Writing a research paper

Rómulo A. Chumacero

This note outlines guidelines for drafting a research document, applicable to term papers, academic articles, or theses. The document's development is structured around four key milestones:

- 1. First report
- 2. Second report
- 3. Third report
- 4. Final report

1 First report

This stage is crucial as it involves selecting the project's topic. It is highly recommended to choose a subject that genuinely interests or excites you. Engaging with a topic that you find enjoyable and that lacks trivial or obvious solutions can significantly enhance the research process. The proposal should address the following questions:

• What question are you aiming to answer? This stage requires defining the research question ("mystery") you aim to address. Specify the question or problem you seek to resolve as clearly as possible. While the question may not necessarily have an empirical answer, it should be grounded in economic theory. Potential sources of inspiration include topics discussed in courses, debates with colleagues, contemporary or historical events, inquiries posed by professors, or papers reviewed in previous courses that you believe were not adequately addressed.

- Why is this question significant or interesting? A crucial aspect of professional research is effectively "selling" or justifying the chosen topic and its methodology. At this stage, presenting data through figures or graphs that highlight a notable trend or a relationship lacking an obvious explanation can be sufficient to motivate the subject matter.
- What previous efforts have been made to answer this question? Given that topics are seldom unexplored, it is essential to compile, even if only partially, previous attempts to answer the question at hand.
- Why are existing efforts insufficient to address the question? Given that we are typically not the first to explore a subject, it is crucial to identify and discuss the shortcomings in the existing literature's ability to answer our question. Highlighting these gaps demonstrates the potential value of revisiting the subject.
- What is your approach to answering the question? It is essential to consider whether we possess the necessary background information to tackle the question and to have a preliminary idea of the methodology intended to be employed in answering it.

2 Second report

After defining the topic, the structure of the second report should be as follows:

• 1. Introduction: This section must succinctly summarize the five key points from the First Report. Begin the introduction by clarifying the objective of the research and the specific question it aims to address. Next, underscore the importance of the question and provide a review of existing literature, highlighting the need for further exploration. Discuss the methodology proposed to tackle the research question. Conclude with a paragraph that

¹ While some researchers opt for a dedicated section for the literature review, I favor incorporating it within the Introduction.

previews the tentative structure of the final document. Each paragraph must serve a distinct purpose; if a paragraph's meaning is unclear to you, it will likely be unclear to your readers as well. Revise it as necessary until you achieve clarity and conciseness in your language.

- 2. Theoretical motivation: Having a comprehensive theoretical framework is crucial for identifying key transmission mechanisms and formulating potential responses to a research question. Economic theory, as opposed to purely empirical research, offers the foundational motivation, core understanding, and explanation of an issue. This section could introduce either a simple or complex model, but it must convey the economic intuition behind the problem, potential solutions, and the factors influencing these outcomes.
- 3. The data: This section is intended to detail the database utilized, including presenting descriptive statistics and stylized facts. It should explain the construction of variables, the relationship between observed variables and their theoretical counterparts, and other relevant details.²
- 4. Methodological approach: This section should provide a comprehensive summary of the methodology to be employed in addressing the research question. It should justify the chosen approach, highlight its advantages, and discuss any potential challenges.

3 Third report

In the third report, you should include at least the following sections:

• 1. Introduction: Revise this section based on the feedback received from the previous report.

² Papers not directly engaging with databases can focus on advancing other aspects, such as calibration, among others.

- **2. Theoretical motivation**: Revise this section based on the feedback received from the previous report.
- **3.** The data: Revise this section based on the feedback received from the previous report.
- **4. Methodological approach**: Revise this section based on the feedback received from the previous report.
- 5. Preliminary results: Revise this section to incorporate preliminary findings achieved through the methodology you've proposed. It's vital that tables and figures within this section are designed to be self-explanatory, ensuring readers can grasp their significance without needing to refer back to the text for explanations regarding terminology, units, or other details. This section should also detail the specification and robustness tests conducted, demonstrating to the reader that the results have been rigorously analyzed, are reliable, and free from evident specification errors. If there are any, specify the corrective measures you intend to take. In presenting results, emphasize the importance of understanding their interpretation, scale, and economic relevance beyond mere statistical significance. The findings should logically connect to the theoretical framework discussed earlier, assessing whether they support the theoretical predictions or, if discrepancies exist, exploring potential reasons. This approach not only deepens the investigation into the problem but also offers an opportunity to refine and enrich the theoretical model based on empirical evidence.

