University of Passau

Chair of Development Economics
Writing a paper/thesis
- A guideline –

This version: December, 2018

Content

Introduction

The aim of this guideline is to give an informal overview of the contents of any research work to help students who plan on writing a paper – be it a seminar paper, a bachelor or a master thesis – at the chair of Development Economics in the University of Passau. To do so, this guide relays heavily on Cochrane (2005) and Chandrasekhar (2000). All other sources are cited accordingly.

This guideline is by no means binding.

1. Structure

The structure of any paper is governed by logic and meant to guide the reader through all the steps undertaken to tell your story.

The following structure can and should be adapted to each research question accordingly.

- Title Page
- Table of contents
- (List of Figures/Tables/Abbreviations)
- Abstract
- Main Text:

Literature Review (seminar paper or Bachelor thesis)	Empirical Paper (e.g. Master thesis)
1. Introduction 2. Background and theoretical/conceptual considerations 3. Empirical evidence/results 4. Discussion 5. Conclusion	1. Introduction 2. Literature review (including theoretical/conceptual considerations) 3. Data and descriptive analysis 4. Methods and empirical specification 5. Results 6. Conclusion

- Bibliography=References
- Appendix[1]

[1] The Appendix should only contain information that is not necessary for the immediate understanding in the main text.

Conceive a structure that will help you write in a logical manner; the paper should not be a log of your research process. Succinctly put by Cochrane (2005): “We don't care about the hundreds of things you tried that did not work. Save it for your memoirs."

Once the ‘skeleton’ of your work is set up, you can start to fill it.

2. Substance

You should write with the reader in mind: first describe what you do, then explain it, and then compare it to the alternatives. Be conscious of the emphasis of your work. Is it empirical in nature or descriptive?

Be precise, be clear, and keep it short. Another student – reader – should be able to understand and to reproduce your work.

2.1 Think – Plan – Write – Revise

Think about what you want to write, plan accordingly. Ask yourself what needs to be done to achieve the final product. For example: What is the best way to present my data? Is it graphs or tables? Think about the best way of presenting the work done by others. Write, read, and be critical with yourself. Let someone else read and let them be critical of your efforts.

Take a hint from those with experience: How is data presented in published articles? How do published authors discuss the literature?

Introduction

In the introduction you have to catch the reader’s attention and explain your motivation and background. Give the reader an insight into your work and explain the main idea, then shortly relate your main findings. The introduction is thus written as you go or it is actually the last thing you write.

After reading the introduction a reader should know the topic, question of the paper, and possibly the main results. Think of it as a trailer that reveals the best scenes in a movie. Revise your introduction after you have written your conclusion and make sure the two match to a 100%. Did you really deliver all you promised? Or did you revise your research goals?

Literature review

You will have to read a lot and much of it you will not use, for that reason you should read methodically. Identify the key authors early on and skim the papers. Read first the abstract, then the conclusion, decide then if it is worth reading in its entirety. If it is, read with a goal in mind. Ask yourself how that article contributes to a better understanding of

your research question. Does it support the causal link of your hypothesis? Does it help explain unexpected results?

A well done literature review will capture the essence of the knowledge in your topic and is vital in justifying your work as it gives context and purpose to your research question. A review will include key approaches to answering your questions as well as the main contributions of the leading authors. Characterize your research question by pointing out what has not been well explained by the existing literature and carefully explain which are the mechanisms assumed in the theory and how you expect them to show in your own analysis.

For more on the literature (‘What is it and where do I find it?’) see section 4.

Data and methods

Describe your data so that a reader will be able to follow all subsequent analysis without wondering what type of information is being used. Relay the database=source and the timeframe. What variables do you have at your disposal, what is their unit of analysis?

If you transform data explain the reasoning behind this decision and discuss alternative approaches. Say, for example: ‘I adjust income by the square root of household size’. Then explain why you do this and then discuss other adjustment functions.

Descriptive statistics are helpful in showing trends that might hint at the mechanisms used in the analysis of the data.

Each table should have a self-contained caption, so that every reader can understand what is being presented without having to look for the corresponding paragraph in the text. The same goes for figures.

In the methods-section describe all the steps of your analysis and back them all up with literature. In case you are doing empirical work, explain what your identification strategy and the theoretical reasoning behind it. Describe the main determinants in your econometric model and state its limitations as well as the steps you take to deal with them.

