



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, theses are written in English. American or British English is accepted, but a mixture of the two is not appropriate.
- To avoid unnecessary errors, we advise you 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. Remember that numbers in English language are written with a decimal point (not comma).

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 existing theory.
- Please write the thesis in line with the topic and avoid deviations from it.
- A systematic, logical and consistent structure of the text is especially important. The structure should suit the content of the work.
- A clear and concise sentence structure helps in understanding your representation and reasoning. Avoid putting nouns together that lead to "monster words".

4. Layout and formatting

- The thesis should be typewritten (using a word-processor) on A4 white page.
- 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").
- We recommend you to choose one of the following font types and sizes for the whole text: 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 pages 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 will automatically generate the table of contents, lists of figures and tables, and the reference list. Use these features to reduce errors. In addition, a final check of the entire text will help to avoid page layout errors, such as headings at the end of a page or half-empty pages.

5. Submission

- Before submitting the thesis, you should check whether
 - Literature and sources referenced in the text are correct and match the information in the reference list.
 - The reference list does not contain any sources 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 must be submitted before the deadline to the Central Examination Office ("Zentrales Prüfungssekretariat") in a printed or electronic form. While you can provide a printout of the thesis to the Central Examination Office in person or by post, we recommend submitting the thesis electronically via uploading it to PAUL. You can find all information and regulations on the webpage of the [Central Examination Office](#). If you choose to submit the thesis electronically please follow all [formal and technical specifications](#). Electronic submission of the thesis is only permitted in pdf/a format!
- In addition, you should submit an electronic copy of the thesis (in pdf format), the literature cited in the thesis (if available electronically), the data used in the thesis (if any) and the code used to conduct statistical analysis (if any) via Sciebo or by email to your supervisor.
- If you want to submit your thesis early and wish for early grading, you must also submit the form "ZPS Vorzeitige Abgabe der Abschlussarbeit", which can be found in PAUL.

Recommended structure and contents of a thesis

Here is an example of how to structure 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. Related literature and hypotheses development
7. Data and sample
8. Methodology and results
9. Summary and conclusion
10. References
11. Figures
12. Tables
13. Appendices (if necessary)
14. Declaration of authorship

However, you should adapt a structure that best suits your content and helps the reader understand it. The text below gives recommendations on some of the points above. For further guidance on content and structure look at published papers in the field of your topic.

1. Title page

The title page should include:

- The [official logo](#) of the university
- Title, which should be concise and informative. For a bachelor or master thesis, the title must be exactly the same as agreed with the supervisor (and written on the "Anmeldeformular").
- Type of thesis (bachelor or 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 briefly state the purpose of the research, the main findings and the main conclusions. An abstract is presented separately from the thesis, so it must be able to stand on its own. For this reason, references should be avoided, but if necessary, then cite the author(s) and year(s). Also, non-standard or unusual abbreviations should be avoided, but if they are essential, they must be defined at their first mention in the abstract itself.

3. Keywords

Immediately after the abstract, give a maximum of six keywords, avoiding general and plural terms and multiple concepts (e.g. avoid "and", "of"). Be careful with abbreviations, only abbreviations that are well established in the field can be considered. These keywords will be used for indexing purposes. Please refer to published academic papers for examples.

4. Table of contents

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 it is followed by at least one other subsection. Use this numbering system also for internal cross-referencing: do not just refer to "the text". In general, internal cross-references should be avoided.

Each subsection should be given a short heading. Each heading should appear on a separate line in the table of contents. As an example, a table of contents could look like this:

Table of Contents

List of abbreviations	II
List of figures.....	III
List of tables.....	IV
1 Introduction.....	1
2 Related literature, theory and hypotheses development.....	2
2.1 XXX.....	2
2.2 XXX.....	2
3 Data and sample.....	3
4 Methodology and results	3
4.1 XXX.....	3
4.2 XXX.....	3
5 Summary and conclusion	4
List of references.....	5
Figures	6
Tables	7
Appendices	8

5. List of abbreviations, list of symbols

Prepare a list of specific abbreviations, which you used in the thesis. Do not include common abbreviations (such as et al. or e.g.) and list them in alphabetical order. This also applies to the list of symbols.

6. List of figures

You have to list all your figures with their headings and the page on which they appear 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 given a meaningful heading. Figures may appear either in the main text or after the reference list and before the tables and appendices. In the latter case, add a short note in the main text: [Insert Figure X here]. For multi-part figures, each part should be labelled (e.g. Figure 1(a), Figure 1(b)). There should be a note below each figure, which describes it (including the source of the figure if necessary). This means that the figures should be self-explanatory. A reader should be able to understand your figure by reading the heading and the note you have provided with the figure. Please refer to published academic papers for examples.

