Clase 2: Estructurar y presentar un artículo de investigación en Economía

Seminario de Tesis PEG
Econ 4600

Ignacio Sarmiento-Barbieri

Universidad de los Andes

January 24, 2024

Agenda

1. Articulate the Argument
2. Communication Ground Rule
3. Why presentations?
4. Designing Slides
   - General Guidelines
   - Specific Tips for this Seminar (and all!)

Agenda

1. Articulate the Argument
2. Communication Ground Rule
3. Why presentations?
4. Designing Slides
   - General Guidelines
   - Specific Tips for this Seminar (and all!)

Articulate the Argument

What is your contribution?

Articulate the Argument

- Our one-sentence answer is the big idea for our research paper:
  1. It addresses the readers' concerns
  2. If it is correctly crafted, it prepares them to expect the details of our research

Articulate the Argument

R: Research question

- R is the research question your paper can claim to answer
- It has to be articulated in a way that appeals to its intended audience
- To appeal the audience, we will think of R as a question *they* might ask, and that the answer is in the paper.
- This allows them to recognize your paper as being relevant to their interests.

Articulate the Argument

R: Research question

- This takes time
- Trial and error
- A good idea is to keep a log, and ask others for feedback

Articulate the Argument

A: Answer

- While R links your argument to readers' concerns,
- A anchors it to what the paper actually delivers
- Think what is the main finding
  - Construct a summary about them: this is A
  - *The BIG PICTURE*, the higher-level idea

Articulate the Argument

A: Answer. Example 1

- Findings:

  I find that applying an R-filter to the Wong-Wolichski process cuts processing times by 20%. In addition, it provides a tighter range of values. The R-filter can also be applied to other Wong-Wolichski type processes.

Articulate the Argument

A: Answer. Example 1

- Findings:

  I find that applying an R-filter to the Wong-Wolichski process cuts processing times by 20%. In addition, it provides a tighter range of values. The R-filter can also be applied to other Wong-Wolichski type processes.

- A

  Applying an R-filter to Wong-Wolichski processes yields more precise estimates faster.

Articulate the Argument

P: Positioning Statement

- P is a single sentence that allows readers to picture the precise gap in the literature that a paper is directed to
- Allows readers to see why the paper is worth writing, given what is already known
- First step in articulating P is deciding how you want to position your paper in the literature:
  - "as the first paper to show X"
  - "as a new technique for getting X"
  - "as the policy implications of documenting X"

Articulate the Argument

P: Positioning Statement

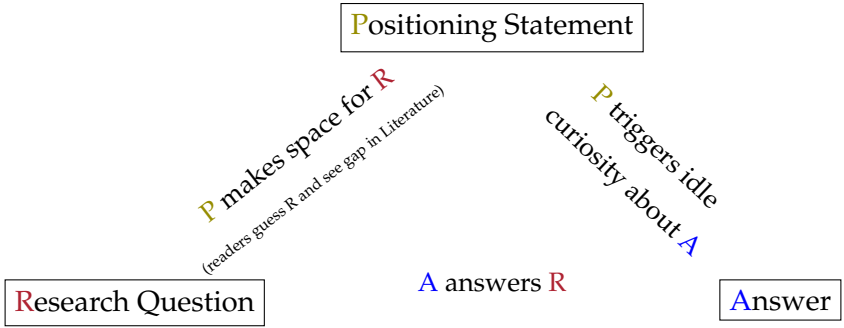
- Second step is articulating it:

  "The World Development Association is proposing to spend $ 20 million on X hoping it will boost Y, but we do not yet have evidence of a causal relationship between the two"

  Although most models assume X, empirical studies have increasingly documented the opposite.

Articulate the Argument

Your RAP



Ejemplo I

THE
QUARTERLY JOURNAL
OF ECONOMICS

Vol. 138 2023 Issue 3

AI-TOCRACY*

MARTIN BERAJA
ANDREW KAO
DAVID Y. YANG
NOAM YUCHTMAN

Ejemplo I

I. Introduction

Autocratic institutions have long been viewed as fundamentally misaligned with frontier innovation: autocrats' political and economic rents are eroded by technological change and economic growth; and incentives to innovate are stifled by threats and acts of expropriation under autocracy.

