# INTRODUCTION TO THESIS WRITING

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#### WHO AM I?

Elena Mattana, Associate Professor

Research interest: Economics of Education, Labor Economics, Applied Microeconometrics, (Financial Aid to University, School Desegregation, Labor Market Power)

Teaching: Applied Microeconometrics, Macroeconomics, Applied Public Policy ...

Supervision: Msc Oecon: 10+, PhDs: 2+ (only in English)





### **OUTLINE**

- What is a thesis?
- How to get started choosing a topic
- Thesis supervision
- Some advice + Resources



#### WHAT IS A THESIS?

- An extensive research article
- on a relatively **narrow** topic (research question) relevant to your study program
- written by you
- based on the your own individual research output
- based on **independent** work
- that shows off your analytical skills
- And your ability in: formulation of a problem statement, proper use of therelevant methodologies, critical evaluation and presentation.
- See also learning objectives in the course catalogue!





#### WHAT IS A THESIS?

- Purely theoretical paper
- Empirical study
- Theory + Empirics
- Literature review/Metastudy
- Case study (in cooperation with a company)
- Essay (a broad case study)
- Other
- The choice of thesis type (methodology) must be coherent with the topic (question)





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#### **HOW TO GET STARTED**

- It all starts with a topic.. And YOU have to choose it..
- A (non-exhaustive) list of constraints:
  - Ideas (creativity)
  - Interest (curiosity)
  - Feasibility
    - Time constraints
    - Human capital constraints
    - Data (more below)





#### **LEARNING OBJECTIVES:**

- Formulate a well-defined research question and argue for the relevance and usefulness of this research question.
  - It starts with the question! What do you want to do and why?
- Identify relevant literature, describe the essence of it and argue for its relevance, and reflect on its strengths and weaknesses related to the research question.
- Identify and apply relevant empirical and/or analytical methods and explain their relevance and limitations for the research question.
- Reflect on the obtained results in relation to the research question, the methodology used and the literature and derive the most important conclusions from the analyses.





#### **HOW TO GET STARTED – CHOOSING A TOPIC**

#### Choice of topic area can be based on:

Interests (good)

Perceived gap in study/world/literature (good)

What is new ... current topics (good)

Topics that you know you are good at (perhaps good)





#### **HOW TO GET STARTED – CHOOSING A TOPIC**

- Look into yourself
- Look in newspapers, previous courses, and academic journals (or NBER wp series)
- Talk with lecturers in courses which fit your interest
- Look for topics offered by the academic supervisors (more later)
- Look in old MSc thesis'
- Look at Statistics Denmark, DA, BM, KRAKA etc.
- Think about constraints..! .. Start now!
- .. You have to spend a lot of time on the thesis so you might as well pick something interesting! (.. And spend time looking for ideas...)





#### **HOW TO GET STARTED – DATA**

Data - START EARLY!

- ➤ Public: many sources!
- ➤ Companies/cases
- ➤ Questionnaires / Interviews survey data
- ➤ Register data limited access/START NOW!

➤ Network/contacts?





#### **DATA SOURCES**

- A non-comprehensive list <u>here (mine for Applied Microeconometrics)</u> and <u>here</u>
- https://econ.au.dk/research/data-and-computational-resources/
- www.statistikbanken.dk
- www.jobindsats.dk
- https://finansdanmark.dk/tal-og-data/#
- Some journals often also require to publish data & codes
- Some researchers have data sources and codes for their papers in their websites
- https://www.tjeconomics.com/
- https://users.nber.org/~rdehejia/data/.nswdata2.html
- https://sites.google.com/site/econrunevejlin/teaching
  - 1 % random sample (often used in BA thesis... less suited for master thesis)





#### **ACCESS TO REGISTER DATA – START NOW**

#### Access via the department:

- work as an RA
- NEW AGREEMENT WITH DST (TRIAL RUN)
  - New student-only project at DST (still waiting for approval finger crossed!)
  - Topic: "the effects of taxes and transfers" (public econ)
  - If your project fits the description and it is good enough, you may get access
  - Your supervisor will be your "data manager"
  - Ask your supervisor (ECON section)





#### SPECIAL ARRANGEMENTS

In some cases, it might be possible to use already existing "exchange deals"

- Look for Publicly advertised: "Speciale pladser" or ask your supervisor (they might be aware of something)
- Danish economic council, Ministry of Education, Ministry of Employment, Statistics Denmark
- For these deals you have to expect screening based on GPA, topic, interview, etc.
- Ask your supervisor if they know

Some study jobs also offer access





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#### FINDING AN ACADEMIC SUPERVISOR

