

Outline for Research Paper

Sonoma State University
Economics 421- Seminar in Labor Economics

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The following structure is a good one for term papers (and other papers) in economics. You do not have to strictly follow it, but do not neglect the basic ingredients.

Introduction

Purpose: State the question to be answered. This must be done right at the beginning of your introduction, even if you suspect that your reader will not fully understand the question until he or she has finished the introduction. Explain why the question is interesting and relevant. *Briefly* explain how you plan to answer the question and mention your data. You do not need to keep your strategy secret.

Literature Review

Purpose: Review the finding of previous studies, why they may differ and what data they used. Also, discuss the previous literature to the extent that you need to in order to achieve 2 goals, as follows. (1) Explain why your question should be and remains to be answered. (2) Justify your proposed method of answering it.

The Model

Explain the theory or model that is relevant your study.

Empirical Strategy

The goal of this section is the conversion of your question into a testable prediction. Make the connection between your regression model and the relevant theory very clear. Start off by restating your question, as clearly and starkly as possible. Then state what evidence would be considered support for your hypothesis. Also state what evidence would be considered contradiction of your hypothesis. Finally, you need to make everything concrete by describing the statistics or regression equations you plan to use in the sections that follow. If you write an equation of any type, please explain what the variable names mean. There is a trade-off between the literature review and the empirical strategy, but expect to use 6 pages for both.

Data

The goal of this section is to describe the data that you use. Start off by telling us what the ideal data for answering this question would look like. Then tell us what you can actually use. Explain the disadvantages of your data relative to the ideal. A number of practical issues should be covered: source, years, reliability, number of observations, missing observations, how you constructed variables, any imputations or assumptions you had to make. It is a good idea to give descriptive statistics on your variables. Descriptive statistics are usually the mean, standard deviation, minimum and maximum of each variable. A histogram

showing the distribution of the main variable is also helpful. In STATA, the command “summarize” creates a table of descriptive statistics.

Evidence

The goal of this section is to describe your findings. Include coefficient estimates, statistics for hypothesis testing such as t-statistics, F-statistics and goodness of fit measures. Discuss the robustness of your model and the different versions of the model that you estimated. It is important to write up your findings in sufficient detail that the evidence is interpretable. It is your responsibility to try to interpret your results. It is not enough to just show them. You should assume that readers really do not see what is interesting in your findings unless you point it out. In your interpretation, link the evidence to the testable predictions you discussed earlier. It is fine to include Stata output (or some other output), as long as it is neatly labeled. It is also fine to have a hand-drawn figure, as long it is neatly labeled. Remember that if you use variable abbreviations, a note must accompany the table that explains the variable abbreviations. Do not depend on your reader’s ability to guess.

Conclusions

The best way to write your conclusion is to think about a reader who is going to skip right from the first paragraph of your paper to your last section. What are the key things that reader should know about what you wanted to test, what you did, and how it all turned out? Be sure to hit upon these points. Once you have done this, you can be more speculative. To what issues are your conclusions related? What else would you have liked to be able to test?

References

Here are the most common term paper mistakes, by section of the paper.

Introduction

- The motivation is too general. You do not narrow in on your question quickly and get right to the heart of why it matters, both as a question for economics and a question for policy.
- The motivation is too journalistic. The reader will perceive that you have a didactic goal. Be balanced and critical. Do not have a prior view.
- You motivate your question as a policy matter, but do not explain the economics behind it.

Literature Review

- Although your literature review demonstrates familiarity with the relevant papers, it is too superficial. Do not just repeat the abstract of other papers. Interpret their results for yourself, making judgements about data, methods, and authors' interpretations.
- Your literature review is problematic because you convey the sense that you have pre-decided what results are desirable.

Empirical Strategy

- You may do a good job of describing the background for your study but then not follow through

and explain how the background generates challenges to identification and why you make the choices you make. An empirical strategy should follow from your set up of the problem; it should not just be presented as a *faite accompli*.

Data

- A lack of clarity about one of the following is the usual problem:
 - which variables are at which level of aggregation.
 - the sources of the variables.
 - the number of observations available for each variable.
- Sometimes the descriptive statistics are clear, but you provide insufficient interpretation of them.

Results

- A reader would have a difficult time knowing which coefficient you were interpreting when.
- You did not relate your results to your initial question or translate the results into words.
- The presentation of results in the tables was unnecessarily confusing or not self-contained.

Conclusion

- You need to insure that the reader has not lost track of your question and the "big picture" on what your results have to say about it.
- Your conclusion is too journalistic.