

NOTES FOR WRITING SEMINAR PAPERS AND BACHELOR, MASTER AND DIPLOMA THESES

(based on the writing notes of Prof. Dr. Marco Runkel, Ökonomie des öffentlichen Sektors, insbesondere Gesundheitsökonomie)

Basic information

Always prepare your work with the greatest (!) care. The number of careless mistakes and "inconsist-encies" already shows how much of an effort you have put into writing your thesis or seminar paper.

You should ask yourself which are the key questions that you want to answer with your thesis and which secondary questions can help you to answer them. You should know which insights you wish to gain and spell them out clearly for the reader.

Make sure that the reader can always follow the golden thread of your reasoning. It must be clearly distinguishable for each section how it contributes to answering your key questions. Focus on what is essential to your topic - avoid wordy descriptions of 'other things that might be of interest'.

Only write about what you have understood 100%! Or else your lack of understanding will become apparent, at the latest, during the oral presentation.

The basic prerequisite for writing a readable thesis is that you put the analysis into your own (!) words and accordingly refrain from using expressions that match the original texts too closely. Avoid translating the original text 1:1. It is therefore recommended to put the original texts aside and rewrite them from memory as best as you can. Only when fine-tuning your text at its final stage you should look at the original literature again to ensure that the details of what you have written are correct.

Keep to the page limit. Experience shows that the more the page limit is exceeded, the less of an effort you have made to focus on the essential.

Make a special effort when writing the **introduction**. – Its purpose is to...

- motivate the reader for the topic (why the subject is of interest, its practical relevance, put it into a larger context),
- specify the question more closely (what exactly you want to deal with, which questions remain beyond the scope of the thesis etc.),
- give a short overview of the literature on this topic and

- state the reasons for which literature you used as a guide,
- present an outlook on the most important results,
- and explain the way you will proceed in the following.

It is recommended that you review the introduction thoroughly once you have finished the main section as usually a number of points become clearer while you write the main section.

In the **main section** you should go into the details of the analysis. Try to show that you have grasped the reasoning of the original articles. Imagine that you are explaining the analysis to a fellow student who has a basic understanding of economics but has not dealt with the specific topic of your thesis before. Could this fellow student understand the analysis by reading your text without having to look at the original articles? If the answer to this question is yes, you have come a step closer to reaching your goal.

Always make sure that throughout your thesis you give reasons for any claims you make. In order to develop your line of reasoning in more detail you can (and in most cases you must) draw on a formal mathematical model. When you do this make sure that all steps in your calculations are comprehensible for the reader. If necessary, add steps that were omitted in the original article, but which facilitate the understanding of the thesis without going beyond its scope. More extensive mathematical derivations and proofs can be explained in more detail in an appendix. Be rigorous with the mathematics because it usually shows very well how much of an effort you have put into the thesis and your level of understanding of the analysis. However, under no circumstances (!) should you lose sight of the economic intuition. First and foremost, you are writing a thesis on an economic topic and mathematics is an important tool for this – not more and not less!

Graphics and tables can be useful to support your reasoning. However, they are not self-explaining. Make sure that all elements of the graphics and tables are appropriately explained in the text or in a legend. Only information relevant to your thesis should appear in the graphics. The tables should only contain relevant data. Graphics and tables copied from books and articles only rarely satisfy these requirements. Therefore, it is always advisable that you create the graphics yourself using Excel or some graphics software.

Where possible, support your theoretical arguments with empirical facts.

Do not forget to point out the economic policy implications of your arguments.

The purpose of the **conclusion** is to summarize the analysis and to discuss it once more. Make sure that you do not repeat yourself too much, but rather provide a short and concise summary. If possible, use wordings different from those in the main section and in the introduction. The outlook should always include a critical discussion of the analysis. Avoid making the conclusion section too long. Sometimes it makes sense to insert this critical discussion in a separate chapter before the conclusion section.

The **bibliography** should be consistent. The formatting of the bibliography should use one of the well-known economic journals as a guide (see section *Citation Style*).

