

GUIDELINES FOR THE PREPARATION OF BACHELOR THESES AT THE INSTITUTE OF PUBLIC FINANCE

1 Procedure

The duration of the Bachelor's thesis is **two months** for the **B.Sc. in Economics and Management** and **three months** for the **B.Sc. in Engineering and Business Administration**. The thesis can be written in German or in English.

At the beginning of your work phase, you will receive a **topic sheet**, with

- the title of your Bachelor's thesis
- at least one essay as starting literature,
- further instructions on how to deal with the topic, and
- the name of your supervisor.

The starting literature is to be worked on in your Bachelor's thesis and completed with independently researched further essays.

Approximately 14 days after the start, a **meeting** with your supervisor should take place, at which you will present the outline of your work and the essays you have selected, and receive feedback on them.

After this meeting, you will write your Bachelor's thesis mainly on your own, but you will have the opportunity to address individual, important questions to your supervisor by e-mail and, if necessary, you can request another meeting.

The Bachelor thesis (including the signed "Declaration on Honour" ("Ehrenwörtlichen Erklärung")) **must be submitted digitally as a PDF file** on the day of submission **by e-mail** to

1. your supervisor, and
2. the Office of the Dean of Studies (studiendekanat@wiwi.uni-hannover.de).

For information on submitting printed copies, please visit [the website of the Dean of Studies for Bachelor's theses at the Faculty of Economics and Management](#).

At the beginning of each summer and winter semester, we offer all students who are writing their Bachelor's thesis at the Institute of Public Finance a **course on the fundamentals of scientific work**. We strongly recommend that you attend this course! Questions regarding formalities, citation etc. **will only be answered at this course**.

2 General Guidelines

The main objective of a Bachelor's thesis is to demonstrate that you can **work on a topic independently and academically**. You should show that you understand a complex line of argumentation, that you can reduce it to its core, present in your own words, and relate it to previous findings. To achieve this, it is important that your Bachelor's thesis has a consistent line of argumentation. Use your own words: the closer you follow the structure of the original article, the harder it is to document your own understanding of the topic. You can also show your

understanding by selective shortening. Ask yourself: What is the central argument? What are the key findings?

A Bachelor's thesis should reflect a good understanding of key concepts and findings related to your topic. In addition to your starting literature, you should discuss one additional article in detail (and use additional literature to strengthen and complete your discussion). When presenting the second main article, it is important to connect it to your starting literature. Do not merely provide summaries of each study, but rather tie together the results of the studies. When conflicting findings are reported in different studies, suggest explanations. Which differences between the articles are important, which are not? Your second main article does not necessarily have to be a scientific study, it can also be from other sources (such as international organizations or political entities). In this case, it is especially important that you point out the relations to your starting literature.

At the start of the work on your Bachelor's thesis you should think about the **topic** in general. Why it is interesting? Why it is important? The answers to these questions should be the basis of your Bachelor's thesis and should be discussed already in the introduction. Keep the main topic in mind throughout the Bachelor's thesis to ensure that you have a logical and coherent line of argumentation. Every paragraph in the Bachelor's thesis **needs to be relevant** for the discussion of the central topic.

Skills derived from writing a Bachelor's thesis are by no means just academic. Reports and proposals are also required in other professions in both the private and the public sector. Writing them relies on similar skills. In other words, learning how to write a Bachelor's thesis can help you for your future career.

You should not only concentrate on the content of your Bachelor's thesis but also on **clarity, consistency and readability**. Use the right language for the audience you are addressing. Keep in mind that you are writing an academic paper, i.e., choose a level of language that is appropriate for a scientific text. You should find words, phrases, sentences, and paragraphs that express your thoughts precisely. Avoid colloquial expressions. However, academic writing does not mean complex sentences – in contrast, the writing is often clearer if the sentence structure is kept simple. Do not switch between British English and American English, i.e. use one variant consistently.

In general, it is helpful to ask someone else to read your text before handing it in. This is helpful even if the other person is not familiar with the subject. Finally, read the finished paper several times over several days to improve the language and the writing.

3 Formal Structure length and layout of the Bachelor's thesis

Your Bachelor's thesis should have the following structure:

- Title Page
- Table of Contents
- If necessary, list of figures and tables, list of abbreviations
- Text Part
- Appendix
- List of References/Bibliography
- Declaration of plagiarism (see section 3.8)

The length of the **text part** is limited to a **maximum of 25 pages** (about 40,000-45,000 characters). You can use the following layout suggestion as a guide:

Font and Size: Times New Roman: Size 12. Arial: Size 11 or similar. Use the same font for the whole text. Footnotes should be placed at the end of the respective page (Times 10pt, Arial 9pt).

Spacing: 1.5-2 for the main text; 1.0 for footnotes, full justification.

Margins: 3-3.5cm left and right, 2-2.5cm top and bottom.