Recent scholarship, however, has suggested that artificial intelligence (AI) technology—considered to be the basis for a "fourth industrial revolution" (Schwab 2017)—may exhibit characteristics that allow an alignment between frontier innovation and autocracy. As a technology of prediction (Agrawal, Gans, and Goldfarb 2019), AI may be particularly effective at enhancing auto-

Ejemplo I

Empirical evidence supporting such a mutually reinforcing relationship is lacking. As a technology still in its infancy, there exists little systematic evidence on the political deployment of

Ejemplo I

In the context of facial-recognition AI in China, we present evidence that frontier innovation and an autocratic regime can indeed be mutually reinforcing. In addition to the economic importance and geopolitical stakes of this context, it is also particularly suitable for studying innovation under autocracy. Maintaining po-

Ejemplo II

The Size and Life-Cycle Growth of Plants: The Role of Productivity, Demand and Wedges.*

Marcela Eslava† John Haltiwanger‡ Nicolas Urdaneta §

February 10, 2023

Ejemplo II

1 Introduction

A prevalent feature of market economies is heterogeneity of firm and establishment size, growth, and a host of establishment attributes correlated with size (e.g., productivity, exports, survival). What are the sources of such heterogeneity, how does the answer matter for aggregate productivity and welfare? A crucial insight from the macro misallocation literature is that there are wedges (often referred to as distortions) impacting establishment size relative to what would be implied by establishment true productivity, and that this leads to aggregate productivity losses, especially in developing economies. Contributions in trade and IO have focused on how firm/establishment size is impacted by attributes such as demand (quality/appeal), markups, or costs, finding that idiosyncratic demand-side factors dominate.[1]

How do these findings relate to each other? Do wedges lie mainly on the cost or demand sides? What sources of heterogeneity across productive units are most harmful for aggregate activity and which are most enhancing, and how is that harm reflected in the size distribution of firms? We examine these questions by developing a unified conceptual, measurement, and

Ejemplo II

What determines the distribution of establishments in terms of size and life-cycle growth? How are those determinants related to aggregate productivity? We provide novel answers by developing a framework that uses price and quantity information on establishments' outputs and inputs to jointly estimate the demand and production parameters, and subsequently, establishments' quality-adjusted productivity, deriving both micro-level and aggregate implications. We find that the dominant source of

Agenda

1. Articulate the Argument
2. Communication Ground Rule
3. Why presentations?
4. Designing Slides
   - General Guidelines
   - Specific Tips for this Seminar (and all!)

Communication Ground Rule: Structure Matters!

A 1-percent decrease in X increases Y by 4.2 percent and causes a fall in A by 4.3 percent. There is a reduction in B by 8.6 percent. This is measured by the A-Y ratio. The model generates G observed in the data, suggesting a good fit. A 1-percent decrease in X only decreases T by 0.7 percent, implying that T is also as responsive in the model as in the data. Simulated and empirical slopes of C, measured by the correlation of Y with A, are identical at -0.89

Communication Ground Rule: Structure Matters!

The fit of the model is good along three dimensions. First, the model generates G as observed in the data. For example, a 1-percent decrease in X increases Y by 4.2 percent, decreases A by 4.3 percent, and decreases B by 8.6 percent. Second, T is as responsive in the model as in the data: a 1-percent decrease in X only decreases T by 0.7 percent. Third, simulated and empirical slopes of C, measured by the correlation of Y with A, are identical at -0.89.

Communication Ground Rule: Structure Matters!

- Take readers from a big idea to little details
  - Readers learn *as* they read when whatever they see *first* helps them to absorb what *follows*
  - Structure your writing to start with a big idea:
    - That is relevant to readers' concerns
    - That prepares them to expect the little details that follow

Communication Ground Rule: Structure Matters!

Take readers from a big idea to little details

- Bad Version:
  A 1-percent decrease in X increases Y by 4.2 percent and causes a fall in A by 4.3 percent. There is a reduction in B by 8.6 percent. This is measured by the A-Y ratio. The model generates G observed in the data, suggesting a good fit. A 1-percent decrease in X only decreases T by 0.7 percent, implying that T is also as responsive in the model as in the data. Simulated and empirical slopes of C, measured by the correlation of Y with A, are identical at -0.89

- Better Version:
  The fit of the model is good along three dimensions. First, the model generates G as observed in the data. For example, a 1-percent decrease in X increases Y by 4.2 percent, decreases A by 4.3 percent, and decreases B by 8.6 percent. Second, T is as responsive in the model as in the data: a 1-percent decrease in X only decreases T by 0.7 percent. Third, simulated and empirical slopes of C, measured by the correlation of Y with A, are identical at -0.89.

Structure Matters for Learning

- You can think the descending structure as a triangular form: big idea to little details
- Do not write research papers like mystery novels.
  - Writing a research paper in a mystery novel style is a recipe for failure.
  - This will most certainly annoy seasoned readers of academic research papers.