If you are not doing empirical work – say, a literature review – describe the methods used by others. Who did what and how? What influence did their methodology have on the results? Are the findings robust? Compare the methodologies and results of different authors. Is there a consensus in the literature?

Results

Present your results in a straightforward and accessible way.

What was said about tables and figures above counts also for this section. If you are reporting regression results, the caption should contain the left hand variable. State significance levels and other reported information in the notes.

Explain if your results are in accordance with the theory presented before. When interpreting your results pay attention to the statistical and to the economic significance of your variables. Be critical of your own findings and question your results. Are the numbers sensible? Are you including robustness checks?

Conclusion

In the conclusion you synthesize your work. What happened to your hypothesis? What new knowledge did you gain? This is the opportunity to show your readers why your paper is meaningful and also useful. Can you draw policy implications, need for further research or other uses of your findings in the 'real world'? State them here!

2.2 Little writing tips

Start writing early. The amount of time needed to have a finished paper is grossly underestimated, especially if you lack experience. Estimate the amount you think it will take you to finish your paper and then multiply by three to arrive at a more realistic figure. No, no one really writes a 20 page final paper in a weekend, at least not a good one.

Start pinning down your thoughts and impressions as soon as you start researching your chosen field/topic. Keep detailed records/dairies/notes of your research and be sure to structure them in a logical manner, especially so if you are doing empirical work. This exercise will firstly help you get your thoughts in order and help you spot errors in the argumentation early and secondly, it will force you to write. Much of what you write early on can be used later when building your paper.

Write in three drafts: put your facts together, then check for coherence and then edit. Rinse and repeat until the deadline or until you are satisfied.

Remember the famous advice: "Don't panic!" (Adams, 2002, p. 2) If you are stuck, get in touch with your supervisor.

3. Style

3.1 Language

Be precise, clear and strive for brevity. Are you at a loss for words? Try ‘Bloom's taxonomy’.[2]

Avoid adjectives, they are not precise. Do not write: ‘very significant’ or ‘quite small’; and if you must, don't use double adjectives. There is no such thing as ‘very novel results’. ‘Where’ is a place. ‘In which’ is a model. Write ‘models in which consumers have uninsured shocks’ not ‘models where consumers have uninsured shocks’.

If you are writing alone, don't use the royal ‘we’ when it is only you that does something, as is done in Mialon (2012): “In this paper, we develop a rational expectations signaling model of lovemaking that yields clear predictions about faking behavior, which we then test using actual survey data."

The ‘we’ can be used when you are including the reader, say for example: ‘we can see that these results are consistent with the theory’.

3.2 Layout

Format

The formatting is done in a way that eases the reading. Use wide line-spacing and justified text. Leave wide margins to the left and to the right. The 3 cm in this document are a minimum, but unlike many theses, it is not bound. Adjust the left margins accordingly.

Length

For a bachelor thesis the number of words should be between 8.000 and 12.000 words. For a master thesis, the respective number of words is between 12.000 and 15.000. The word count is done without the References and the Appendix. Please state the final word count on the Title Page.

Quoting

We don't abide a particular style (although recommended styles are for instance Harvard, APA, AER or Chicago), but we do expect consistency. Just follow some basic rules.

[2] Found for example here: http://en.wikipedia.org/wiki/Bloom's_taxonomy [Accessed Feb. 10, 2014].
(Oh, and never quote Wikipedia!)

When quoting in text:

- The name of the author and the publication year should be in parentheses (and not in a footnote).
- If your quote is literal, use quotation marks and indentation. For direct quotation you should report the page number.

In the references=bibliography:

- Organize the references alphabetically by first author.
- Every reference contains the name(s) of the author(s), the year, the name of the item.
- The citation of a scientific article contains the name of the journal in italics. Included have to be also the issue, the volume, and the pages where the article is found.
- The citation of a book contains the name of the book in italics. Included are also the publisher and the city where the publisher resides.
- If you are quoting from the internet, you have to report the date when the item you are citing went online and when you accessed it, as well as the full URL.[3]

4 Literature's 3 W's: the what, the where, the why

4.1 What

By 'literature' we mean the traceable, reliable body of work that encompasses the current knowledge in a field. This knowledge is usually presented in books and articles ('papers').