3.1 Title Page

The title page should follow the layout of the Dean of Studies. Therefore, please note the information required by the Dean of Studies Office and the [checklist for submission](#).

3.2 Table of Contents

At the beginning of the Bachelor's thesis there should be a table of contents with corresponding page numbers. The sub-division of sections should be in relation to the length of your Bachelor's thesis, i.e., two levels are usually enough. If you divide a section, it needs to have at least two sub-sections (e.g., after 1.1 there is always 1.2). The headings of sections and sub-sections in the table of contents must be identical to the headings in the text. The table of contents should include the page number (right aligned) on which each section begins.

3.3 List of Abbreviations

Abbreviations should be used sparingly and consistently. All abbreviations should be introduced in the first instance with the word written out in full: "Multinational enterprises (MNEs) are ...". If an abbreviation is common (i.e., if it is in a dictionary) you do not have to introduce it. Parameters and variables of an economic or econometric model are not listed in the list of abbreviations, but are explained at the relevant place in the text.

3.4 List of Figures and Tables

Use a separate page for each list. The corresponding page numbers must be right aligned. The list is necessary if you include more than one table or figure in the text. All tables and graphs must be listed with the same title as in the continuous text. Please also note the information in section 5.2.

3.5 Text Part

Use the following guideline to structure your paper:

- (1) Introduction
- (2) Main part
- (3) Conclusion (including economic policy implications)

Note that these are not suitable headings.

Put special emphasis on the **introduction**. The introduction should motivate the topic. You should also address the theoretical or practical importance of the research. Tell the reader why it is interesting and why it is relevant in the contemporary academic or political debate.

In general, the introduction should:

- motivate the topic (why is the topic interesting, placement in a larger context, reference to current context).
- specify the concrete question (what exactly is dealt with in the Bachelor thesis).
- contain a brief overview of the literature on the topic dealt with, which goes beyond the research work research papers discussed in detail in the thesis.
- give an overview of the key findings and conclusions.
- explain the further steps of the thesis and make the structure of the thesis clear.

In the **main part** you discuss your topic. Here, the main results of the starting literature which has been assigned to you must be reproduced, discussed and supplemented in an independent form. In this process it is important to put the different works and their results into a context. In the main part, make sure you focus on meaningful topics that make your work coherent. The independently selected papers should - if possible - be from a qualitatively "good" source (peer-reviewed journal or large working paper series such as NBER, CEPR, CESifo). You can also use publications from international organisations, political texts or current draft laws. It is also possible to supplement the starting literature with an independent empirical or theoretical analysis. The selected literature and independent analyses should be discussed with your supervisor.

During the discussion of the independently selected papers, you should work out the key interrelationships between the different papers.

- What are the key assumptions and the main results of the papers?
- In which essential points do the papers agree, in which do they disagree?
- What are superficial, insignificant differences that can be left out of the discussion?

Even if you discuss further literature from other fields (e.g. from international organisations) it is important that you make reference to your starting literature.

Use your own words while reproducing the thoughts of other authors.

The more you align your own text with the structure of the original article, the more difficult it will be to document the independence of your Bachelor's thesis. On the other hand, you can demonstrate your understanding by **reducing** and **eliminating** on your own.

What are trivialities which can be left unmentioned? What are minor assumptions or secondary results that can be introduced briefly? What is the key argument or the key result of the paper?

For all results which are derived or referred in your Bachelor thesis, you have to provide an intuition. In addition, the **economic policy implications** of each model that is being discussed must be pointed out. Both also apply for the results of simulation analyses and for empirical research results.

It is important to **critically examine** the literature that is presented. Therefore, in addition to the literature that you present in detail, you must also have read and understood other studies and papers.

In the **conclusion**, you summarise your topic and the results you have achieved and give an outlook. You can derive economic policy implications from your work or conclude your work by pointing out the need for further research in certain areas. The conclusion should not exceed two pages.

It is expected that you make a substantial personal contribution in your Bachelor's thesis. This own achievement can lie in the selection, comparison and critical discussion of the literature, and/or in an independent analysis of your topic. A simple summary of the starting literature is not sufficient!

3.6 Appendix

Make sure to integrate calculations, tables, graphics, etc., **necessary for the understanding of your paper in your main text**. An **appendix** should be used only for information that is **not essential** for the understanding of the. The appendices should be listed in the table of contents. The reader must be told when to refer to the appendix. To do this, include a reference to the appendix ("see Appendix 1") at the relevant place in the text.

3.7 List of References/Bibliography

The list of references should contain all references included in your paper. Conversely, references not included in the text should not be included in the list of references.

