

Academic Writing in Economics (PhD)

Lecture 2 - Writing Strategies

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Writing Strategies

Standard Empirical Econ. Paper - Order of Appearance

- ▶ Title
- ▶ Abstract, JEL Codes, Keywords, Acknowledgements (written last)
- ▶ Introduction (written last before abstract and title)
- ▶ Theoretical/Conceptual Framework
- ▶ Experimental Design/Data and Descriptive Statistics
- ▶ Empirical Framework
- ▶ Results and Discussion
- ▶ Summary and Concluding Remarks
- ▶ References
- ▶ Appendix

Writing Strategies

Theoretical Framework

- ▶ Paper's goal: does x cause y ?
- ▶ Begins with a theory of change
- ▶ Best to focus on a single important question you answer well
 - ▶ Does incentivised communication increase WTP for new technologies?
- ▶ You answer this question well using a credible identification strategy

Writing Strategies

Theoretical Framework

- ▶ How to change your theory of change into a proper theoretical framework?
 - ▶ The theory of change for your topic has been investigated by theorists
 - ▶ Borrow the theory of change and indicate your additions (modifications)
- ▶ The theory of change for your topic has not been investigated by theorists
 - ▶ Clearly state your theory of change
 - ▶ Can be mathematical or verbal
- ▶ It is always recommended to have one in an applied paper
 - ▶ Sometimes, editors and reviewers may force you to drop, reduce, or move it to the appendix.

Writing Strategies

Data and descriptive Statistics

- ▶ Source of data, when collected, by whom, sampling
- ▶ How was missing data handled?
- ▶ Is there attrition (for panel data) and how is it addressed?
- ▶ Introduces all the variables used in the paper
 - ▶ What they measure and how they measure
 - ▶ E.g., consumption expenditure - how collected, measured and adjusted for price differences
- ▶ Descriptive statistics of key variables - focus on the most important one, no more than a paragraph

Writing Strategies

Experimental Data

- ▶ Properly describe all aspects of the experiment:
 - ▶ Context: where and why the experiment was conducted? Do the authors have ethical clearance? Did they register the experiment and their preanalysis plan?
 - ▶ Sample Selection: how is the sample size determined (external validity)? Using power calculations?
 - ▶ Treatments and Timeline: what exactly the treatments are and how exactly assigned (internal validity), how many treatment arms, the timeline of the different stages of the experiment (pilot, baseline, midline, endline)
 - ▶ Descriptive statistics (+ nonparametric tools), randomization checks (covariate balance) and attrition
- ▶ Remember: a small mistake can ruin the project - make sure to show that you took the maximum care to avoid those!

Writing Strategies

Experimental Data

- ▶ Avoid using past tense and passive voice in description and results
- ▶ Avoid too many decimal points (max, 3) - rescale the variable if needed
- ▶ Provide mean and standard deviations (SD)
- ▶ Make tables look nice and tidy - add informative table notes

Writing Strategies

Empirical Framework

- ▶ Two components:
 - ▶ Estimation strategy: what is estimated, how it is estimated and how inference is done
 - ▶ Identification strategy: what feature of data allows for causal inference

Writing Strategies

Empirical Framework

Estimation Strategy

- ▶ The equations to be estimated
- ▶ Put control variables in a vector x , treatment variable D or T
- ▶ Use proper subscripts (i, j, k, l) etc..
- ▶ Latin letters = variables, Greek letters = coefficients

$$y_{ijt} = \alpha + \eta D_j + \beta X_{ij0} + \varepsilon_{ijt} \quad (1)$$

- ▶ y = outcome variable of household i in village j at time t , D = treatment variable in village j , X = a vector of explanatory variables, η = treatment effect, ε_{ijt} idiosyncratic error term
- ▶ Estimation method: (e.g., maximum likelihood, GMM, least square), how standard errors are estimated
- ▶ Hypothesis e.g., $H_0 = \eta = 0$, $H_A = \eta \neq 0$

Writing Strategies

Identification Strategy

- ▶ The source of how D causes y should be stated - e.g., experiment
- ▶ Sometimes, the coefficient may be biased, but still causality can be established
 - ▶ E.g., if D is randomly assigned, but measured with error - treatment effect biased towards zero because of attenuation bias
 - ▶ If $H_0 = \eta = 0$ is not rejected, we can establish a causal relationship, but the estimate is biased towards zero
 - ▶ We estimated the lower bound in absolute value of the true effect
- ▶ Identification can also be established using non-experimental methods (e.g., IV, DID, and RD methods)

