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How to write a bachelor thesis: Structure, style and form

Bachelor thesis in Empirical Economics

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Contents

1	Introduction	1
2	Main part	1
2.1	Literature overview and citation	1
2.2	Theory and methods	1
2.3	Data	2
2.4	Empirical Analysis	2
3	Conclusion	2
4	Appendix	2
5	Formatting rules	3

List of Figures

1	Mean Bond-Yield-curve (example for a figure)	3
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List of Tables

1	Cointegration of Bond Yields (example for a table)	3
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1 Introduction

The introduction should directly lead to the main topic of the paper. It should not be a historical essay or a deep reaching explanation of the topic, but it should explain concisely what the main questions of the topic are, why they are interesting, and which methods or data will be used. A further goal of the introduction is to define the structure for the paper. This can be achieved by describing the goals, the methods and the main results of the paper. Methods and results do not have to be discussed in detail - this is left to the main part of the paper - but they should be summed up in a short way. The introduction of a paper is often finished by a short "roadmap". This is not necessary, if the aspects mentioned above have been laid out in a satisfactory way before.

2 Main part

2.1 Literature overview and citation

The literature overview may be kept short in a bachelor thesis. Bachelor theses whose main purpose is to present and discuss the contents of published articles are exceptions. When referring to articles or other literature, it is essential to mark these as references. This is best done in the text itself. When referring to papers, the author and the year of publication should be given, e.g. "Imbens (2002) gives an overview for the GMM-estimator and its empirical likelihood".

If the paper was written by more than two authors, this fact is usually abbreviated as, for example, "Imbens et al. (2002)". If there was more than one publication in the same year, a small letter should be added to the year such as "Imbens (1997a)". When referring to a whole chapter, the chapter should be mentioned, e.g. "Wooldridge (2002), ch. 13".

Direct citations must be enclosed in quotation marks. In this case the year of publication should be added with the author's name, e.g. "Generalized method of moments (GMM) estimation has become an important unifying framework for inference in econometrics in the last 20 years (Imbens (2002), p. 493)". The use of direct citations should be kept to a minimum.

2.2 Theory and methods

When writing an empirical bachelor thesis, the theoretical part should be limited to an amount necessary to understand the empirical part. It is better to limit the theory to the special cases rather than striving for a maximum of generality. Of course, when writing a theoretical paper, or

a paper on pure methods, the theoretical part will receive more weight. However, the presentation should always be structured so that it clearly works out the main points, concentrating on the aspects that are really central to the topic. Detailed proofs should be moved to the appendix.

2.3 Data

When writing an empirical paper, it is necessary to give a concise description of the data set that is being used. This description should include information about the data set provider and the variables used. A descriptive analysis of the data is useful, but it may also be moved to the appendix.

2.4 Empirical Analysis

In the empirical section, the main results should be explained first. If this is not possible, because intermediate steps are required to understand the results, then only intermediate results should be explained that are really essential for this purpose. Tables and figures should be used to present the main results. In addition, the tables and figures have to be discussed in the text. Each table and each figure must have their own title and caption.

It is often useful to investigate the robustness of the results with respect to different aspects. If the results were calculated under the homoskedasticity assumption for example, one should discuss what happens if the assumption is violated. More detailed empirical results should be put into the appendix unless there are important reasons not to do so.

3 Conclusion

The conclusion should contain a summary of the main results and its implications. One can also mention directions for future research.

4 Appendix

The appendix contains figures, tables or results that are less relevant but still important enough to be included in the paper. Detailed derivations and proofs also belong to the appendix - not to the main text.

5 Formatting rules

- Letter size 11 to 12pt, line spacing 1 - 1.5 times letter size, margins left/right 2.5cm, bottom 3cm, top 2.5cm.
- Pre-introduction page numbers should be roman, the ones of the main text arabic.
- The table of contents shows chapters and sections.
- The list of figures and tables list all the figures and tables in the paper.
- Every figure and table should have a short title plus description and should be explained in the text.
- The number of pages of the main text should be between 10-15 pages (appendix excluded).