- Books
    - General: Books that give an overview over a wide range of topics, for example: Ray (1998) on 'Development Economics' in general.
    - Specific: Books that treat one specific concept, for example Williams (2011) on human conflict in Africa.
- Discussion papers and working papers: disseminate research quickly in order to get comments and suggestions for revision or improvement before they are submitted to refereed journals (e.g.: IZA (Grimm et al., 2013)).
- Journal papers: articles that are reviewed by the editor and associates, then independent reviewers (e.g.: World Development (Grimm et al., 2012)).

[3] This mere document serves as an example.

4.2 Where

- The journals themselves (http://www.journals.elsevier.com/world-development/)
- Databanks: the EZB (http://rzblx1.uni-regensburg.de/ezeit/fl.phtml?notation=&rest=3&bibid=UBPA) and the DBIS (http://rzblx10.uni-regensburg.de/dbinfo/fachliste.php?bib_id=ub_pa&lett=l&colors=&ocolors=)
- Google Scholar

4.3 Why

Ideally you will find and use four different types of literature in your study: (a) general literature from the field you are looking at, (b) literature to support the causal relationships of your hypothesis, (c) literature to help explain your – unexpected – results[4] and (d) literature to incorporate your study into a comprehensive theoretical framework.

4.4 Little reading tips

Besides the tips given in section 2.1, here are some question you should keep in mind when reading any article:

1. What is the research question(s) that the authors are trying to address in their paper?
2. What is their contribution to the already existing (empirical) literature?
3. What methodological approach are they using?
4. What kind of data are they using for analysis?
5. Is the methodological approach/data appropriate to address the research question? Can you think of alternatives?
6. What are their main findings and (policy) conclusions? Do you agree with their point of view?
7. Are there any shortcomings in their analysis?
8. Do you have any questions which remain unaddressed/issues that remain unclear?

5 Useful data links

The quest for data – if you do not have some of your own – can be a difficult one.

[4] Of course, this is only needed if you have any results.

Here are some links to get you started:

- Most Chairs offer an eclectic collection of useful links, ours is no different. There you can find links to the Demographic Health Surveys (DHS), the Living Standards Measurement Surveys (LSMS), as well as others. → http://www.wiwi.uni-passau.de/development-economics/links/
- Some journals have a data availability policy, i.e. data used for a published study has to be made available to other researchers for the purpose of replication. For example, the journals associated with the American Economic Association, like the Journal of Applied Economics, adhere to this practice. → https://www.aeaweb.org/aej/app/index.php
- Some books also offer data, like 'Poor Economics: A radical rethinking of the way to fight global poverty' in http://pooreconomics.com/.
- There are many projects that make their data available, e.g.: 'Young Lives' in http://www.younglives.org.uk/.
- Some researchers disclose some of the data used by them, one example is Andreas Fuchs: http://www.andreas-fuchs.net/data.html.

Bibliography

Adams, D. (2002, March). *The Hitchhiker's Guide to the Galaxy.* London: Picador.

Chandrasekhar, R. (2000). How to write a thesis: A working guide. http://ciips.ee.uwa.edu.au/pub/HowToWriteAThesis.pdf. The University of Western Australia [Accessed Feb. 10, 2014].

Cochrane, J. H. (2005). Writing tips for Ph.D. students. http://faculty.chicagobooth.edu/john.cochrane/research/Papers/phd_paper_writing.pdf. Graduate School of Business, University of Chicago [Accessed Feb. 10, 2014].

Grimm, M., R. Hartwig, and J. Lay (2013). Does forced solidarity hamper investment in small and micro enterprises? http://ftp.iza.org/dp7229.pdf. IZA DP Nr. 7229 [Accessed Feb. 25, 2015].

Grimm, M., P. Knorringa, and J. Lay (2012). Constrained gazelles: high potentials in west africa's informal economy. *World Development 40*(7), 1352-1368.

Mialon, H. M. (2012). The economics of faking ecstasy. *Economic Inquiry 50*(1), 277-285.

Ray, D. (1998). *Development economics.* Princeton, NJ: Princeton University Press.

Williams, P. D. (2011). *War and Conflict in Africa.* Cambridge, UK: Polity Press.