Citation Style

Use of the intellectual property of someone else must be recognizable by a precise reference to the source in the text. The style of citations should be consistent throughout your thesis. In economic studies it is common practice to cite as far as possible the name, year of publication and, if applicable page of the source used. The complete source is listed in the bibliography. Examples:

According to the traditional sacrifice theory approach vertical tax justice involves distributing a given tax burden in such a way that all taxpayers make the same sacrifice. (see Mill 1848)

A detailed explanation of the commuting allowance can be found in Homburg (2005).

If possible, only few literal quotes should be used as these will often not fit the style of your thesis. However, if they do prove necessary then these literal quotes must be put in quotation marks. Short omissions within the text should be marked by two dots (one word) or three dots (two or more words); highlights that you add or omit yourself should be indicated in the footnote (e.g. emphasis added). When making a literal quote of an English text a translation is not necessary.

If an idea is adopted in content rather than literally (indirect citation), this should be noted as well. The short citation in the running text then reads (cf. Sinn 1987) or (see Sinn 1987, p. 56). This is meant to acknowledge the origin of the idea.

If several sources must be cited, it can sometimes be better to indicate them in a footnote. If additional sources must be cited for a main source, this can also be done in a footnote starting with "see also" or similar.

According to Homburg (2005) the proposal intends to tighten the rules for non-discrimination in such a way that married spouses should always pay the same tax as unmarried individuals. In this context this is referred to as the marriage neutrality of taxation.¹

If a longer paragraph or even an entire section is based on one literature source, then this should be made clear where the idea is first introduced in the text. It is sufficient to quote the source at the beginning of the passage.

The following model is based on Dixit and Stiglitz (1977) according to...

Unless otherwise stated, the following comments refer to Skeperdas (2006, p. 25).

Standard knowledge from textbooks does not require a reference.

¹ The proposal is described in detail by Fraser (1986).

If you want to point out that other opinions differing from the source text exist, this can be detailed in a footnote. Here you can cite publications in which these are set out by adding "other opinions...".

If you quote from a quotation (this should be the exception!), the original source should be cited as a reference by adding "cited according to ...".

If an author has published more than one article in the same year and these are cited, then the unequivocal reference to the source both in the text and in the bibliography should be provided by adding Latin lowercase letters after the year, for example Sinn (1991a), Sinn (1991b).

Bibliography

As a rule of thumb the title of the cover page of a literature reference should always be italicized, i.e. the book title, the journal title or the title of a position paper.

a) Books and articles in books should be listed as follows: Friedman, Milton (1962): *Capitalism and Freedom*, Chicago University Press: Chicago.

Gerrard, B. (1992): *Beyond the Treatise: Continuity or Change*, in The Philosophy and Economics of J. M. Keynes, Edward Elgar, London.

- b) Journal articles are quoted as follows: Zodrow, R., Mieszkowski, P. (1986): "Pigou, Tiebout, Property Taxation and the Under-provision of Local Public Goods", *Journal of Urban Economics* 19, 356-370.
- c) Unpublished work, e.g. consultation papers, is quoted as follows: Konrad, K.A. (2007): *Mobile Tax Base as a Global Common*, CESifo Working Paper, No. 2144
- d) Internet sources are quoted in the same way as print media, except that the corresponding URL should appear at the end:
 Bundesagentur für Arbeit (2008): Arbeitsmarkt 2007, Nürnberg, http://www.pub.arbeitsamt.de/hst/services/statistik/000100/html/jahr/arbeitsmarkt 2007 gesamt.pdf.
 Even if some internet publications do not readily permit the recognition of an author or an exact title you should follow the scheme given (author, year, title, URL) as far as possible.

All authors cited in the text must be listed in the bibliography in alphabetical order. Articles by the same author are listed chronologically:

Bradford, D.F. (1978): "Factor Prices may be Constant but Factor Returns are not", *Economics Letters* 1, 199-203.

Combrugghe, A. and H. Tulkens (1990): "On Pareto Improving Tax Changes under Fiscal Competition", *Journal of Public Economics* 41, 335-50.