Writing Strategies

Results and Discussion

- ▶ The most important, but the least read section (unless by reviewers, grad students, or authors working on a similar topic)
- ▶ Follows the following order:
 - ▶ Basic results, results adding controls,
 - ▶ Robustness checks - verifies that the results are not cherry-picked
 - ▶ Placebo or falsification tests
 - ▶ Changes in functional form
 - ▶ Treatment Heterogeneity
 - ▶ Mechanisms
 - ▶ Limitations/Caveats
 - ▶ Tables: properly titled, labeled, and provide important info, e.g no. of obs, R-squared, statistical significance, table notes, etc

Writing Strategies

Summary and Concluding Remarks

- ▶ Summary of what has been done
- ▶ Limitations: recap the key limitations
- ▶ Policy implications (if paper not done to make technical points): should originate from your analysis
- ▶ Implications for future research

Writing Strategies

Introduction

A very key section

- ▶ The title and abstract convinces your readers to read your intro
- ▶ The intro convinces your reader to read the whole paper
 - ▶ You win or lose your readers in the intro
 - ▶ Good intro - high rate of citation
- ▶ Spells out the “What”, “why” and “How” questions
 - ▶ What is the research question?
 - ▶ Why is it important?
 - ▶ How do you answer it?
 - ▶ What do you find?
 - ▶ What is the value added in relation to existing literature?

Writing Strategies

Introduction

The Outline: Evans (2020)

1. Motivate with a puzzle or a problem (1–2 paragraphs)
 2. Clearly state your research question (1 paragraph)
 3. Empirical approach (1 paragraph)
 4. Detailed results (3–4 paragraphs)
 5. Value-added relative to related literature (1–3 paragraphs)
 6. Optional paragraphs: robustness checks, policy relevance, limitations
 7. Roadmap (1 paragraph)
- ▶ Most papers in top journals follow this pattern
 - ▶ Helps readers grasp the whole paper easily

Writing Strategies

Introduction

Different types of motivations

- ▶ A big development problem and a specific aspect of that problem
- ▶ A major policy that many countries or other entities engage in
- ▶ A big debate in economics
- ▶ A striking resource mis-use

Writing Strategies

Introduction

The Motivation - Blumenstock et al. 2024 ReStat

“Approximately, 20% of the world’s population lives in countries affected by fragility, violence, or conflict (World Bank, 2011), and up to two-thirds of the world’s extreme poor will soon be in these settings (Corral et al., 2020). While substantial literature documents the positive relationship between conflict and poverty, investigations of the microeconomic mechanisms by which violence impedes economic development are more recent.¹ Such evidence indicates that conflict destroys capital (Davis & Weinstein, 2002; Miguel & Roland, 2011), deters investment (Besley & Mueller, 2012), changes economic decision making (Voors et al., 2012; Callen et al., 2014; Brown et al., 2019), and introduces new uncertainty over the future.”

Writing Strategies

Introduction

The Motivation - Herman & Oliver, 2023, JDE

“For many years, international trade and internet connectivity have been considered integral building blocks for connecting developing countries to the global economy and improving their economic outcomes. The positive impact of trade on growth and development has been well documented. In their survey of this literature, Harrison and Rodríguez-Clare (2010) note that trade helps to improve product variety, spread new technologies, increase competition, and improve productivity, among other potential benefits. As Engel et al. (2021) note, by connecting small firms and low-skilled or informal workers to global markets via e-commerce marketplaces and international supply chains, the internet can be an influential means of promoting growth through trade. In particular, these connections can help citizens in developing countries overcome poor transportation infrastructure and economic remoteness. There is also extensive evidence that

Writing Strategies

Introduction

The Motivation - Alem et al. 2023 JEBO

“Household-level decisions made by spouses - who often have different preferences and bargaining power - have significant implications for the welfare of all members of the household, including children. There is consistent evidence based on observational data from both developed and developing countries showing the differences in spending patterns between men and women due to differences in preferences. For example, Browning et al. (1994) and Phipps and Burton (1998) in Canada and Bourguignon et al. (1993) in France document that women have different spending patterns than men. Women in developing countries spend a larger proportion of their income on children's and household goods (Hoddinott and Had- dad, 1995) and children's health (Thomas, 1990), and micro-finance credits have a larger impact on household outcomes when women are the clients (Ditt and Khandker, 1998). In South Africa, pension income

