

Writing Guide for Academic Papers

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Abstract

This guide discusses style, format, content, and referencing with respect to academic writing in economics. In addition, this note provides advice on how to begin a research project. It is aimed at students new to academic writing.

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1 Introduction

Academic writing is a skill that you will develop over time, but it is essential to have a basic understanding of structure, format, and referencing from early on in the learning process. The aim of this note is to provide you with a reference guide for writing. Academic papers are generally structured to have an introduction, a body, and a conclusion. The flow of a paper is important and should follow a logical order that the reader can easily understand. Academic papers must be concise and it is therefore important to use space efficiently in order to limit the length of the paper. Formatting and referencing issues are also critical, and are discussed in more detail below. Consulting other literature is a necessary part of academic research, and proper credit must always be given to other sources. Referencing is therefore extremely important - failure to properly cite sources constitutes plagiarism. Some examples of referencing are provided for your information.

This document serves as a guide to writing both empirical papers and comparative literature reviews. You are strongly encouraged to complement this guide with examples of empirical and comparative studies from the economics literature. Journal articles provide excellent examples of structure, format, and referencing. The more you read, the more familiar you will become with structure, language, style, *etc.* and the better writer you will become.

After looking at the layout and format, the next section of this note provides general advice on writing an academic paper. This is followed by section four, which notes specific guidelines for writing *empirical* and *comparative literature reviews*, respectively. Section five is dedicated to referencing and provides examples of how to cite sources in the text and at the end of a paper. Tables and figures are discussed in sections seven and eight, while use of appendices is described in section nine. Finally Section 10 concludes with a brief review of some essentials for good academic writing.

2 Layout & Format

An academic paper should have the following layout:

- Font size 12, black, Times New Roman
- 2.5 cm margins at top, bottom, left, and right
- Line spacing of 1.5

- Justified text
- 15 (+/- 10%) pages for a seminar paper; 30 (+/- 10%) for bachelor degree; 60 (+/- 10%) for masters degree
- A-4 paper with 1 side per page
- You must have at least 30 references, 20 of which must be from academic journals or books.
- Print two-sided
- Staple paper together or get your paper bound before submission
- Sign the declaration before submission

3 General advice on how to begin and write a paper

3.1 General advice - a quick list of “DOs and DO NOTs for academic writers in economics

Style

- Keep your paper short. The reader of an academic paper generally has limited time and can lose interest quickly if the paper does not “get to the point” early on. If you can make your point with one sentence, write *one* sentence, not more. In the interest of keeping a paper as short as possible:
 - Do not be repetitive - if your paper follows a logical structure, you should not need to remind the reader of what you wrote earlier in the paper. It is frustrating for a reader to be presented with the same information more than once - respect your reader’s time and “keep it short, keep it simple”.
 - Do not “waffle”. In other words, do not write frivolously - this is extremely irritating for a reader. You must be concise and only write what is important. Again - “keep it short, keep it simple”.
 - The writing style (in terms of length) should resemble a newspaper article rather than a novel; give the essential information and then expand into more detail. Do not, however, give granular information or a chronology of how you find the results you find.

- Do not use fancy language. Keep your paper simple and clear. The reader will detect if you are intentionally throwing in “fancy” words just for the sake of it.
- Do not use contractions in academic writing (*i.e.* write “you are” instead of “you’re” and “do not” instead of “don’t”). Although you should use simple language, remember that academic writing is *formal*.
- Write in present tense: authors obtain (not: obtained) results. You show x and y (not: you will show)
- Always check and re-check your spelling and grammar. Spelling mistakes, missing words, sentences that do not make sense, and punctuation errors all suggest that you did not care enough to proof-read your work. This does not leave the reader with a good impression.
- Use *italics* when writing words in a language other than that in which the paper is written (such as Latin words for example). Also use italics for emphasis of particular words, but do not over-do it. The purpose of emphasising a word is to distinguish it within the text. If many words are emphasised, this defeats the purpose.
- You can abbreviate words that you use throughout your paper, but when first using the word, you must write it in full and then in brackets indicate the abbreviation you use throughout the rest of the paper. For example, write “American Economics Association (AEA)”, and when referring to this later in the paper, you can simply write “AEA”.