Agenda

1. Articulate the Argument
2. Communication Ground Rule
3. Why presentations?
4. Designing Slides
   - General Guidelines
   - Specific Tips for this Seminar (and all!)

General advise

- **Good ideas do not sell themselves**
- **Busy people often prefer communicating through presentations**
  - Reading is too time consuming.
  - Asking questions/interacting helps to understand new material.

Know what your audience cares about

- You are selling your research, which presumably you believe in.
- It is not dishonest to try to explain to others why you believe in it.
- You cannot sell ideas without understanding what your audience cares about and how they think.
- What is convincing to you may not convince others.

Agenda

1. Articulate the Argument
2. Communication Ground Rule
3. Why presentations?
4. Designing Slides
   - General Guidelines
   - Specific Tips for this Seminar (and all!)

Agenda

1. Articulate the Argument
2. Communication Ground Rule
3. Why presentations?
4. Designing Slides
   - General Guidelines
   - Specific Tips for this Seminar (and all!)

Don’t assume people know what you know...

- Don’t overestimate your audience.
- People cannot digest a lot of new material in one sitting.
- Much of what now seems obvious to you is not obvious and actually has to be spelled out.
- It is almost impossible to make a presentation too simple.
- People must feel they understand your work well enough to critique it.
  - They will not “buy” something if they feel they can’t evaluate it.
  - If they do not feel this, you are sunk.

...but don't try to show how hard you worked

- Really good ideas in economics are often obvious ex-post.
- But don't try to show how hard you worked.
- The only way to manage this problem is to frame the talk correctly.
- If you can make the idea feel obvious now but remind the audience why it wasn't obvious before, they will buy the idea, and they will buy it from you.

Agenda

1. Articulate the Argument
2. Communication Ground Rule
3. Why presentations?
4. Designing Slides
   - General Guidelines
   - Specific Tips for this Seminar (and all!)

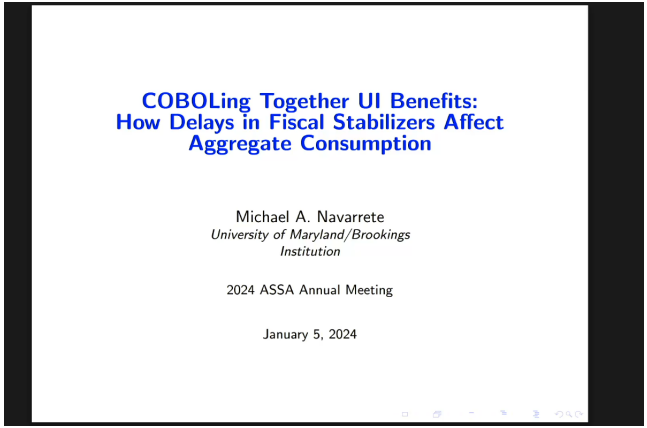
- There are two presentations throughout the semester: 20 min. and a 25 min.
- In economics we follow a structure

Structure of the presentation

- Presentations are usually organized as follows:
  - Title slide
  - Motivation (Hook/Positioning)
  - Clear Research Question (the research question could also be at the end of the motivation slide)
  - What this paper does - identification strategy in 1 sentence, data in 1 sentence, headline results (if you have some)
  - Contribution/Value Added/Antecedents/Lit Review
  - Data
  - Theoretical/Empirical Framework
  - The rest of the slides are going to be dependent on the needs of the individual presentation. “if in doubt, leave it out”

