

Empirical Labor Market Research

Chapter 1: Introduction

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1.1 Personal Introduction

Since 05/2021: Head of the Research Department of Regional Labour Markets at IAB and
Professor of Regional Labour Economics at University of Bamberg

10/2014 – 04/2021: Assistant Professor of Empirical International and Regional Economics at
University of Würzburg

03/2008 – 09/2014: Researcher at IAB

10/2008 – 09/2011: GradAB scholarship holder at IAB

Research interests:

- What explains the (persistent) difference between local labor markets?
- How do local labor markets work?
- Effects of technological change on the labor market
- Adjustment of individual workers to globalization

1.2 The Institute for Employment Research (IAB)



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- The Institute for Employment Research (IAB) is the research institute of the Federal Employment Agency (Bundesagentur für Arbeit / BA).
- The remit of the IAB is to conduct research on the labour market, mandated by §§ 280 and 282 subsection 1 of Social Code Book III (SGB III) and § 55 of Social Code Book II (SGB II).
- IAB research is scientifically independent. Its researchers enjoy freedom of research in accordance with Art. 5 subsection 3 of the Basic Law for the Federal Republic of Germany.

Structure of the IAB

- 15 research units organized in 8 competence fields:
 - Structural Change and the Labour Market
 - International and Regional Labour Markets
 - Labour Market Policy
 - The Firms' Side of Work
 - Education and the Labour Market
 - Labour Force Participation, Poverty, and Social Policy
 - Macroeconomy
 - Research Data and Methods
- 12 interdisciplinary working groups
- Directorate, press office and research coordination, research management
- Scientific Advisory Council
- **Joint Graduate programme with the University of Erlangen-Nuremberg (FAU)**
- **Strong ties with University of Bamberg** (S-Professors, Universitätsrat, regular cooperations)

The IAB in the public eye

- Scientific policy advice
- Organization of symposiums and conferences
- Publication of the research findings in the IAB's own publication series (e.g. IAB Brief Report) and in national and international journals
- Generally available free-of-charge online, e.g. via IAB website and the IAB Info Platforms
- Online magazine: www.iab-forum.de/en/
- IAB findings on Twitter: @IAB_news