## Supervisors are different!

- Pick the right supervisor (not only topic but also method)
- Talk to your supervisor about the supervision process
- Align expectations early on in the process



# STUDENT'S RESPONSIBILITY (A NON-EXHAUSTIVE LIST)

- Topic/idea
- Collecting, reading and understanding relevant literature
- Collecting data and implementing empirical methods
- Writing the thesis
- Initiate contact with the supervisor
- Submit inputs/agenda prior to supervisor meetings
- Be proactive





#### SUPERVISOR ROLE

- Examinator
- A guide
  - Help narrowing in on the topic/idea
  - Help ensuring alignment between level of ambition and topic/idea
  - Guide you through your process
    - Offer advice if you run into problems with focus or structure of the thesis, data, the writing process or other general issues
    - Asking questions to get you to come up with solutions,
    - Direction rather than answers (try to look at these papers, think more but focus on ....)
    - sometimes it may even be the role of the supervisor not to help.. ©





#### IT IS NOT THE SUPERVISOR'S ROLE TO...

- come up with a problem statement (but they might help!)
- answer detailed questions regarding scientific papers
- assist you in collecting data and doing the empirical analysis
- read the (full) thesis before submission (ask how much your supervisor is willing to read)
- answer detailed questions about the administrative process/deadlines etc.





#### FINDING AN ACADEMIC SUPERVISOR

- See the Supervisor list for Department of Economics and Business Economics (Study portal Master's thesis) or consider the lecturers you already know
- Contact the supervisor you prefer
  - Be as explicit as you can about what you want to do in your thesis
- If no match, then try another supervisor or contact the coordinator after 4-5 rejections
  - Approach one at a time. Do not spray and pray! Supervisors are people with constraints ©
     ... and they talk together!
  - There is no casting: Don't expect long meeting with many supervisors before selecting your prefered supervisor!
  - Remember to be thoughtful on people's time!





#### THESIS ADVISING PROCESS

- Before first contact: As a minimum a topic area and ideally some good ideas (initial impression matters!)
- Then discuss with your potential thesis supervisor:
  - Ideas for topics
  - Problems to be analysed
  - Choice of method
  - Literature and perhaps empirical data
- Your initial thesis synopsis / proposal may be revised on the basis of the discussions that you
  have with your thesis supervisor
- **Be honest** about your strengths and weaknesses: say something if you think that your supervisor is suggesting methods that are too hard/you do not understand





#### THESIS ADVISING PROCESS

To ensure that your thesis supervision and the cooperation with the thesis supervisor are optimal:

- Make sure that you show up well prepared for all thesis supervision meetings
- Make sure that well in advance of each supervision meeting:
  - Prepare and send to the supervisor suggestions for questions and issues to be discussed at the meeting as well as material, drafts, etc. of relevance to these suggestions.



Process sketch (again remember supervisors are different):

- Examples of alignment
  - Problem statement (needs to be handed in and approved!)
  - Do we meet on a regular basis (shorter meetings) or only when you reach out?
  - What is the aim of the thesis? What is the expectations from the student/supervisor?
- Tentative sketch of contact:
  - Supervisor meetings / email exchanges (weekly status) etc.
  - Synopsis (sketch of thesis)
  - Read and comment on a small selection of the thesis





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#### **SOME ADVICE**

- Choose a topic you find interesting
- Make sure you can get relevant data
- Position the thesis in the current academic literature
  - Use Google Scholar to search for literature (or library, or scispace)
- Listen to your supervisor (take notes!)
- Draw up a synopsis early in the process
  - Continuously update the synopsis (work on your pitch of the project)
- Start as early as possible (in the best of all worlds you can take a break towards the end...)
- Criticise existing and own work (nicely)





#### **SOME ADVICE - CONTINUED**

- Start writing early in the process (do not underestimate this process)
  - Write regularly.. It becomes easier and it becomes a habit
  - Write well (use resources for good ACADEMIC writing)
  - Before it is written down, nobody can help
- Give a broader perspective on your findings
- Proof-read your thesis (use your study group / family / friends)
- Have fun! (enjoy the process it is likely once in a life-time!)





#### **RESOURCES**

#### Writing resources:

- <u>Study Portal</u> (forgive the typo but do not repeat it!)
- Plamen Nikolov: <u>Writing Tips for Economics Research Papers</u>.
- Marc F. Bellemare: <u>How to Write Applied Papers in Economics</u>.
- Paul Dudenhefer: <u>A Guide to Writing in Economics</u>.
- Claudia Sahm: <u>Good Writing Matters in Economics!</u>
- How to write your introduction: <u>1</u>, <u>2</u>.
- AU tips for students: <u>The Writing Process</u>.
- Resources on everything (academia): <u>Claes Backman</u>







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