Structure of the presentation

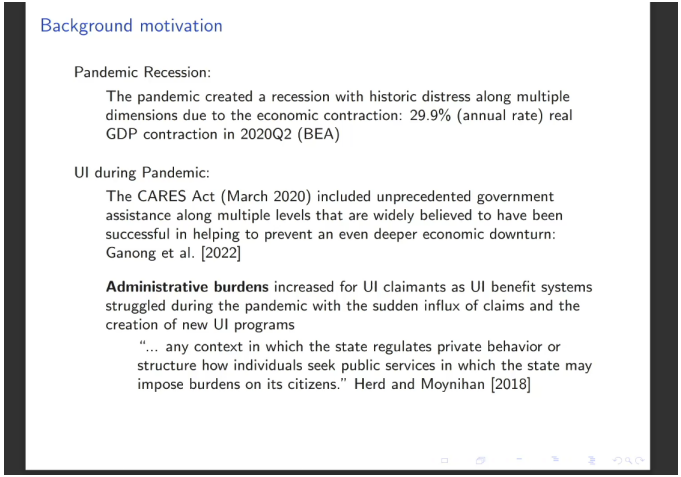
Example AEA Meetings 2024



Source:https://www.aeaweb.org/webcasts/2024/csmgep-dissertations

Structure of the presentation

Example AEA Meetings 2024

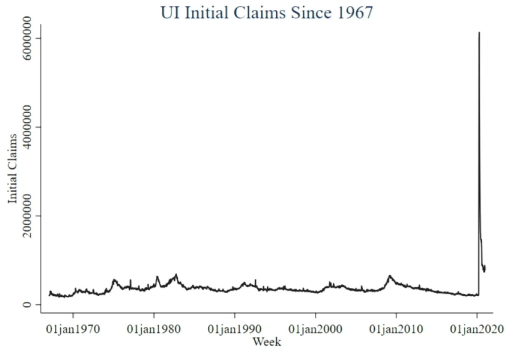


Source:https://www.aeaweb.org/webcasts/2024/csmgep-dissertations

Structure of the presentation

Example AEA Meetings 2024

Unprecedented Initial Claims



Source: DOLETA

Source:https://www.aeaweb.org/webcasts/2024/csmgep-dissertations

Structure of the presentation

Example AEA Meetings 2024

Research question

In this project, I examine how increased (counter-cyclical) administrative burdens to UI benefits during the pandemic hampered UI from functioning as a fiscal stabilizer

Focus on the following question:

How did aggregate consumption in COBOL states change relative to non-COBOL states from March 13, 2020 to December 31, 2020?

There are two likely channels that are driving the effect that I estimate:

- Delays in receiving UI benefits
- Discouraged Filers

Source:https://www.aeaweb.org/webcasts/2024/csmgep-dissertations

Structure of the presentation

Example AEA Meetings 2024

Preview of Main Findings

Using a two-way fixed-effects estimator, I estimate the average decline in consumption from March 13, 2020 to December 31, 2020 was 2.8 percentage points larger in COBOL states than in non-COBOL states

As a robustness check, I implement the Penalized Synthetic Control Method [Abadie and L'Hour, 2021] and find consistent results

Administrative burdens to UI hampered UI from functioning as a fiscal stabilizer (macroeconomic consequences of administrative burdens)

Two Potential Mechanisms:

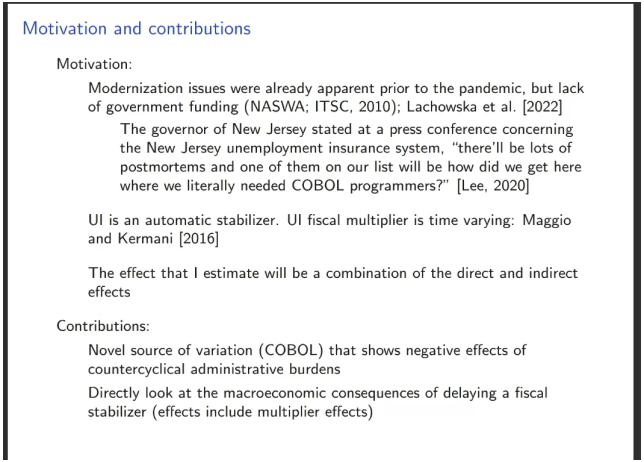
(Processing) Delays: I estimate that the share of claims whose processing was delayed by over 70 days rose by between [1.4-3.4] percentage point more in COBOL states relative to non-COBOL states

Discouraged filers: I find suggestive evidence that the increase in administrative burden for claimants in COBOL states led to additional discouraged filers

Source:https://www.aeaweb.org/webcasts/2024/csmgep-dissertations

Structure of the presentation

Example AEA Meetings 2024



Motivation and contributions

Motivation:

Modernization issues were already apparent prior to the pandemic, but lack of government funding (NASWA; ITSC, 2010); Lachowska et al. [2022]

The governor of New Jersey stated at a press conference concerning the New Jersey unemployment insurance system, "there'll be lots of postmortems and one of them on our list will be how did we get here where we literally needed COBOL programmers?" [Lee, 2020]

UI is an automatic stabilizer. UI fiscal multiplier is time varying: Maggio and Kermani [2016]

The effect that I estimate will be a combination of the direct and indirect effects

Contributions:

Novel source of variation (COBOL) that shows negative effects of countercyclical administrative burdens

Directly look at the macroeconomic consequences of delaying a fiscal stabilizer (effects include multiplier effects)