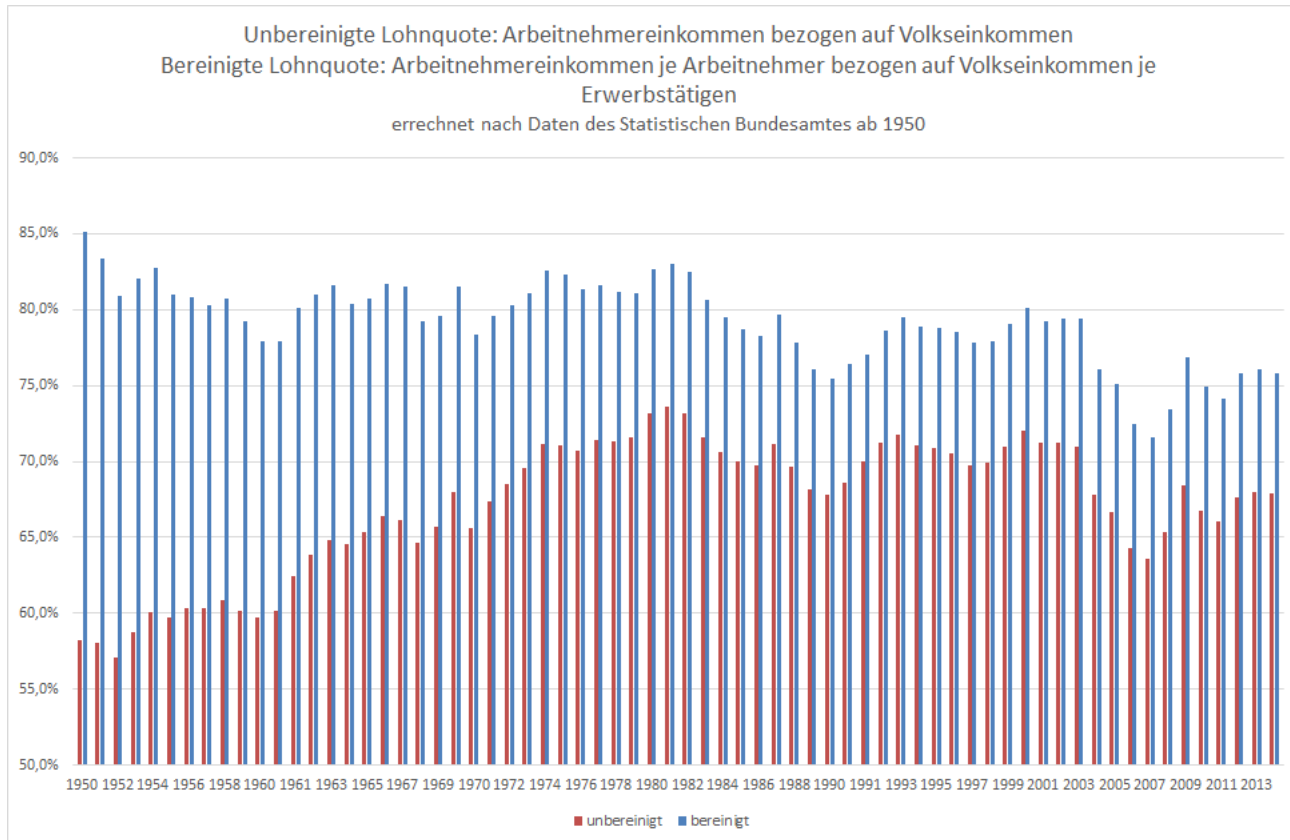


Triad comprising data, research and policy advice

- Data
 - Preparing administrative process data
 - Collecting survey data
 - Providing data for research purposes
- Research
 - Application-oriented and multidisciplinary labour market research
 - Selected fields of basic research
- Policy advice
 - Advising the BA, especially the Executive Board and the Board of Directors, as well as the Federal Ministry of Labor and Social Affairs
 - Advising ministries, associations, trade unions, municipalities and international organizations
 - Answering enquiries from the Bundestag and the federal government, as well as from the state parliaments and governments
 - Commenting on current topics in the field of labor market policy

1.3 Why focus on the Labor Market?

The labor market is relevant:



- The majority of the society depends on labor as the main (and only) source of income!
- Any development that affects the labor market has implications on the daily lives and welfare of a lot of people!

Source: Lohnquote nach Daten des Statistisches Bundesamts. Tabelle 18 Verteilung des Volkseinkommens ab 1950, 21 Bevölkerung und Erwerbstätigkeit ab 1950, 1.8 Arbeitnehmerentgelt, Löhne und Gehälter (Inländer) ab 1970, 1.12 Bevölkerung und Erwerbsbeteiligung ab 1970

“Pure” supply/demand considerations are not very helpful

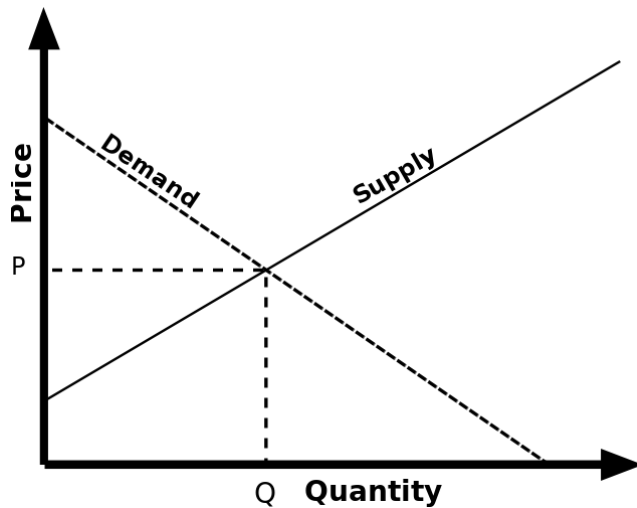


Figure by Dallas-Epperson, CC BY SA 3.0

- Monopsony power by employers
- Inelastic supply by employees
- Labor is not a homogeneous good
- Frictions / Mismatch

The labor market receives a lot of attention from policymakers and interest groups: “institutions”

- Employer’s associations and trade unions influence wage setting
- Governments provide training and services to reduce frictions
- Governments provide unemployment insurance that reduces workers’ uncertainty w.r.t incomes but affect job search
- Job protection legislation and specialized labor courts