Writing Strategies

Introduction

The Motivation - Zhang et al. 2017 JEEM

Over the past decade, a growing body of economics research has projected the impacts of climate change on important facets of well-being, such as agriculture, industry, human health, energy demand, and economic growth (Dell et al., 2014). Given the natural relationship between climatic factors and plant growth, the agricultural sector is thoroughly researched (Mendelsohn et al., 1994; Schlenker et al., 2005, 2006; Deschênes and Greenstone, 2007; Schlenker and Roberts, 2009; Welch et al., 2010; Deschênes and Greenstone, 2012; Fisher et al., 2012; Roberts et al., 2012; Lobell et al., 2013; Chen et al., 2015; Burke and Emerick, 2016). However, the majority of these studies focus on temperature and precipitation, largely ignoring other climatic variables such as humidity, wind speed, sunshine duration, and evaporation (hereinafter referred to as additional climatic variables).¹ Though

Writing Strategies

Introduction

The Research Question - state clearly, e.g.,

- ▶ “This paper examines the relationship between violence and the adoption of mobile money in Afghanistan. (Blumenstock et al. 2024 ReStat par 2)
- ▶ “In this paper, we seek to provide a thorough and contemporary assessment of the role of internet connectivity and digital policies in international trade and the ways in which they shape economic development.” (Herman & Oliver, 2023, JDE)
- ▶ “In this paper, we use a novel field experiment to investigate to what extent differences in preferences within couples, mainly driven by division of labor within the household, and spousal influence result in low willingness-to-pay for an important household durable
- ▶ “Therefore, this paper identifies the key climatic variables

Writing Strategies

Introduction

The Empirical Approach (the how) e.g.,

- ▶ “Specifically, we conduct a field experiment in which we offer these graduated microfinance borrowers..” (Bari et al. 2024, AER).
- ▶ “We collaborated with Tanzania’s largest saving and credit cooperative (SACCO), Women Advancement Trust - WAT SACCOS LTD - and randomly distributed the LPG gas stoves to households in Dar es Salaam through subsidy and on credit repayable in six months.” (Alem & Ruh. 2024, WBER).
- ▶ “Our experiment takes place in an important real-world context: agricultural extension services in developing countries.” (Beaman et al. 2021, AER)
- ▶ “Using the county-level agricultural data from 1980 to 2010 in China, we estimate and compare two models.” (Zhang et al. 2017, JEEM).

Writing Strategies

Introduction

The key results (the what you find) e.g.,

- ▶ Papers in top journals: 3-5 paragraphs
- ▶ Constitutes 25 - 40% of the intro
- ▶ Readers should be able to cite your paper after reading your intro

Writing Strategies

Introduction

The value added (the “what is your contribution?”)

- ▶ What your paper contributes above and beyond the existing literature
 - ▶ Don't just review the literature: highlight what your paper adds
 - ▶ See e.g., Blumenstock et al. 2024; ReStat, Alem et al. 2023 JEBO papers,

Writing Strategies

Introduction

The Optional Paragraphs

- ▶ Policy implications
- ▶ Limitations of the study and
- ▶ Mechanisms: important (recommended if they are clearly spelled out in the paper)

Writing Strategies

Introduction

The Roadmap

- ▶ Most papers in high-rank journals write it
- ▶ Some cleverly integrate with the whole intro (Carter & Lybbert, 2012 JDE)
- ▶ It is a convention, but at times, it sounds like unnecessary

Writing Strategies

Introduction

Final Thoughts

- ▶ The introduction is a very important section
- ▶ Editors and Reviewers often judge the entire paper based on the intro
- ▶ Follow the style of articles published in high-rank journals
- ▶ Devote a considerable amount of your writing time to it
- ▶ Ask yourself if the intro clearly tells what you did, what you find, and how you build on existing literature
 - ▶ Do not exaggerate your contributions!
 - ▶ Do not undervalue (or omit) other people's work - some of them will be your reviewers when you submit your paper to a journal!

Writing Strategies

References and Appendix

References

- ▶ Make sure all papers you cite in the paper are also listed in the list of references
- ▶ Make sure the citations are correct and consistent
- ▶ Learn how to use the LaTeX BIB - it takes care omissions and inconsistencies

Appendix

- ▶ Make it neat - with title and content pages
- ▶ All material (experimental instruction, additional robustness tables, maps etc..) of not first-order importance should be presented in the appendix

Writing Strategies

Abstract

- ▶ An abstract: a short summary of your research paper - 6-7 sentences, 150-200 words
- ▶ **Three purposes:**
 - ▶ Should offer the essence of the paper quickly - readers make the second decision to read/not to read your paper after reading the abstract
 - ▶ Prepare the reader to quickly capture the detailed information, analysis, and arguments in the paper
 - ▶ Helps readers remember the key take-aways from your papers
- ▶ Search engines and bibliographic databases use abstracts (also the title) to identify keywords to index your paper

