Roberts, C.B., and Gray, S.J. (1995). Factors Influencing Voluntary Annual Report Disclosures by U.S., U.K. and Continental European Multinational Corporations. *Journal of International Business Studies*, 26(3), pp. 555–572.

Internet resource:

RiskMetrics Group (2002). Credit Grades Technical Document. Retrieved from: <http://www.riskmetrics.com/publications/techdocs/cgtdovv.html> (01.11.2010).

Additional tips for citing can for example be found on the webpage of the *European Accounting Review*, Instructions for authors:

<http://www.tandfonline.com/action/authorSubmission?journalCode=rear20&page=instruction>

15. Declaration of authorship

Every thesis must have a personally signed declaration of authorship (no signature copy!). This declaration states that the author prepared the thesis without help from others and without any sources other than those referenced and listed in the reference list. The current declaration reads as follows:

"I assert with my signature that this thesis was written by me personally without improper help by a third party. All uses of the writings or thoughts of others are properly referenced. I assert that this paper or parts thereof have not been submitted for grading elsewhere, and have not been published, neither by me nor by others. I am aware that any false statement on my behalf regarding these issues will result in a fail grade. If there is reasonable suspicion of academic misbehaviour, I consent that my paper may be screened by the software Turnitin.

Thereby

I allow that my thesis may be stored electronically by the professorship.

I don't allow electronic storage by the professorship.

Regardless of the result returned by Turnitin, the paper will be evaluated and graded individually. The paper will not be made accessible to third parties without my consent."

Signature and date