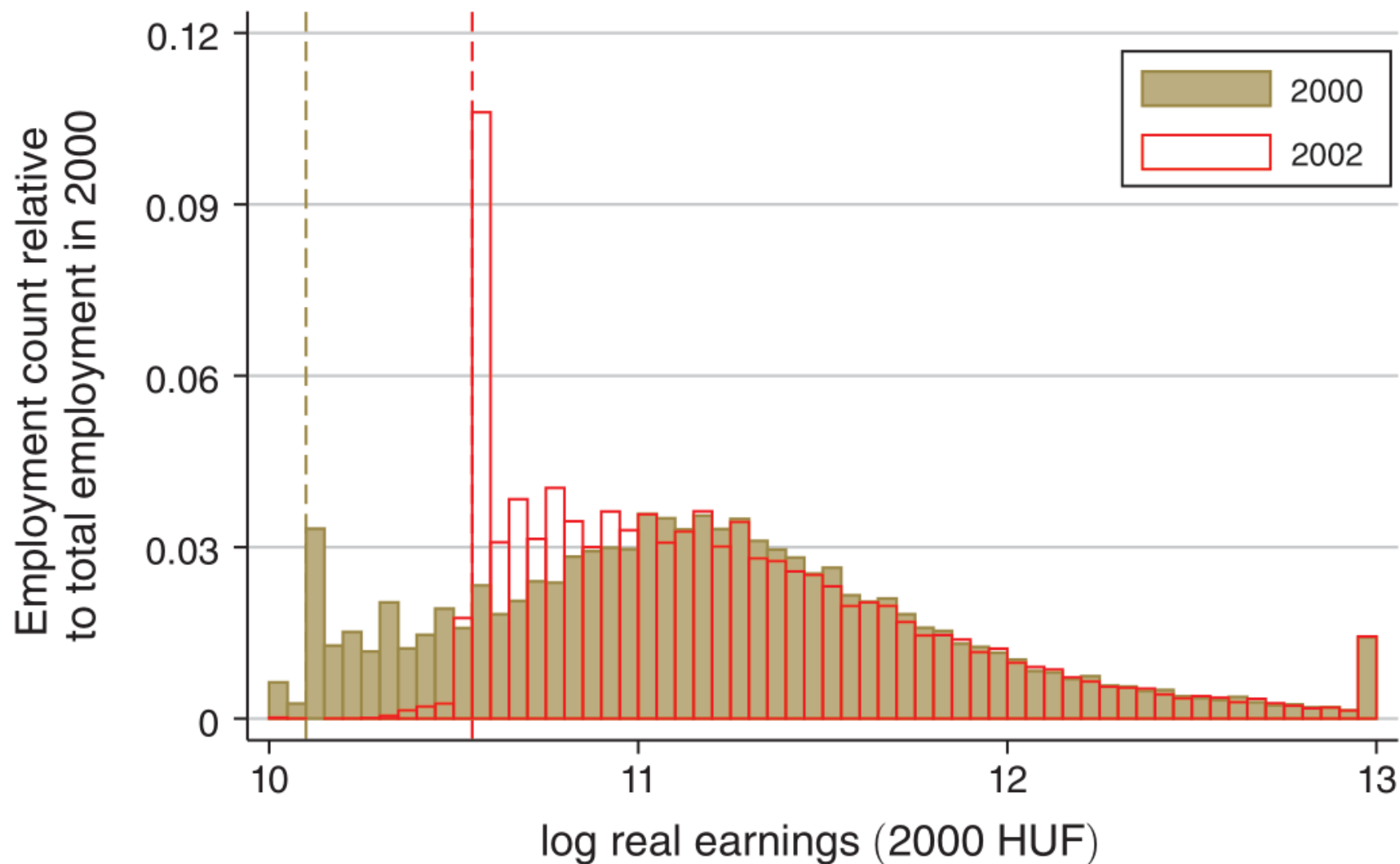
1.4 Empirical Labor Market Research

- Among economic disciplines, labor economics is one of the most active and advanced
 - Just count the share of professors that do research on labor!
 - Many important practices in economic research come from labor economics.
In particular: treatment effects in empirical analysis and concept of causality!
- Availability and quality of data particularly good in labor economics
 - Specialized survey data (GSOEP, NEPS, ...)
 - **Administrative data: social security authorities usually collect comprehensive data and are interested in scientific evidence.**
 - Big data: probably weak spot. Other fields will catch up.