Writing Strategies

Abstract

- ▶ The number of words in the abstract may be limited by the journal
 - ▶ AER and AEJ: 100 words (4-5 sentences)
 - ▶ QJE: 200 words (6-7 sentences)
 - ▶ JDE: 150 words
 - ▶ JEEM:
 - ▶ AJAE:
 - ▶ Exp Econ:
- ▶ Check these requirements in advance and make every word count!
 - ▶ It can be stressful (and you will likely make mistakes) if you are forced to reduce the number of words in the abstract during submission

Writing Strategies

Abstract

Tips: Evans (2020)

- ▶ (Often) Start directly with the research question and empirical approach
- ▶ (Sometimes) Start with one sentence of motivation before jumping into the research question and empirical approach
- ▶ (Almost always) Spend most of the space on a detailed discussion of the results
- ▶ (Sometimes) Include one sentence discussing the implications of the results

Writing Strategies

Abstract

Jump right to the research question

- ▶ “We run a field experiment offering graduated microcredit clients the opportunity to finance a business asset worth four times their usual borrowing limit.” (Bari et al. 2024, AER).
- ▶ “We distributed high-cost LPG stoves to urban households through subsidy and on credit in an RCT setup and measured their impact on charcoal consumption, CO2 emission, and cooking time.” (Alem & Ruh., 2024, WBER)
- ▶ “This paper examines how subsistence farmers respond to extreme heat.” (Aragon et al. 2021, AEJ: Econ. Policy)
- ▶ “This paper studies alcohol consumption among low-income workers in India.” (Schilbach 2019, AER)
- ▶ “This paper assesses the impact of internet connectivity and digital trade policies on trade and welfare (Herman & Oliver, 2023, JDE).

Writing Strategies

Abstract

Jump right to the research question

- ▶ “We evaluate a pedagogical intervention aimed at improving learning in elementary school children by fostering their curiosity. (Alan & Mumcu, 2024, AER)
- ▶ “We use a field experiment to identify how differences in preferences and spousal influence result in low willingness to pay (WTP) for technologies that can benefit all household members.” (Alem et al. 2023, JEBO)
- ▶ “This paper evaluates a randomized, over-the-phone counseling intervention aimed at mitigating the mental health impact of COVID-19 on a sample of 2,402 women across 357 villages in Bangladesh.” (Vlassopoulos et al. 2024, AEJ: Applied)

Writing Strategies

Abstract

Single sentence motivation

- ▶ “Almost all firms in developing countries have fewer than ten workers, with a modal size of one.” (McKenzie, 2017, AER)
- ▶ “Climate change shifts the distributions of a set of climatic variables, including temperature, precipitation, humidity, wind speed, sunshine duration, and evaporation.” (Zhang et al. 2017, JEEM)
- ▶ “Climate change is making El-Niños more frequent and intense. Therefore, understanding the effects of El-Niño-induced climatic events is essential to designing effective coping and adaptation strategies.” (Abebe & Alem, 2024, ERAE)
- ▶ ‘Fake news is a growing problem in developing countries with potentially far-reaching consequences.’ (Ali and Qazi, 2023 JDE)

Writing Strategies

Abstract

- ▶ Most of the abstract should describe the results - what you find and what you don't find
- ▶ Close abstract with a final sentence on the implications of the study (if you have space!)
 - ▶ A judgement call (in my view) - sometimes, you can reduce a sentence from the results and devote to the implications
 - ▶ Depends on your results as well - e.g., if it implies changing the way we do things

Writing Strategies

Abstract

Implications

- ▶ “this highlights the potential for welfare improvements through large capital injections that are financially sustainable.” (Bari et al. 2024, AER)
- ▶ “The findings suggest that access to micro-finance is the critical promising venue to promote energy transition and address the adverse effects of biomass fuel use. (Alem & Ruh. 2024, WBER)
- ▶ “This means that without proper targeting of information, the diffusion process can stall and technology adoption remains perpetually low. (Beaman et al. 2021, AER)
- ▶ “Our findings highlight the importance of considering the division of labor, preference difference, and spousal influence within the household when promoting the adoption of new household technologies. Improving access to cash for poor

Writing Strategies

Abstract

Full abstracts, e.g., ReStat

“We provide evidence that violence reduces the adoption and use of mobile money in three separate empirical settings in Afghanistan. First, analyzing nationwide mobile money transaction logs, we find that users exposed to violence reduce use of mobile money. Second, using panel survey data from a field experiment, we show that subjects expecting violence are significantly less likely to respond to random inducements to use mobile money. Finally, analyzing nationwide financial survey data, we find that individuals expecting violence hold more cash. Collectively, this evidence suggests that violence can impede the growth of formal financial systems.” (Blumenstock et al. 2024 ReStat)