7. List of tables

You must list all your tables with their headings and the page on which they appear 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 given a meaningful heading. As with figures, tables may appear either in the main text or before the appendices. In the latter case, add a short note in the main text: [Insert Table X here]. Below each table there should be a note, which describes it (including the source of the table if necessary). This means that the tables should be self-explanatory. A reader should be able to understand your table by reading the heading and the note you have provided with the table. If a table contains empirical results, explain the variables and the analyses presented in the note to the table. If you have 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 tell the reader what is the topical problem (i.e. research question) of the thesis and why is it useful to work on this problem. It also gives the reader 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 addresses, 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 reasonably and justifiably narrow the topic and focus the thesis on a specific research question. The need to focus the thesis is partly due to the limited space available.

Remember that the motivation for your research is a very important part of your introduction. Therefore, state the objectives of the thesis and the motivation for your problem/research question. Provide an adequate background to the problem and state how the thesis addresses it. The following questions can help to motivate the thesis:

- What practical problems or observations need to be explained or analysed?
- Who might benefit from the explanation or analysis?
- To what extent are the problems discussed in your thesis present in the public, professional or political debate?

When narrowing down the topic to a specific research question, you should give reasons for the particular focus and structure of your thesis. For example, the title of the thesis might be "Capital market reactions to corporate disclosure" and, after reading a wide range of related literature, you decide to focus on stock market reactions to voluntary corporate disclosure. This decision needs to be justified to the reader. The justification could, for example, be based on theoretical arguments, anecdotal evidence about the relative importance of voluntary disclosure, or the availability of academic literature (which can be seen as an argument for the academic importance of this subtopic).

9. Related literature and hypotheses development

Work on the thesis typically begins with reading a wide range of academic papers and books related to the topic of your thesis. From this reading, you will need to identify those sources that are relevant to the focus of your thesis.

The following questions may help you identify relevant papers:

- How close is the research question of this paper to the topic/focus of my thesis?
- What are the main arguments?
- What are the conclusions?
- How does the paper break new ground?
- What methods do the authors of this paper use?

The literature review allows you to give the reader a comprehensive overview of the relevant literature, while keeping it within reasonable limits (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 papers according to their main argument or methodology. It is then sufficient to cite only the most prominent or most typical papers in each group. In general, the extent of the literature review depends on the space available, the literature available and the nature and objective of the thesis. The latter is particularly important. The literature review is not an end in itself. It should provide the reader with enough background information to understand the topic, to relate it to the existing literature, and know the state of the art on the topic.

As an alternative to having a separate literature review section, the author may choose to include the review of relevant literature in the introduction.

Finally, the literature review may be combined with the development of the hypotheses. The thesis may contain one or more hypotheses. We do not recommend more than three hypotheses. You should develop your hypotheses based on previous empirical findings and

theory. Make sure that each hypothesis is precise and clear. They should also be closely related to your research question. Use appropriate statistical analysis to test your hypotheses.

10. Summary and conclusion

The thesis ends with a brief summary of its content, its main findings and their implications for the academic field, practice or policymakers. It is often helpful to repeat the initial motivation in the conclusion. This allows you to remind the reader why the topic is important and how your findings help to 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, that remain unanswered. The summary usually also outlines the limitations of generalising the results and suggests ways to overcome these limitations.

11. Appendices (if needed)

If the thesis has an appendix, it should only contain information that is not crucial to the understanding of the thesis but merely supports it. Everything that is necessary for the reader to understand the thesis and follow your line of argument must be included in the main text. Hence, the appendix contains supporting material, such as formal demonstrations, examples, extensive quotations, and the like. Tables and figures that illustrate important results and/or arguments need to be included 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 numbered separately: Eq. (A.1), Eq. (A.2), etc. The same applies to tables and figures: Table (A.1); Figure (A.1), etc.

12. 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 must be numbered consecutively in Arabic numbers (1, 2, 3...). They have to be separated from the main text by a short line. We advise you to use the "insert footnote" function of your word-processor. A footnote is a complete sentence and must therefore begin with a capital letter and end with a full stop. Do not outsource to footnotes important arguments that are necessary to understand the text. Basically, the text should be understandable also without the footnote. The same 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).

13. References

You have to build your work on the ideas and arguments found in scientific literature. Foreign ideas and arguments must be identified in the thesis by using citations. Mention all the sources of the arguments, whether you quote word by word or just reproduce the spirit of an argument.

Direct quotations (word for word) should only be used in exceptional cases. If you use a direct quotation, the in-text citation must 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 in the reference list at the end of the thesis. In the text, the references are cited by the author's surname, the year of the work, and a page number if it is a direct quotation. They 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). Page numbers are required for direct quotations, e.g. (Pearce, (1989), p. 22).

All references (books, journals, newspapers and other documents) should be listed alphabetically by the author's surname in the reference list at the end of the main text in. Where there is more than one reference from the same author(s) in the same year, the references should be identified by a suffix: (Pearce, 1995a). Reference should only be made to works that are published, accepted for publication, or available through libraries or institutions. A full reference in the reference list should include all authors' names and initials (or full first names), the date of publication, the title of the article, the title of the publication/journal (in italics), the volume and issue number (of a journal), the publisher and form (only for books, conference proceedings) and the first and the last page of the article. Full references in the reference list always end with a full stop. It is important that the list is the complete: All references in your 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*, under [Instructions for authors](#).

14. 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