1.5 This course

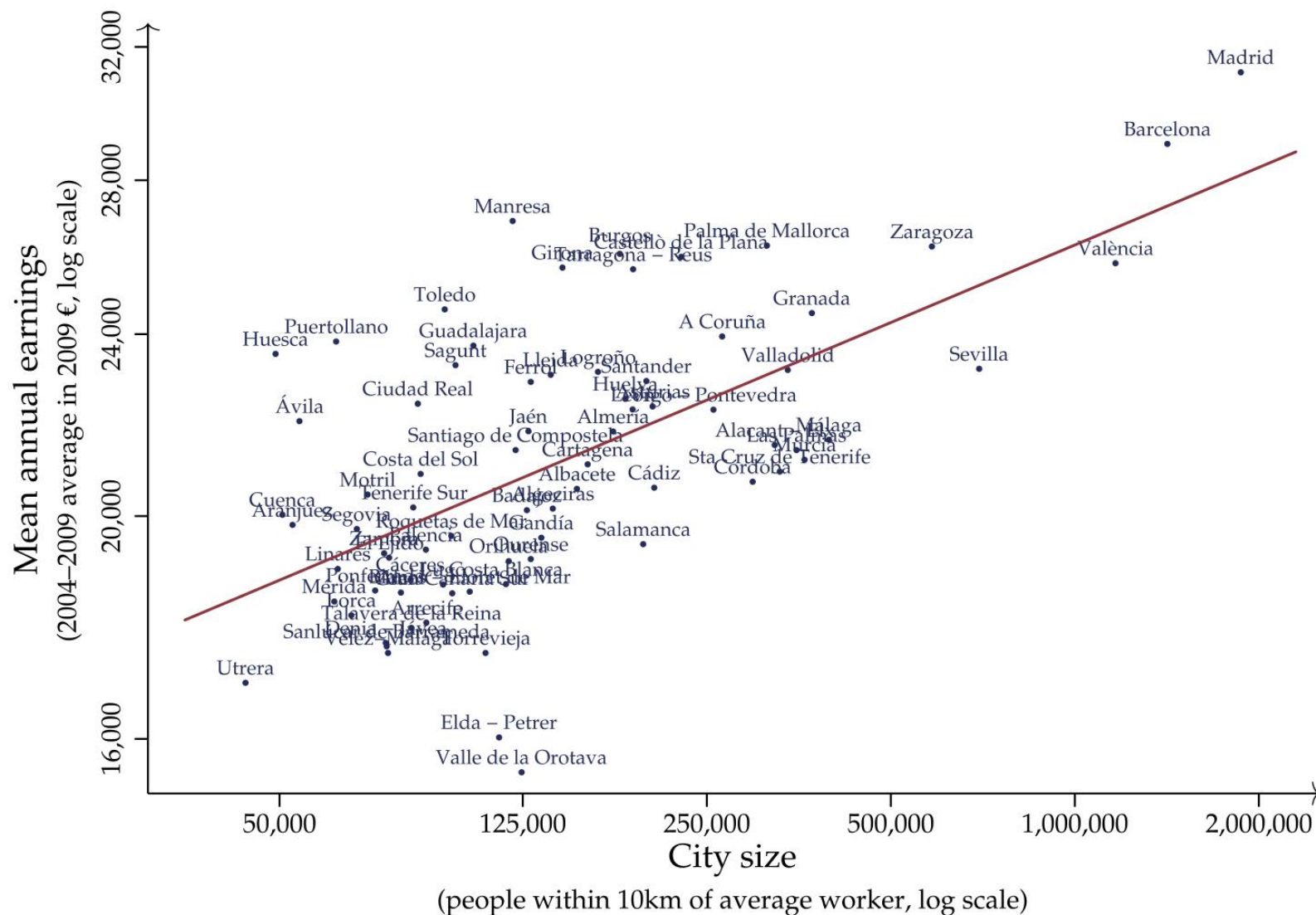
- We will discuss a handful of very recent topics in research in labor economics...
- ... and learn how to analyze them empirically.
- Each meeting has two parts:
 1. Lecture on motivation, theoretical background and empirical literature
 2. Hands-on empirical analysis, guided by prominent empirical study
- Assessment:
 - Pick one topic
 - Receive one research paper as baseline literature
 - Write a 15-20-page paper, explaining the paper's empirical approach, insights and contribution to the topic
 - It is highly recommended to go beyond the baseline literature and contextualize it within the field
 - Own empirical analysis using replication data is welcome but not mandatory
 - Preparation time: 7 weeks

Do minimum wage regulations reduce labor demand?



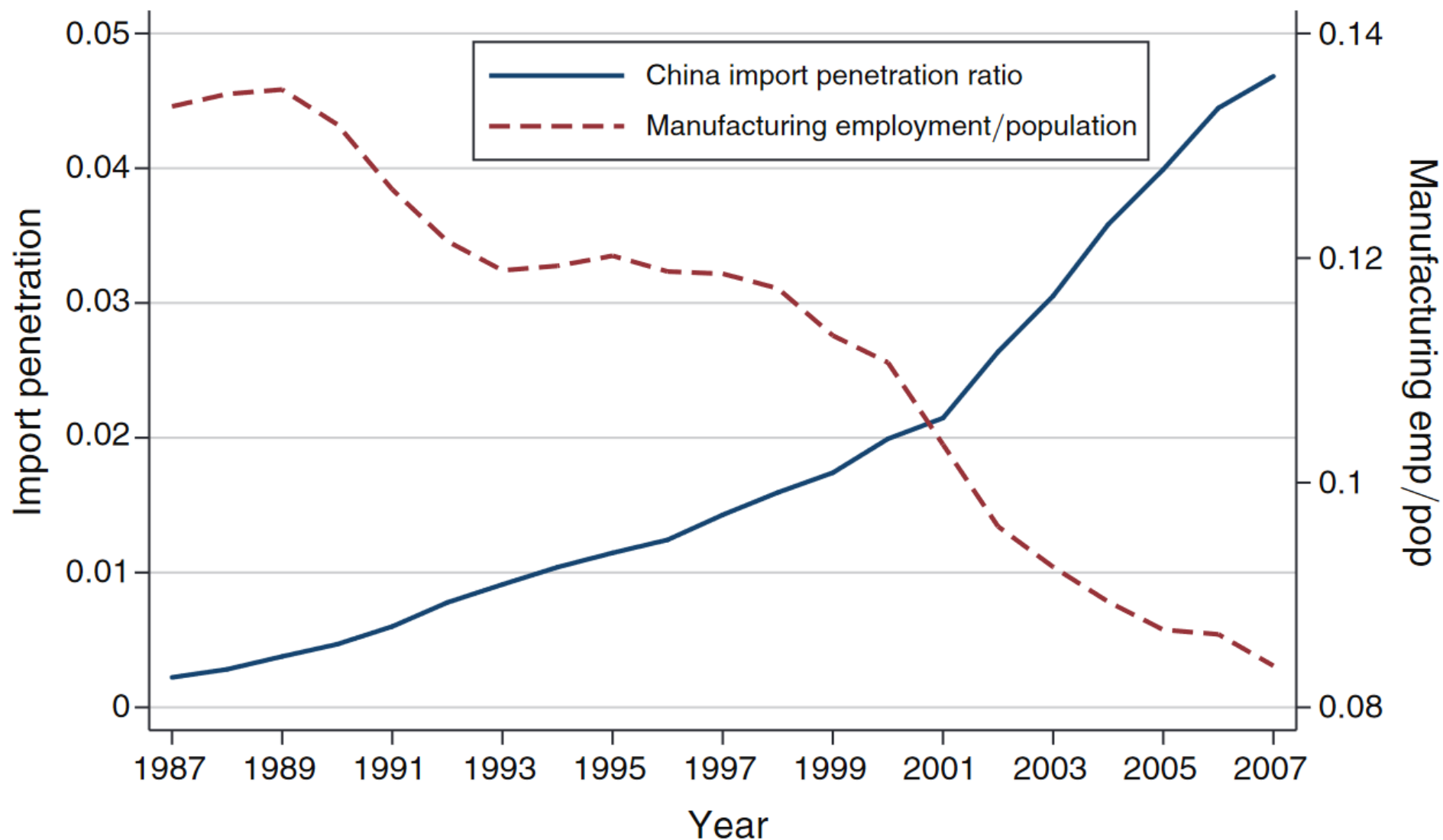
Source: Harasztosi/Lindner (2019)