Content

- Economics papers must have a basis in economic theory. You should clearly convey the theory underlying your paper, regardless of whether it is an empirical or comparative literature study. The theory should be outlined and introduced in the beginning of the paper, and should be linked with your discussion and analysis throughout the paper.
- Regardless of the type of paper you are writing, ensure that you clearly convey your contribution to the existing literature. What makes your paper unique? Why should anyone bother reading your paper? What do you add to the existing literature - what is “new” in your paper?

- Make sure that by the end of the paper, you have answered all of the questions you set out to answer in the beginning.
- Discuss the implications of your paper - are there implications for economic theory or economic policy?

Structure

- Follow the structures outlined in this document for empirical and comparative literature studies.
- Your paper should be easy to read. This means that in addition to following the style bullet points outlined above, the structure of your paper should be reader-friendly.

Editing

- Before you submit a paper, have a classmate or friend read it for content, as well as for spelling and grammar. If someone reads your paper and does not understand something in it, re-write it.
- Read your paper as you write it. After writing one page, for example, go back and read it. This will help you to more quickly identify problems in the paper, whether they are related to sentence structure, format, spelling, or anything else.

3.2 How to start a paper

First, organise your time. When you have a writing assignment, make a timetable with short-term goals and set a deadline for yourself to finish the paper in advance of the actual submission deadline. For example, if you have one month to write a paper (30 days), you could decide on the following timeline:

- By day 5: Collect 30 articles from academic journals on the subject
- By day 10: Read all of the articles collected and reference textbooks as needed to firmly cement understanding of the theory behind the topic
- By day 12: Sketch an outline of the paper - think about what you want to say and the structure the paper will take

- By day 20: Complete a first draft of the paper
- By day 23: Have some fellow students read the paper and provide feedback
- By day 26: Complete a final draft of the paper
- By day 28: Finalise the paper, carefully check all formatting, spelling, and referencing
- Day 30: Submit the paper

The above timeline contains many small, but achievable goals over the 30-day period, and allows for a 5-day buffer period between when you plan to finish the paper and when the paper is due. This will give you some flexibility in case you are stuck with some aspect of the research or writing process. Time-management is the key to avoiding stress ahead of the submission deadline.

Once you decide how you will manage your time, think about your topic and some specific questions you hope to answer. Your research should ultimately yield a novel contribution - do not just summarise what other people have written or repeat someone else's work. Even if you are not doing empirical work, you can still write a literature summary that includes your own ideas and insights. Once you have a research idea, thoroughly search the literature and read as much as you can about the topic. Some useful sources for finding academic journal articles are:

3.2.1 Useful resources for finding academic journal articles

- EconLit
- NBER Working Papers Database
- Social Science Research Network (SSRN)
- JSTOR
- RePEC

Try not to get overwhelmed - depending on your research topic, there could be a ton of journal articles related to what you are researching. Select about five articles based on

reading the abstracts, which give you a snapshot of the paper's motivation, methodology, and conclusion. Then read those papers. By looking at the reference pages of the initial five papers, you will likely be directed to about a hundred other papers. After reading a few articles, you will have a better sense of what you would like to focus on and can then collect additional information from other academic journals and books. While newspapers are a great source of information, it is very important to consult with academic literature. Books are an excellent starting point, especially for getting information on economic theory, and the range of economics journals is extensive. Some of the top economics journals are:

3.2.2 Economics journals

- American Economic Review
- Quarterly Journal of Economics
- Journal of Political Economy
- Econometrica
- Journal of Economic Theory

In addition, two excellent journals for students new to economics are the *Journal of Economic Literature* and the *Journal of Economic Perspectives*. These journals publish literature reviews on all sorts of economics topics, ranging from labour markets to health economics to finance. They are therefore a great starting point for research as you can get a nice summary of the literature on a topic of interest, and some suggestions for further reading. The *Journal of Economic Perspective* often publishes non-technical papers on a range of topics that link theory to empirical research. If you are new to economics and have not yet studied econometrics, this is an excellent resource.

In addition to the aforementioned general-interest journals, there are many special interest economics journals, such as:

- Games and Economic Behavior
- Journal of Labor Economics

- Canadian Journal of Agricultural Economics
- International Journal of Health Care Finance and Economics
- Journal of Cultural Economics

These journals are only a tiny selection of what is available, and by referring to journal articles, you can see the linkages between economic theory, practice, and empirical research.