Please use appropriate software (e.g. [Zotero](#)) to create the bibliography and for citation in the text. Publications should be presented alphabetically by author. When several publications by the same author(s) are referenced, they appear chronologically. Should an author have more publications within the same year, they should be distinguished by appending letters (e.g., Slemrod, 2006a, and Slemrod, 2006b). The key to a good list of references is consistency in design and complete presentation of all relevant information (all authors, complete title, year of publication, if applicable edition, volume number of the journal...).

Here are some examples:

- **An Article in a Scholarly Journal:**
Buettner, T., M. Overesch, U. Schreiber und G. Wamser (2012): The Impact of Thin-Capitalization Rules on the Capital Structure of Multinational Firms. *Journal of Public Economics*, 96, 930-938.
- **Working Paper:**
Ruf, M., und A. Weichenrieder (2013): CFC Legislation, Passive Assets and the Impact of the ECJ's Cadbury-Schweppes Decision. CESifo Working Paper No. 4461.
- **Chapters in Edited Volumes:**
Persson, T. und G. Tabellini (1995): Double-Edged Incentives: Institutions and Policy Coordination. In: Grossman, G. und K. Rogoff (Hrsg.), *Handbook of International Economics*, Vol. III., Elsevier, Amsterdam.

- **Books:**
Slemrod, J. und C. Gillitzer (2014): Tax Systems. MIT Press, Cambridge (MA, USA).
- **Web pages:**
Daniel Davies (2016): Gaps and holes: How the Swiss cheese was made. Published on April 8, 2016, <http://crookedtimber.org/2016/04/08/gaps-and-holes-how-the-swiss-cheese-was-made/>, retrieved June 22, 2016.

3.8 Declaration of Plagiarism

Your Bachelor thesis must contain a Statutory Declaration signed by you. The You can find the corresponding text on the [website of the Dean of Studies Office](#).

4 Formal Layout

4.1 References

The careful documentation of sources is crucial for an academic paper. Whenever you draw on the work of another person or institution with new thoughts, you must document your source (try to cite the author who expressed the idea first). You do not have to cite standard knowledge from textbooks or scripts. The relation between the reference and your own reasoning should be apparent from the context. Often this requires an additional explanation, for example, "A critical review of some of the most common empirical methods used to measure the magnitude of tax evasion can be found in Slemrod and Weber (2012)."

Use short citations, i.e., the **Harvard citation system** (since it is standard practice in economics). In the text, refer simply to the last name of the author(s) followed by the year and, if necessary, the precise page number. In the Harvard citation method, the focus is either on the author (author and year are mentioned at the beginning of a sentence/paragraph) or on the information (author and year are given at the end of the sentence/paragraph). For example:

Focus on author

- An alternative approach is discussed by Boadway et al. (1998). The authors show that ...
- ... (see Wolff 2010).
- The pioneering study by Feldstein (1976) found a ...
- Whinston (1983, p. 16) shows that ...

Focus on information:

- After strong increases in the 1980s and 1990s, wealth growth in the US slowed significantly between 2001 and 2007 (Wolff, 2010).
- The main task of the capital market is the distribution of ownership of the capital stock of the economy (Fama, 1970)

Indirect quotations which refer to a specific passage in the text must include a page number (e.g. In contrast, Slemrod (2009, p. 17) defines [...] as [...]). If the essential findings of a source are summarised, it is unnecessary to give a page number in the citation. Make sure that "and", "/" or "&" are used consistently to separate the names of two authors in short quotations e.g. Ruf and Weichenrieder

(2013) or Slemrod/Gillitzer (2014) or Persson & Tabellini (1995). In the case of short citations for sources with three or more co-authors, usually only the surname of the first author is mentioned followed by an "et al." (short for "et alia", meaning "and others"), e.g. Buettner et al. (2012) instead of Buettner, Overesch, Schreiber and Wamser (2012). However, please note that the names of all authors are listed in complete form in the bibliography.

Verbatim quotations are usually unnecessary and should never be used to avoid formulating your own expression. Therefore, use verbatim quotations very sparingly and only where the author makes an especially memorable statement. Verbatim quotes are to be marked with quotation marks. If you remove or modify words in a quote, this change must be labeled as such. Minor omissions are identified by two points (one word) or three points (two or more words).

4.2 Special requirements for references - legal texts, judgements and commentaries

The Harvard citation style for **legal texts** specifies that laws should only be cited in the text and not included in the bibliography. The in-text reference must be as detailed as possible, including information such as paragraph, section, sentence, number, and letter, along with the short title of the legal code. For example, the full form is: "§ 50 Absatz 2 Satz 2 Nummer 4 Buchstabe a.) EStG", the abbreviated form: "§ 50 Abs. 2 S. 2 Nr. 4 Buchst. a.) EStG", and the short form: "§ 50 I 2 Nr. 4 Buchst. a.) EStG". When first mentioning a law, the full title is written out, followed by the short form in parentheses, e.g., "Einkommensteuergesetz (EStG)". For subsequent mentions, the short form of the law suffices. Since legal texts are generally accessible, a correct in-text reference is sufficient when citing the current version of a law. However, when referencing older versions, the publication date must be specified, such as "v. 11.11.2022" or "i. d. F. v. 11.11.2011".