Are workers and firms more productive if they are located in bigger cities?



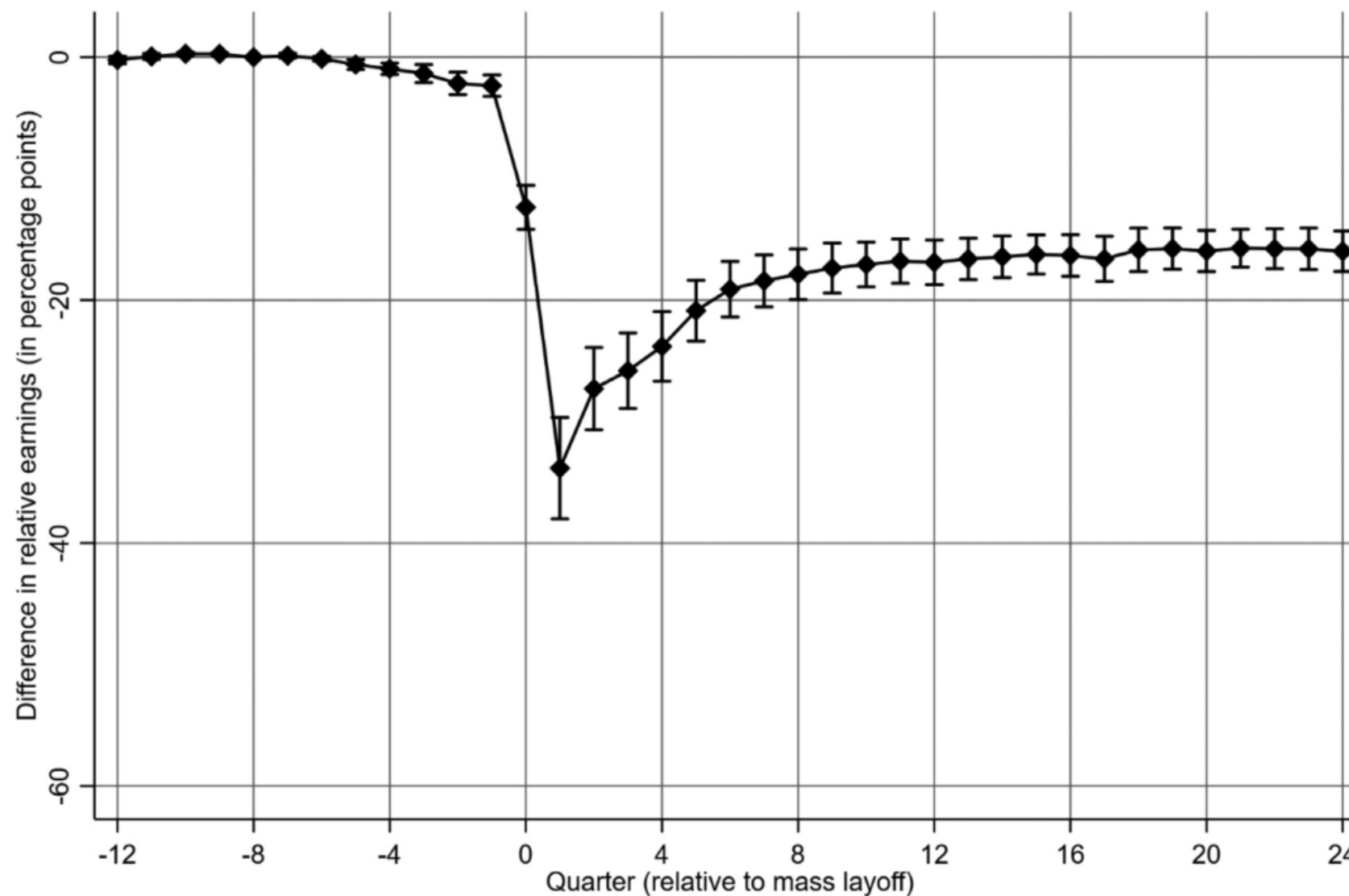
Source: de la Roca/Puga (2017)

