

## The Term Paper

## Yes there is a term paper

- ▶ For most of you, this is a literature review.
- ▶ You may, work in a team of three if you are doing an empirical paper.
  - ▶ This means data handling and regressions.
  - ▶ I don't recommend this unless you have taken two terms of econometrics.

# What is a Literature Review

- ▶ Part of every research paper
  - ▶ Provides the setting
  - ▶ Shows how the paper fits in with existing literature
- ▶ Can also be a stand alone paper
  - ▶ Never a paper by paper recitation
  - ▶ Make the papers talk to each other.

Main purpose is to draw connections between publications that may not be obvious from reading them individually.

# These are Suggestions

- ▶ There are many approaches to writing your literature review term paper.
- ▶ This is *a* recommendation.

## Start with a seed paper

- ▶ Start with a paper you like.
- ▶ The paper should come from one of the Energy Economics oriented journals listed on the syllabus or one of the general interest economics journals.
- ▶ If your paper is not from one of those journals
  - ▶ Your paper may be engineering or business but not economics.
  - ▶ Your paper may not be energy

Think of the paper as a seed. You are going to grow a literature review from that paper.

# Mine the bibliography

- ▶ Every paper comes with a literature review and bibliography
- ▶ Look at the literature review
  - ▶ They cited similar papers to establish how the paper fits in the literature.
  - ▶ Grab what you need.
  - ▶ Ignore the general references, e.g., this is how you add two numbers together.

You now have a few more papers to read on the same topic.

# Find out What People Thought of the Paper After

- ▶ People will read your seed paper and write new ones.
- ▶ They will then include it in a literature review
- ▶ Look the paper up on Google scholar (<https://scholar.google.com>) and find out who cited your seed paper.
- ▶ Choose some of those papers to read.

You now have even more papers to read.

# Read and Make Notes

These are not all the papers you will read, but it will get you started.

Use the multi-step process:

- ▶ Read the title and abstract
- ▶ Read the section headings
- ▶ Read the introduction
- ▶ Read the conclusion
- ▶ Look at the figures
- ▶ Look at the equations
- ▶ Skim the whole thing
- ▶ Read it but don't freak out if you don't get everything.
  - ▶ Keep notes on your reactions, how the topic connects back and questions (My personal notes on papers are filled with profanity)
  - ▶ Repeat as time allows.



# While Reading Take Notes

- ▶ How are key terms are defined?
- ▶ What are some key statistics?
- ▶ Keep an eye out for good quotes.
- ▶ Analyze the papers a bit. Some are better than others and make notes on why the good ones are good and the bad ones are bad.
- ▶ Look for trends over time on how a topic is treated.
- ▶ Look for a hole in the literature. Is there a topic that has been missed? That would be a great motivation for a later original contribution to the literature.

# You will Notice Patterns

- ▶ Could be a chronological pattern, how people think of a topic changes over time.
- ▶ Could break into schools of thought, fresh water vs salt water.
- ▶ Technique, regression or simulation, etc.
- ▶ Pro vs con

# Writing a Paper is a Process

After high school, you don't just write a paper in one night, in one draft. That said, we see a lot of those.

- ▶ Break the habit.
- ▶ It will work for a while, but the inability to manage a project that take more than a few days will limit you in life.

# The Process

- ▶ Abstract
- ▶ Bibliography
- ▶ Annotated Bibliography
- ▶ First Draft
- ▶ ...
- ▶ Final Draft.

# The Abstract

Revised many times before the final draft

- ▶ Start with one
- ▶ Make sure your topic is not too big for a paper.
- ▶ Get Narrow

Undergraduates try to write very short papers about very broad topics and end up with a very poor product.

# Bibliography

Out of the papers you have read, pick the ones you want to use.

- ▶ If your answer is “all them”, you have not read enough. Go back and read some more.
- ▶ The sole exception to this rule is if you doing a meta-analysis, which treats a literature statistically.

# Annotated Bibliography

A brief descriptive and evaluative statement about each article and indication of how you will use it.

- ▶ Typically not in citation order
- ▶ Organized according to how you will use them in an argument.  
For example,
  - ▶ Statistics
  - ▶ European vs American vs Latin American perspectives
- ▶ Categorize by your argument.

The annotated bibliography is basically your first outline of the paper.

# Write

- ▶ If you have a system that works use it.
- ▶ If you think your system works, question it.
  - ▶ Some of your system are very high school.
  - ▶ They kinda work
  - ▶ Microwaving a burrito will get you dinner, but hardly constitutes cooking or an effective lifestyle.



# A suggestion

I start with a rough outline and then:

- ▶ Add graphics, tables and data analysis
- ▶ Add a bunch of details to the outline
- ▶ Start adding paragraphs

Just write:

- ▶ Don't have to write in order.
- ▶ Do not make it perfect
- ▶ Write
- ▶ If every other sentence is readable – great.
- ▶ Write every day.

# Editing

- ▶ Don't edit till you are done writing for the day.
- ▶ Edit what you wrote the day before.
  - ▶ Helps make it more readable.
  - ▶ Puts you in the readers' shoes.

# Faculty Perspectives

- ▶ We don't hate term papers because we are lazy.
- ▶ We hate them because we get high school quality and high school effort work.
- ▶ Faculty comments are
  - ▶ More useful the more effort you put in.
  - ▶ I'll spend a few hours on a good paper, making comments, finding new references that fit the topic.
  - ▶ Poor papers will only get general, basically copy and paste, comments.

A hurried, night before, draft paper will set you behind since you will get less help from me.

# Translating Faculty Comments

- ▶ “Clearly Early Work” = Bet you started this last night.
- ▶ “Watch your citations” = Not sure if you were never taught how to cite or were attempting to plagiarize.
- ▶ “Nice!” = Seriously, I didn’t think of that and am impressed.
- ▶ “Tell me more” = “Expand” = I have no idea what you are saying because you were so brief.

Many of us have gotten so cynical, we assume the worst but we try not to let on.

## A literature Review Chosen at Random

Greening, Lorna A., David L. Greene, and Carmen Difiglio. "Energy efficiency and consumption—the rebound effect—a survey." *Energy policy* 28.6 (2000): 389-401 (<http://www.sciencedirect.com.proxy.lib.pdx.edu/science/article/pii/S0301421500000215>)

# Comments

## Solid outline

- ▶ Typology of rebounds
- ▶ “Rebound effect” used differently across papers
- ▶ Discussed how definitions and scope are different across papers
  - made them talk to each other.
- ▶ Organized literature review by end-use.
- ▶ Nice use of tables to summarize differences.

In the end

Teach me something I would not have noticed by reading the individual papers.