Writing Strategies

Abstract - JDE

“Climate change shifts the distributions of a set of climatic variables, including temperature, precipitation, humidity, wind speed, sunshine duration, and evaporation. This paper explores the importance of those additional climatic variables other than temperature and precipitation. Using the county-level agricultural data from 1980 to 2010 in China, we find that those additional climatic variables, especially humidity and wind speed, are critical for crop growth. Therefore, omitting those variables is likely to bias the predicted impacts of climate change on crop yields. In particular, omitting humidity tends to overpredict the cost of climate change on crop yields, while ignoring wind speed is likely to underpredict the effect. Our preferred specification indicates that climate change is likely to decrease the yields of rice, wheat, and corn in China by 36.25%, 18.26%, and 45.10%, respectively, by the end of this century. Zhang et al. 2017, JEEM)

Writing Strategies

Abstract

Full abstracts, e.g., AJAE

How does income uncertainty affect individual well-being? Combining individual-level panel data from rural Ethiopia with high-resolution meteorological data, we estimate that mean-preserving increases in rainfall variability are associated with reductions in objective consumption and subjective well-being. Mediation analysis suggests that the estimated reduction in consumption does not fully explain the total effect on individual well-being. Increased rainfall variability also has a large direct effect on individual well-being. These findings suggest that the gains from further consumption smoothing are likely greater than estimates based solely on observed consumption fluctuations. (Alem and Colmer, 2022, AJAE)

Writing Strategies

Abstract

When do you write the abstract?

- ▶ Some researchers think about and spend time writing the abstract at the start of the project
 - ▶ Can sometimes be helpful in sketching the paper
- ▶ But I think it is best to write the abstract after writing the whole paper
 - ▶ You will have a much better information about the most important aspects of your paper after you wrote it!
- ▶ Conclusion: Bellmare (2020): “If your title is not repellent, and if your abstract is intelligible to people who are not experts in your field and to people in other disciplines, you have just expanded the scope of your citations tenfold, because whether one likes it or not, a lot of people cite stuff they have only read the abstract of.”

Writing Strategies

Title

- ▶ Very important part of your paper - readers make the decision to read/not to read your paper based on your title and abstract
- ▶ A title: A concise description of the contents of your research paper - should have the following objectives
 - ▶ Predict the content and scope of the paper
 - ▶ Should sound interesting (novel) to the reader
 - ▶ The human mind craves novelty!
 - ▶ Contain important keywords - useful for identifying it in keyword search

Writing Strategies

Title

General Guidelines - Katherine Bosworth, blog.mdpi.com

- ▶ **Describe rather than ask:** there is a tendency to use questions - can be greatly limiting
 - ▶ The top 5 most downloaded papers at BDMI have descriptive titles
- ▶ **Include key details:** arrange the important points from your article - practice explaining your research in a couple of sentences to family and friends - helps to arrive at better title
 - ▶ **Be as concise as possible:** should not be long and rambling (keep them 10-12 words)

Writing Strategies

Title

- ▶ **Use a wordplay or humour:** use clever phrases to attract attention and arouse curiosity
 - ▶ Be aware of cultural differences with some international readers
- ▶ **Make it more searchable:** keywords and acronyms used frequently in the field, and possibly outside of the field, have a greater impact
 - ▶ The keywords and acronyms should be related to your research findings and the contents of your manuscript
- ▶ **Have several options:** draft different titles, share them with co-authors and peers
- ▶ **My experience:** don't worry too much about your title until you make your draft paper public - the title may change continuously until publication

Writing Strategies

Title

Sample Titles

- ▶ How Research Affects Policy: Experimental Evidence from 2,150 Brazilian Municipalities (Hjort et al. AER)
- ▶ Identifying and Spurring High-Growth Entrepreneurship: Experimental Evidence from a Business Plan Competition (McKenzie, AER)
- ▶ Asset-Based Microfinance for Microenterprises: Evidence from Pakistan (Bari et al. 2024, AER)
- ▶ Violence and Financial Decisions: Evidence from Mobile Money in Afghanistan. (Blum et al. 2024, ReStat).
- ▶ Blame it on the rain: Rainfall variability, consumption smoothing, and subjective well-being in rural Ethiopia (Alem and Colmer, AJAE)
- ▶ Countering misinformation on social media through educational interventions: Evidence from a randomized

Academic Writing and Research Ethics

Course Organization

► End of Lecture