What are the labor market effects of globalization?



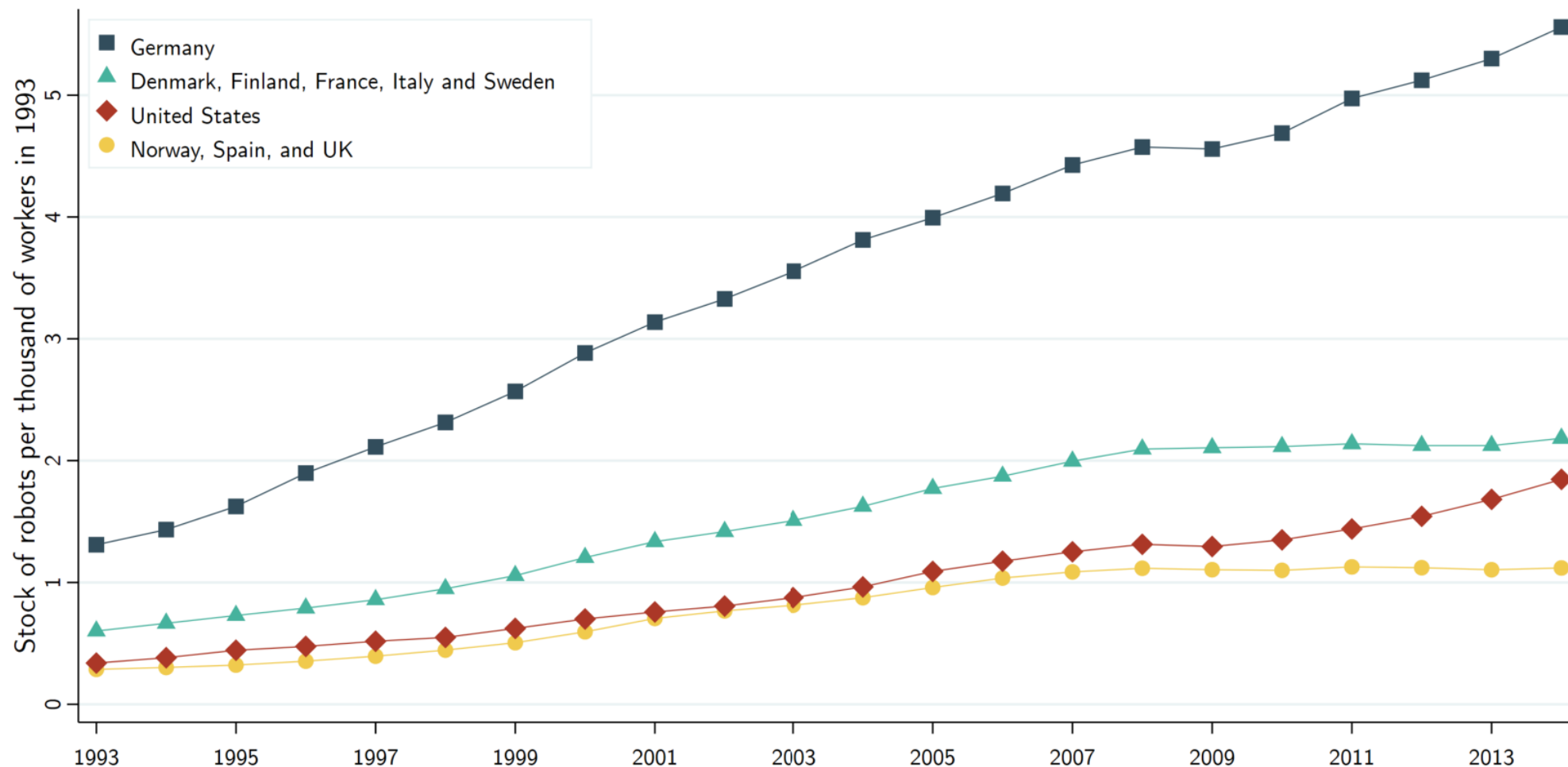
Source: Autor/Dorn/Hanson (2013)

What are the long term consequences of job loss?