Note: Mr Matlage from the Economics and Social Sciences Library provides a presentation on research tools available to you in the library. This document can be found for your perusal on *Stine*. He also runs a workshop on research methods which you may attend.

3.3 How to write a paper

Now that you have made a time-management plan for yourself and have started your research, organise your thoughts before you start to write - envision the structure of the paper. Remember that your paper needs to be very clear - so before you start typing, have an idea of what you are going to write and how you are going to write it. Once you start writing, keep it simple. The reader of an academic paper is usually someone with little patience so only write what needs to be written, be concise and focused.

Academic papers in economics need to be based on economic theory. The beginning of the paper should clearly state the underlying theory or theories on which the paper is based. If writing an empirical paper, you need to explain how your model links with theory. Discussion of empirical results should also be linked with theory. If writing a comparative literature study, you should explain the theory underlying the body of literature you are discussing. Are there debates in the literature about the theory? How does the literature analyse the theory? Do you have any input into the theory from your reading? These questions should be discussed in an empirical academic paper.

A final piece of advice - if you need help or have questions, ask as soon as possible so you can get back to work on your paper.

Note: If you do not follow the guidelines set out in this document, points will be deducted. In the event of serious failure to comply with these guidelines, particularly with respect to referencing, your paper may not be corrected and may be deemed insufficient.

4 Structure

This section outlines the general structure of an academic paper. It begins by summarising the components of an empirical paper and a comparative literature review. It then provides more detail on the respective sections.

4.1 Empirical paper: broad structure

An empirical paper has the following broad structure:

- Title page
- Table of contents
- Declaration
- Abstract
- Main text
 - Introduction (includes discussion of economic theory)
 - Literature review
 - Data & Methodology
 - Main results & discussion
 - Robustness checks
 - Conclusion
- References
- Appendices (optional)

4.2 Comparative literature study

A comparative literature study has the following broad structure:

- Title page
- Table of contents

- Declaration
- Abstract
- Main text
 - Introduction (includes discussion of economic theory)
 - Literature review, analysis, critique, and comparison
 - Discussion of the implications of the literature
 - Conclusion
- References (bibliography)
- Appendices (optional)

What follows is a brief explanation of the aforementioned sections of empirical and comparative literature studies.

4.3 Title page

A title page must be included in any type of academic work. The title page should contain the title of your paper, your name, the course name, and your professor's name. It should also include the date of submission.

4.4 Table of contents

A table of contents should be included in any type of academic work. The table of contents lists the various sections and subsections of your paper, and the page numbers on which they begin.

4.5 Declaration

A declaration must be included when submitting any type of academic paper. When handing in your paper, you must include a declaration stating that the work is your own and has not been submitted for another course. See the following example:

I declare that this paper, submitted for the course entitled *Advanced Macroeconomics* has not been submitted as an exercise for any other course. All research contained herein is entirely my own. [signature and date]

4.6 Abstract

An abstract must be included in any type of academic paper. It should be brief and concise. In an empirical paper, an abstract indicates the research question, methodological approach, and conclusion of the paper. It should also state the paper's contribution to the relevant body of literature. For a comparative literature review, an abstract indicates the body of literature being reviewed, the reason the review has been undertaken, the main conclusion of the review, and the paper's unique contribution to the literature. Despite being brief, a good abstract is essential - if it does not grab the reader's attention, the paper is unlikely to be read at all.

4.7 Main text

4.7.1 Introduction

Both empirical and comparative literature studies begin with an introduction. The introduction sets out the motivation for the paper and clearly states the research question or questions that are answered by the end of the paper. It also explains the contribution of the paper to the relevant body of literature. Note that the introduction is *not* a literature review; it outlines the research problem and its importance, and identifies the economic theory underlying the paper, but does not review existing literature on the topic. An introduction should also state and give the facts behind the results of the research. Finally, the introduction sets out the paper's structure, indicating how the author will answer the research question(s). For example, the introduction of an empirical paper may end as follows: "Section 2 sets out the model, section 3 discusses identification, section 4 gives the main results, section 5 checks for robustness, and section 6 concludes."