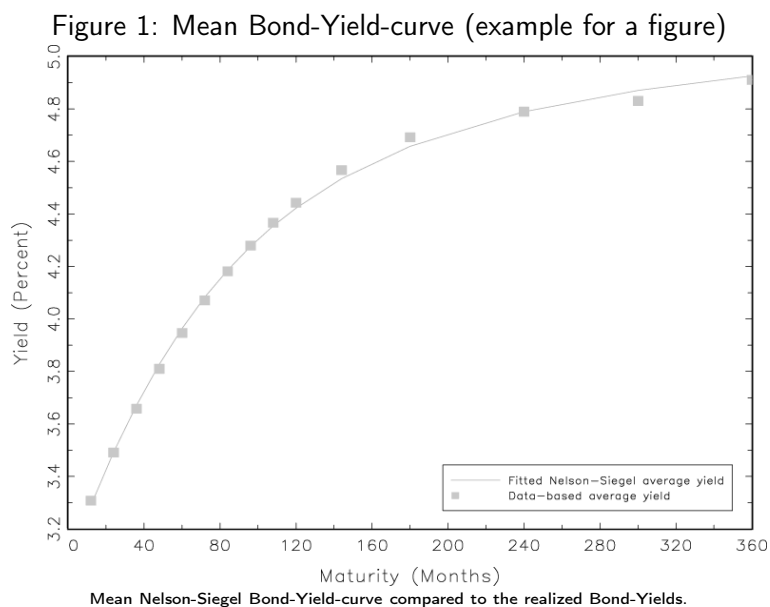


Table 1: Cointegration of Bond Yields (example for a table)

Rank at least	\mathcal{L}_{trace}	5% crit. value	\mathcal{L}_{max}	5% crit. value
$r_0 = 0$	299.71	76.07	108.08	34.40
$r_0 = 1$	191.64	53.12	91.00	28.14
$r_0 = 2$	100.64	34.91	65.14	22.00
$r_0 = 3$	35.50	19.96	29.29	15.67
$r_0 = 4$	6.21	9.24	6.21	9.24

The Akaike-Information-criterion suggests a maximal lag length of 14

References

- [1] Imbens, G. (1997a), "One-step Estimators for Overidentified Generalized Method of Moments Model". *Review of Economic Studies*, 64, 3, 359 - 383.¹
- [2] Imbens, G. (1997b), "Book Review of 'The Foundations of Econometric Analysis' by David Hendry and Mary Morgan". *Journal of Applied Econometrics*, 12, 91-94.
- [3] Imbens, G., Johnson, P., und Spady, R. (1998) "Information Theoretic Approaches to Inference in Moment Condition Models". *Econometrica*, 66, 333-357.
- [4] Imbens, G. (2002), "Generalized Method of Moments and Empirical Likelihood". *Journal of Business and Economic Statistics*, 20, 4, 493-506. ²
- [5] Manski, C.F. (2008), "Partial Prescriptions for Decisions with Partial Knowledge". *NBER Working Paper Series*, Nr. 14396.³
- [6] World Trade Organization (2008). "What is the World Trade Organization". http://www.wto.org/english/thewto_e/whatis_e/tif_e/fact1_e.htm.⁴
- [7] Van den Berg, G.J. (2001), "Duration Models: Specification, Identification and Multiple Durations" in J.J. Heckman und E. Leamer, eds, *Handbook of Econometrics*, 5, pp. 3381-3460. Amsterdam: Elsevier Science B.V.⁵
- [8] Wooldridge, J.M. (2002), *Econometric Analysis of Cross Section and Panel Data*. Cambridge: The MIT Press.⁶

¹In the bibliography, references are listed alphabetically. Only references mentioned in the text may be included.

²Papers from journals have to be cited with author(s), publishing year, title of the paper, name of the journal, volume and page numbers.

³Discussion papers have to be cited with author(s), publishing year, title of the paper, name of the institution, and number of the discussion paper.

⁴For sources from the internet author(s), title and internet address are important. Internet sources are not as trustworthy as written sources; they should only be used if necessary.

⁵Papers from anthologies have to be cited with authors, publishing year, title of the paper, name of the publisher, title of the anthology, page numbers, publisher.

⁶Books have to be cited with author(s), publishing year, title, and publisher.