Source:https://www.aeaweb.org/webcasts/2024/csmgep-dissertations

Structure of the presentation

Example AEA Meetings 2024

Data: COBOL

COBOL Status:

- Personally gathered by emailing UI state agencies, news articles, and NASWA ITSC definition of modernized

Economic Tracker [Chetty et al., 2020] (Jan. 13, 2020-Dec. 31, 2020):

- Daily consumption data from Affinity Solution (Credit/Debit card spending) (7 Day MA)
- Daily COVID-19 cases and deaths from the New York Times COVID-19 repository (7 Day MA)

DOL Employment Training Administration (DOLETA)(Jan 2019-Dec 2020):

- Monthly state reports on delays of UI benefits (9050 Report)
- Monthly state reports on number of first UI payments (5159 Report)

Source:https://www.aeaweb.org/webcasts/2024/csmgep-dissertations

Structure of the presentation

Example AEA Meetings 2024

Summary Statistics

	Non-COBOL	COBOL
Relative Consumption	-5.44	-7.51
	(9.82)	(10.08)
Fraction Topcoded	10.74	13.23
	(12.93)	(16.27)
Relative First Payments (Ratio)	7.79	6.74
	(11.95)	(10.48)
New COVID-19 Death Rate	0.29	0.29
	(0.33)	(0.46)
New COVID-19 Case Rate	18.81	18.10
	(23.75)	(25.40)
Population (Thous.)	5,800.01	7,143.62
	(4,650.14)	(8,809.51)
Republican Vote Share (2016)	50.59	48.11
	(9.06)	(10.89)
Pct. Urban Population (2010)	72.56	74.38
	(13.72)	(14.90)
UI Generosity (Jan. 2020)	10,154.82	12,470.57
	(4,710.13)	(3,378.89)
Acc. and Food Services Inc. Share (2019)	4.14	3.70
	(2.40)	(1.46)
Pct. w/ Bachelor's Degree (2019)	31.23	32.90
	(5.09)	(5.32)
Pct. Population in Poverty (2019)	12.43	11.88
	(3.14)	(2.11)
Unemployment Rate	7.76	7.73
	(4.04)	(3.69)

Source:https://www.aeaweb.org/webcasts/2024/csmgep-dissertations

Structure of the presentation

Example AEA Meetings 2024

TWFE specification

My main specification:

$$Y_{it} = \alpha_0 + \beta_1 Post_t * Cobol_i + \beta_2 Post_t * X_i + \gamma Z_{it} + \phi_t + \psi_i + \varepsilon_{it}.$$

Y denotes relative consumption, share of topcoded claims, or relative increase in first payments

state i

day or month t

Post: binary variable for whether date is after March 13, 2020

COBOL: binary variable for states that use COBOL

X: State characteristics from before the emergency declaration such as the 2016 presidential Republican vote share

Z: set of controls such as new COVID-19 new cases and deaths

ϕ_t: day or month fixed effect

ψ_i: state fixed effect

Source:https://www.aeaweb.org/webcasts/2024/csmgep-dissertations

Structure of the presentation

Example AEA Meetings 2024

Event Study DiD specification

Weekly specification:

$$Rel\_Cons_{ik} = \alpha_0 + \sum_{k=-5}^{41} \beta_k Cobol_{ik} + \beta_{42} Post_t * X_i + \gamma Z_{ik} + \phi_k + \psi_i + \epsilon_{ik}$$

Rel_Cons denotes relative consumption in state i and week k

state i

week k

k: weeks relative to March 13th

$Post$: binary variable for whether the week is after March 13, 2020

$Cobol$: binary variable for states that use COBOL

X: State characteristics from before the emergency declaration such as the 2016 presidential Republican vote share

Z: set of controls such as new COVID-19 new cases and deaths in state i and week k

ϕ_k week fixed effect

ψ_i state fixed effect

Source:https://www.aeaweb.org/webcasts/2024/csmgep-dissertations

Restrict the number of slides and the material on each slide

- Put only the bare essentials on the main slides
- Use landscape and large font (can you read this?)
- Any software is fine (beamer, power point, etc.)
- Convey one message per slide
  - Summarize the message in the headline.
  - Use at most ten bullet points to deliver the message.
  - Restrict each bullet point to one line.

Plan to say everything that is on the slides

- If you don't plan to say it, then leave it out. Plan to say more than is on the slides
- I need 2–3 minutes to deliver one slide.
- I first say what is on it, then I explain and rephrase it, then I go beyond it.
- Where possible, graphs $>$ tables.

More: Extra Stuff

Extra stuff Back