4.7.2 Literature review

The contents of a literature review depend on whether the paper is an empirical or a comparative study.

Literature review: empirical paper

(i) The literature review of an empirical paper should begin with an explanation of what distinguishes your paper from others. It should discuss the *theory* underlying the research question and *place the paper into context* by referring to other papers which explore similar theories or research questions. In an *empirical* paper, do not summarise other papers or

list all of the publications you think are relevant to your work - the point of the literature review is to offset your paper against the main pieces of literature that are related to your own research. Remember that you are trying to highlight how your paper is unique and how it contributes to the broader body of literature.

Literature review: comparative literature study

(i) If you are writing a comparative literature study, your literature “review” should really be a review, analysis, critique, and comparison. The discussion of the body of literature you are reviewing must be based on economic theory, and should include a brief summary on the methodology employed by other authors. You should consider the following questions in your literature review: what are the strengths and weaknesses of the literature? How do the papers you are reviewing compare to one another? Does there appear to be consensus or disagreement within the body of literature? What implications do you derive from the literature review? Your literature review should include a critical discussion of the literature - your paper must make an intellectual contribution to the existing body of literature. A comparative literature summary should have a particular focus. It is not possible, within a single paper, to comprehensively review and critique an entire body of literature! For example, if you are reviewing literature on monetary union, take one or two *aspects* of monetary union and discuss the literature in the context of your focal point(s). In a comparative literature review of monetary union, Beetsma and Giuliodori (2010) summarise literature on the “macroeconomic costs and benefits of the EMU”, but focus in particular on the political economy and institutional issues of EMU. If the authors tried to cover all aspects of the literature on costs and benefits of EMU, their “summary” would be more like a novel.

4.7.3 Methodology & Data

This particular section relates only to *empirical* papers. After setting out the motivation and research question(s) of your paper, you should specifically state your hypothesis (*i.e.* what are you testing?). An example of a hypothesis is: *Education leads to higher economic growth*. This is a hypothesis that can be tested. You must clearly state your methodology - how will you go about testing your hypothesis and why is this method appropriate? In addition, you must discuss the source(s) and characteristics of your data set. It is important to state any limitations of the methodology and data you use, and to include a table with summary statistics of the data (in an appendix).

4.7.4 Main results & discussion

This section relates only to *empirical* papers. This is a critical section of the paper and should be concise. Discussion of results must ultimately link back to economic theory, and should clearly state whether or not your hypothesis can be rejected. While tables provide detailed information on results in empirical econometric studies, the body of the paper should focus on the results unique to your paper. A well written paper translates the results of tables into simple, clear, and brief language, and links these results with the broader policy or theoretic issues related to your research. A good paper also discusses the limitations of the research. In addition, you must discuss the *implications* of your findings. This provides you with an opportunity to distinguish your work.

4.8 Robustness checks

This section relates only to *empirical* studies. It is important to discuss any robustness checks performed as part of your empirical analysis. You should clearly state whether or not, and if so *how*, your results changed when conducting robustness checks. Any tables or figures related to robustness checks should be confined to the annex. Remember that the body of the paper should be as short as possible and only contain essential information.

4.9 Conclusion

A conclusion is important for both empirical and comparative literature studies. A conclusion summarises the findings of your research and states whether or not your hypothesis could be rejected. The conclusion should also reiterate the contribution of your research and, where appropriate, link back to economic theory or policy. In addition, the conclusion should summarise the implications of your findings. Conclusions may also propose ideas for further research.

5 Referencing

There are many different referencing styles, but in the field of economics, the Harvard referencing system is generally used. Referencing is critical and failure to cite sources constitutes plagiarism - a very serious offense. Note that the way in which material is referenced depends on where the reference is made, such as in the text or bibliography. Some examples are provided for your information, but these examples

are not exhaustive. A good guide to the Harvard referencing system is available at: <http://libweb.anglia.ac.uk/referencing/harvard.htm>.