Source: Blien/Dauth/Roth (2021)

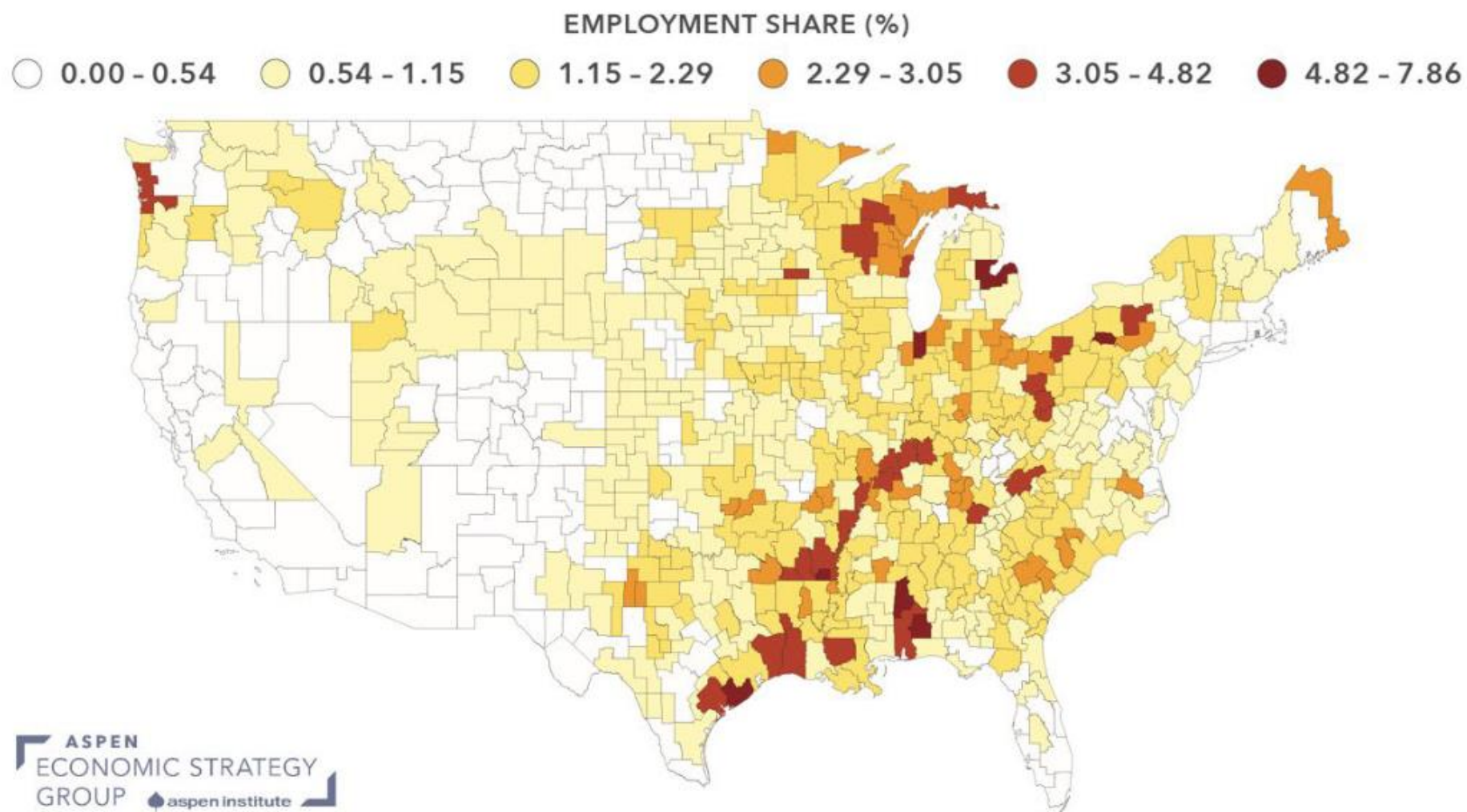
Does technological change destroy jobs?



Source: Acemoglu/Restrepo (2020)

How does transformation through decarbonization affect the labor market?

B. ENERGY INTENSIVE MANUFACTURING, 2019



Source: Hanson (2023)

1.6. Tips for the seminar thesis

Your task is to summarize a certain research topic in a way that the reader (e.g. a fellow student) is able to understand the main questions, problems, and insights.

Workflow:

- Literature review
 - What are the most relevant papers on this topic? How are they related?
 - Are there different streams of the literature? How are they related?
- Section on theory, conceptual framework, hypotheses
 - What are the economic mechanisms that are analyzed in the empirical analysis?
- Empirical strategy
 - How can we use data to analyze the topic/research question?
 - What are the pitfalls? What are the solutions?
 - Explain the *essence* of the research strategy on your own words.
- Empirical results
 - Include figures/tables from your preferred paper. Explain and discuss them in your own words.