When citing **court rulings** in an academic paper, a reference is mandatory. The in-text reference is similar to a regular citation but includes the court, date, and case number, for example: (BFH, 09.08.1989, I R 181/85). Here, "BFH" stands for the Federal Fiscal Court, the date represents the decision date, and "I R 181/85" is the case number. The full details of the ruling should be included in the bibliography. In Harvard citation style, the source should be as precise as possible, including the court, date, case number, publication in the official gazette, and the reference (e.g., journal or database where the ruling was published). An example would be: "BFH (1989): Judgment from 09.08.1989 – I R 181/85, BStBl. 1989 II p. 990, retrieved from Beck-Online."

When citing **commentary literature** in the Harvard citation style, the general principles of the Harvard system are followed, but specific details such as the editor and the commented paragraph or article are added. The in-text citation follows the author-year format, supplemented with the paragraph or article of the law being commented on, e.g., (Klein, 2018, § 42 AO). In the bibliography, all relevant information must be provided, including the editor, title of the commentary, paragraph or article, edition, publisher, and place of publication. An example would be: "Klein, F. (Ed.) (2018): Commentary on the German Fiscal Code. § 42 AO. 14th edition, Beck'sche Online-Kommentare, Munich."

4.3 Footnotes

If you want to make comments or add explanations in addition to the reference, use a **footnote**. For example, you can put a fundamentally different opinion, which is not further investigated, or an example to a general statement in a footnote. However, your reader should understand the text without reading the footnotes. If a footnote refers to a word, place it behind this word; if it refers to a sentence, place it at the end of the sentence after the full stop. If an entire paragraph is based on a reference, you can clarify this with a footnote at the end of the paragraph (e.g., "See Desai et al. (2004)"). Each footnote is a complete sentence.

4.4 Figures, Tables, Equations, Numbers

All **figures and tables** must be numbered consecutively (e.g., Table 1, Table 2, Figure 1, ...). You have to reference each figure or table in the text. Tables and graphs should be included in body of the paper. For each table and figure, you need to state its source (below the table/figure). If you have created a graph or table by yourself, then clarify it by "Source: own calculations" (possibly supplemented by "on the basis of ..."). The data sources you have used to compile graphics and tables must be cited (e.g. source: DESTATIS 2021).

Do not use screenshots of **tables** (e.g., regression results) from the original article, but type them yourself. This allows you to only present the information that is relevant for your term paper. Figures which contain specific data can be copied from the article (but quote the source!). Tables and figures should have a caption. Explain the results visible in the table in the text. Think about appropriate units, e.g., use percentages (it is often easier to understand a number as 2.3 percent rather than 0.023).

Use a formula editor, integrated in all regular word processing programs, to write down **equations** by yourself (i.e., do not use screenshots from the article). All formulas should be indented and numbered. Since your term paper should be understandable without reading the original article, you must clearly define all the symbols and variables that occur in the equations.

When including **numbers** in your text, note that the numbers up to twelve should be written out (e.g., five articles). Over twelve, the figure itself should be included (e.g., 1064 observations).

4.5 Additional information

- Use either "%" or "percent" consistently throughout your text.
- For bachelor theses in English: Use British or American English consistently throughout your bachelor thesis

5 Literature Research

Your term paper needs to be based on the **academic literature**. To find relevant articles, you can use, for example, [Google Scholar](#) or **EconLit**. It is also helpful to look through the list of references of your starting literature.

Ensure that you use the most recent version of a paper. If you find an interesting working paper, see whether it is already published (for example, on <https://ideas.repec.org>). Published articles can be found in the "Electronic

Journals Library" on <https://opac.tib.eu/DB=1/LNG=DU> . Try to assess the quality of any work before using and citing it, for example by the journals ranking (e.g. Handelsblatt, VWL ranking <https://www.forschungsmonitoring.org> or VHB-JOURQUAL <https://vhbonline.org/vhb4you/vhb-jourqual/vhb-jourqual-3/tabellen-zum-download>) or the *impact factor*.

If you are not sure about **academic writing** conventions, you can consult any handbook on this topic. There are also some helpful online resources, e.g. the standard textbook on academic writing by Strunk and White (<https://faculty.washington.edu/heagerty/Courses/b572/public/StrunkWhite.pdf>), Theisen, M. R. (2011): Wissenschaftliches Arbeiten, 15.,aktualisierte Auflage, Verlag Vahlen, München and various sites from different universities with helpful information, e.g. this site by the University of Toronto (www.writing.utoronto.ca/advice).

Good luck!