5.1 Referencing within the body of the paper

When using material from another source - whether you directly quote or paraphrase - you must always have a citation. You may, if you wish, state the author's name in the sentence and then follow with the year of publication in brackets. Alternatively, you can put both the author's name and year of publication in brackets if you do not mention the author's name in the sentence. If you are paraphrasing or quoting from a specific page, you should also add the page number to the citation. Any source referenced within the body of the paper must also be included in the full reference list (or bibliography) at the end of the paper. Here are some examples of referencing within the text of a paper - also known as parenthetical referencing:

- Akerlof and Kranton published a summary of literature on the economics of education some years ago (2002).
 - *Note that this is a sentence referring in a general sense to a specific article. We therefore do not need to include a page number.*
- Akerlof and Kranton explain that a person gains utility when his actions, and those of others, support his self-image (2002, p. 1168).
- We should also consider the notion that a person gains utility when his actions, and those of others, support his self-image (Akerlof and Kranton, 2002, p. 1168)
 - *Note that the above sentences are paraphrasing a specific part of Akerlof's and Kranton's paper. We therefore note the page number after the date of publication. In the second example, we do not mention the authors of the paper we are paraphrasing in the sentence, so we must therefore include their names in the brackets at the end of the sentence.*
- According to Akerlof and Kranton, economists have considered “both theoretically and empirically the implications of market structure on educational attainment” (2002, p. 1170).
 - *Note that as part of the above sentence is a direct quote, we use quotation marks*

5.2 Referencing in a bibliography

At the end of any academic paper (before the appendix), there must be a list of references giving details of the material you have used. This is called a bibliography. Any item referenced within the body of the paper must be included in the bibliography. A few guidelines and examples are provided for your information.

Some referencing guidelines:

- When there are more than two authors, state the first author's name and then write *et. al.* afterwards.
 - According to Smith *et. al.* , financial markets remain volatile (2011).
- The list of references should be in alphabetical order. Where you have more than one paper by the same author, place in order by date of publication.
- How to cite a journal article: Author, Initials., Year. Title of Article. *Full Title of Journal* , Volume number (Issue/Part number): page numbers.
 - Akerlof, G.A. and Rachel E. Kranton, 2002. Identity and Schooling: Some Lessons for the Economics of Education. *Journal of Economic Literature* , 40: pp. 1167-1201.
 - Note that after the name of the journal, you write the VOLUME (40 in above example) followed by the issue number, if there is one, in brackets. In the above example, there is no issue number. Let us say that hypothetically, the issue number was three. We would write ...*Journal of Economic Literature* , 40(3): pp. 1167-1201.
- How to cite a book: Author, Initials., Year. *Title* . Edition number. Place of publication: Publisher.
 - Redman, P., 2006. *Good essay writing: a social sciences guide* . 3rd ed. London: Open University Press.
- How to cite a website: Author or Source, Year. *Title of web document or web page* .[type of medium] Available at: <URL> [access date].
 - NHS Evidence, 2003. *National Library of Guidelines*. [online] Available at: <<http://www.library.nhs.uk/guidelinesFinder>> [Accessed 10 October 2009].

6 Footnotes

If something is important, you should put it in the text rather than in a footnote. Footnotes should only be used for things the reader can genuinely skip, but that some readers may find interesting or useful as a side point. Long lists of references, simple bits of algebra, or other documentation are good candidates for footnotes. Do not use footnotes to reference material discussed in the text - when you paraphrase or quote, you must directly reference it in the text using parenthetical citations, and at the end of the paper in the bibliography.¹

7 Tables

Each table should have a self-contained caption so that the reader can understand the facts presented in the table without having to read the text of the paper for things like definitions of variables. Make sure the table is clear and readable. **If taking a table from another source, you must give the source in the caption to the table and in the bibliography at the end of the paper.** Tables should be placed at the back of the paper, in an appendix, and each table should be in a separate section. An example of a table is provided for your reference below:

8 Figures

Figures are an excellent way to communicate patterns in data clearly, but use them appropriately as they take up a lot of space. Like with tables, figures should have a self-contained caption so the reader can understand the figure without having to read the text of the paper. **If you take a figure from another source, you must cite the source in the caption to the figure and in the bibliography at the end of the paper.** Figures should be placed at the back of the paper in an annex and each figure should be in its own section. See the following example of a figure:

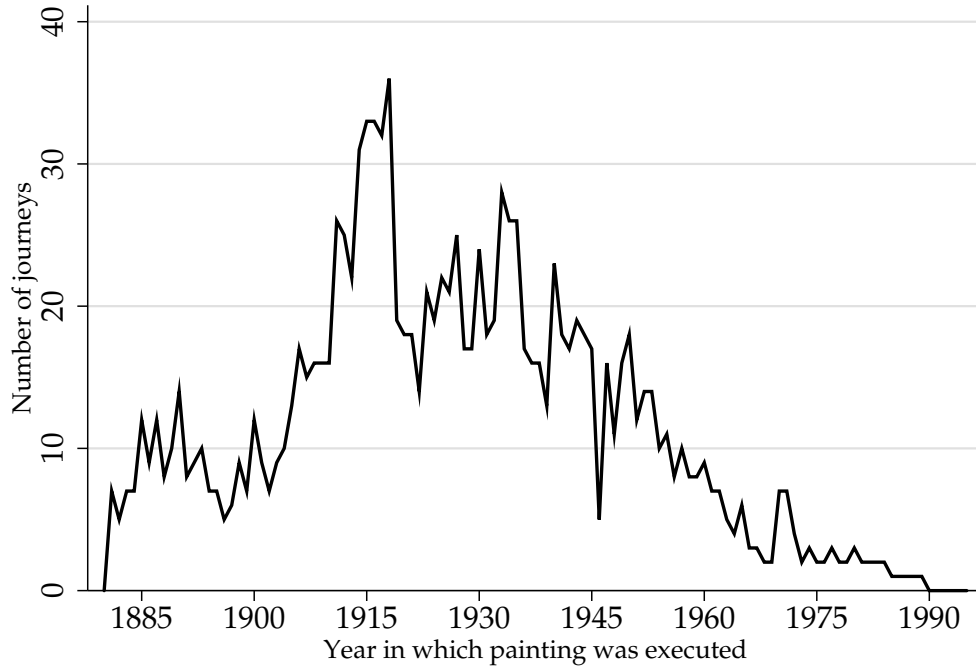
¹Remember that footnotes are only for non-essential material. Footnotes appear at the bottom of a page, and have a superscript reference within the text. Footnotes should not be distracting for the reader, and the reader should be able to skip a footnote without missing important information for his or her understanding of your paper.

Table 1: Country panel estimation

	(1)	(1)	(2)	(2)
	Number of artists	Number of artists	Sum of column-inches	Sum of column-inches
Polity	0.042 [0.017]**	0.045 [0.017]***	0.046 [0.012]***	0.043 [0.012]***
GDP Growth (3 year window)	2.580 [0.886]***	1.762 [0.848]**	1.818 [0.596]***	0.659 [0.623]
Log (GDP per capita)	1.315 [0.473]***	1.450 [0.422]***	1.110 [0.318]***	1.369 [0.310]***
Share of urban population	-1.622 [1.727]	-1.595 [1.723]	-0.936 [1.157]	-0.818 [1.257]
Energy consumption	0.000 [0.000]	0.000 [0.000]	0.000 [0.000]	0.000 [0.000]
Openness	0.604 [0.504]		0.367 [0.338]	
Country fixed effects	yes	yes	yes	yes
Time fixed effects	yes	yes	yes	yes
Observations	1,657	1,889	1,657	1,889
R-squared	0.086	0.090	0.078	0.097
Number of countries	26	26	26	26

Notes: * significant at 10%; ** significant at 5%; *** significant at 1% level. Robust standard errors are in parantheses.
Sources: All information on artists were obtained from *Grove Dictionary of Art: Online (2008)* and data on polity were obtained from *Polity IV Project(2009)*.

Figure 1: Number of journeys over time



Source: Hellmanzik, C., 2011.

9 Appendices

Appendices are optional and appear at the very end of a paper (after your reference list). They should be used to provide more detailed information to the reader on data, methodology, robustness tests, or even simple historical information on your topic - if you think it could be interesting to the reader. Tables and figures should also be confined to the appendix.

10 Conclusion

Academic writing is a critical skill that you will build-on and improve over time. You should follow the advice and guidelines discussed in this note, which will provide you with a solid foundation on which to develop your writing skills further. Although many economists claim that writing is of secondary importance, it is a critical skill. Most leading economists with strong publications spend well over 50% of their time writing! So take it seriously, ask questions if you need help, and keep practicing. Be very attentive when reading economics journal articles, as this will also help you develop your writing skills.