- Conclusion
 - Briefly summarize the main results.
 - What are the main implications of the results?
 - What are the implications for society or policymakers?
- Introduction
 - Write the introduction last!
 - The introduction is extremely important. The first impression will stick in the reader's mind!
 - What is the topic of your thesis?
 - Why is it relevant? Why should the reader spend 30 minutes of her/his life reading it?
 - Give a preview on what methods are used and on the main results
- General advice
 - Your thesis should provide a value added by synthesizing the literature on the respective topic
 - Merely reproducing literature in your own words is not enough! Provide explanations and discussions.
 - An uninformed reader should not need to read the original papers in order to understand your thesis.
 - Your thesis should have a “red string” or leitmotif, i.e. a clear and logical structure
 - Write in a linear way but refer to insights from previous parts of your paper

Writing style

Frankly: Many theses I have read over my career were written horribly. It was an agony reading them and I have pity for the poor souls that now have to read those people's writings.

You can do better!!!

- Each paragraph should focus on one issue.
- Ask yourself: “What point do I want the reader to take away from this paragraph?” Make sure that this point is comprehensible and explicit.
- Only include statements from the literature that you are sure you have understood yourself.
- Build each of your arguments the way you learned in high school:
 - Statement
 - Reasoning
 - Example or evidence (citation!)
 - Implication / synthesis
- Paragraphs must be logically connected. Before moving to a different topic, write a transition.

Principles of good scientific writing

- Put yourself in the shoes of your reader
 - Focus on your reader! Do not assume any knowledge from your reader.
 - Write explicitly, avoid complex terminology.
 - Follow a clear logic. Avoid redundancies.
- Make your message clear to the reader
 - Do not get lost in detail
 - If you have little to say about something, then say little!
- Structure your paper for the reader
 - Good structure is crucial for a well-written paper!
 - Make clear headings/ sections/ topic sentences
 - Linearity: a to b, b to c, ...

Always keep in mind:

Writing a good thesis is work for the author, reading a bad thesis is work for the reader.

It should always be the author who has to do the work!

Working with literature

- If you have a relevant paper, the literature cited in that paper helps you to find further literature
- <https://scholar.google.com/> is your best friend!
- Mind the hierarchy of academic publications (in economics)
 1. Articles in refereed journals
 2. Books, book chapters
 3. Working papers
 4. Mimeographs / Grey literature
- Avoid non-academic sources:
 - Cite articles from newspapers (e.g., FAZ, SZ, NY Times, The Economist) only in your motivation
 - Avoid citing articles that target a non-scientific audience, e.g. IAB Kurzbericht, DIW Wochenbericht, ...
Often, they are based on an actual research paper!
 - NEVER cite from Wikipedia and similar online sources!
- Accessing literature:
 - Published articles are often behind a paywall. Many journals are licensed by the library → use VPN
 - If you still can't access the published version of a paper, download the free working paper version

How you should read a research paper

- Typical structure
 - Introduction, Literature
 - Theory, “Conceptual framework”
 - Data, Methods, “Empirical strategy”
 - Main results
 - Further results, robustness checks
 - Discussion, conclusion
- The introduction is the most important part! Usually it is enough to read the introduction to know:
 - The paper’s topic/context
 - Contribution to the literature
 - Research strategy
 - Main results
- In good papers, all tables and figures are self-explanatory and give the reader an insight on the results without reading the actual paper
- Gauge whether it is worth to read the whole paper just by looking at intro, figures and tables

Try to avoid the most common mistakes:

- Merely summarizing the base literature without providing any further explanation, interpretation, discussion, comparison to other results, synopsis etc.
- Not understanding the cited literature
- Not proving statements by arguments or citations
- Explaining relevant issues too cursorily
- Including paragraphs/sections that are completely irrelevant
- Bad style of writing (no transitions between sections, no logical connection between sections, long sections without any internal structure, incomprehensible structure and headlines, no connection between different statements, etc.)
- **Not reading the previous pages several times before and while writing your thesis**

Suggestion:

Ask your friend/sibling/spouse to have a look at your thesis and share her/his honest opinion.

Literature:

Acemoglu, D. and Restrepo, P. (2020): *Robots and Jobs: Evidence from US Labor Markets*, Journal of Political Economy, 128(6): 2188–2244

Autor, D., Dorn, D., and Hanson, G. (2013): *The China Syndrome: Local Labor Market Effects of Import Competition in the United States*, American Economic Review 103(6): 2121–2168

Blien, U., Dauth, W., and Roth, D. (2021): *Occupational routine intensity and the costs of job loss: evidence from mass layoffs*, Labour Economics 68: 101953

De la Roca, J. and Puga, D. (2017): *Learning by Working in Big Cities*, Review of Economic Studies 84(1): 106–142

Hanson, G. (2023): *Local Labor Market Impacts of the Energy Transition: Prospects and Policies*, HKS Working Paper No. RWP23-005

Harasztsi, P. and Lindner, A. (2019): *Who Pays for the Minimum Wage?*, American Economic Review 109(8): 2693–2727

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