Devereux, M., Grith, R. and A. Klemm (2002): "Corporate Income Tax Reforms and International Tax Competition", *Economic Policy* 35, 451-95.

Devereux, M., Lockwood, B. and M. Redoano (2008): "Do Countries Compete over Corporate Tax Rates?", *Journal of Public Economics* 92, 1210-1235.

Eggert, W. and G. Schjelderup (2003): "Symmetric Tax Competition under Formula Apportionment", *Journal of Public Economic Theory* 5, 439-46.

If there are more than two authors, only the first author name should be given in the text. However, in the bibliography all authors must be listed. Example: The text contains "Practical suggestions for employment accounts have been made by Brown et al. (2006)". In the bibliography the article appears as follows:

Brown, A.J.G., J.M. Orzag and D.J. Snower (2006): *Unemployment Accounts and Employment Incentives*, Kiel Working Paper 1274, Institut für Weltwirtschaft, Kiel.

The literature references that you have been given represent the initial literature which you should always take into account. However, these literature references are far from exhaustive. You should make an extensive and thorough literature search. Be careful: Internet search engines such as Google can help you to find up to date political information – however, they are not best suited for finding technical texts. Use the library databases to search for technical texts. Science does not take place on Wikipedia but in international, peer-reviewed journals which you can find in the relevant databases, e.g. EconLit. Encyclopedias such as Wikipedia can be used for an initial clarification of terms, but you must not use them as a literature source!

For graphics and tables, the sources should be indicated. When presenting data, you should take care to use the correct citation style, too. If data from different sources are processed to make a table or graph, for each data series the corresponding source must be indicated. If you make your own calculations, it must be clearly stated from which raw data these calculations were made.

Formal requirements for a thesis

When grading a thesis its outer appearance is taken into account. You should therefore always ensure that your text is carefully worded and checked for correct spelling and punctuation (new spelling rules apply).

Size of the thesis

• Seminar paper: 15-20 pages

• Bachelor thesis: 35-40 pages (unless otherwise agreed)

• Master/Diploma thesis: 35-40 pages (unless otherwise agreed)

This does not include the outline, title page and bibliography. The pagination starts with page 1 of the introduction. The cover page contains the following information:

- Seminar paper: title of the seminar, title of the paper, name of the author, address, enrolment number, semester, name of the lecturer, name of the supervisor.
- Theses: Specification of the thesis (e.g. bachelor thesis), title of the thesis, name of the author, address, enrolment number, name of the professor, name of the supervisor.

All theses must start with an outline.

A list of symbols employed can be useful; a list of the abbreviations used and an overview of the tables and figures are not normally required.

Graphics etc. should be integrated into the running text, if possible; only in exceptional cases they may appear in the appendix. Calculations and proofs that are not directly necessary for understanding the text may also be included in the appendix. Tables and graphics are serially numbered, just as each page is given a page number. All tables and graphics must have their own heading.

When using contents from the Internet, a printout with date and internet address (URL) must be attached to the thesis as an appendix. Should the source material be extensive, submission can be made in electronic form after prior approval.

The bibliography must list the literature exactly as used in the thesis (i.e. all sources listed must actually be used in the thesis).

The last page of the thesis is the statement of authorship which must be signed.

Margins, font size and line spacing

Margin: left 3,0 cm, right 2,0 cm, top 2,5 cm, bottom 2,5 cm

Line spacing: 1.5-fold

Font size: 12 pt

Font: Times New Roman, Arial or Calibri (ensure good readability)
Footnotes: at the bottom of each page, single-spaced and font size 10 pt

Justified text!

Automatic hyphenation (optional)

When using the text typesetting program LaTeX, the corresponding settings must be selected. Use of this text program is recommended.

The staff of the chair wishes you success with your thesis. Your supervisor will of course be available to support you while you are preparing your thesis. Please, make use of this offer. You should definitely discuss your first (and surely provisional) outline with your supervisor.