4 Final report

The final report should adhere to the structure typical of an academic paper published in journals within the discipline.³

• Cover: The cover page must have:

³ For guidance, consult articles published on https://estudiosdeeconomia.uchile.cl/.

- 1. A title that is engaging, informative, and attention-grabbing.
- 2. Include a footnote with the title to express gratitude to everyone who assisted you, such as classmates, instructors, family members, etc. Be generous in your acknowledgments, recognizing that significant aspects of your work may have originated from discussions or suggestions by others.
- 3. Name of the author(s)
- 4. Include a footer with the author's details, specifying their institutional affiliation and email address.
- 5. An abstract that outlines the objectives, describes the work carried out, explains the methodology used, and results obtained.
- 6. Keywords: Select several phrases or keywords that will facilitate referencing and searching for the work.
- 7. JEL Classification: Refer to the Journal of Economic Literature's classification system for areas, topics, and tools. Include two or three (two-digit) codes that best encapsulate the essence of your work.⁴
- 1. Introduction: Revise this section multiple times, considering the feedback provided on the previous report.
- 2. Theoretical motivation: Revise this section multiple times, considering the feedback provided on the previous report.
- **3.** The data: Revise this section multiple times, considering the feedback provided on the previous report.
- 4. Methodological approach: Revise this section multiple times, considering the feedback provided on the previous report.
- **5. Results**: Revise this section multiple times, considering the feedback provided on the previous report.
- 6. Conclusions: This section provides a summary of the findings and concludes the study. It may offer policy implications derived from the research and, while not

5

⁴ https://www.aeaweb.org/jel/guide/jel.php

mandatory, discuss any aspects not addressed by the study, potential extensions, and other related considerations.

References: In every submission, it is essential to include the bibliographic references for all sources used. Always attribute credit by referencing when you adopt a model or concept that is not originally yours. Direct quotations from another author must be enclosed in quotation marks to avoid any impression of academic dishonesty, which can be perceived as a serious violation of academic integrity.

When citing a work, always include the author's last name and the year of publication in parentheses. For a single author, format it as Pérez (2011). If the work is co-authored by two individuals, cite it as Pérez and Soto (2012). For publications with more than two authors, use the format Pérez et al. (2016) in your in-text citations.

It's crucial to list all works cited at the end of your document. Omissions of cited authors from the reference list, discrepancies in publication years, or including works in the reference list that are not cited within the text are significant issues. Format references to journal articles as follows: Pérez, J. (2011), "The Importance of Water in Underwater Hunting," Journal of Aquatic Sports, 43(2), where the numbers denote the volume and issue. For books, use the format: Pérez, J. and D. Soto (2012), Saltwater Rules, Cambridge University Press. Cite unpublished works or working papers as: Pérez, J., D. Soto, and H. Zárate (2016), "It's the Water, Stupid," Working Paper 62, Wichita State University. When applicable, especially for materials that are not easily accessible, include the URL of the work.

• Annexes: You might include robustness checks, database construction, equation derivations, etc., in your work that, while not central, could be of interest to readers. These are typically presented in appendices, each labeled with a letter, such as: Annex A: Database Construction, Annex B: Proof of Theorem 4, Annex C: Robustness Checks for Various Specifications, Annex D: Additional Specification Tests.

A critical observation is the reality of how work is read. Time is precious, and often, the abstract and, if we're fortunate, the introduction are the first sections read. With even greater luck, the conclusions are reviewed, and possibly, the rest of the work is skimmed. Therefore, crafting a compelling abstract, introduction, and conclusion is vital. These sections are your chance to spark the reader's interest in delving deeper into your paper. Remember, effective writing often requires that you revise your introduction multiple times, with four to five revisions being a good benchmark. Revision and rewriting are essential steps in the writing process.

5 Suggestions for presentations

Here are some tips for your presentations:

- Carefully select the structure of your presentation and decide what to exclude.

 Value others' time by focusing on key points.
- Rehearse your presentation both alone and with peers. This practice will refine
 your understanding, improve your delivery, and prepare you for potential
 questions.
- Arrive at the presentation venue EARLY to ensure your presentation is functioning and loaded onto your computer.⁵
- Select colors, fonts, and font sizes carefully. Even an engaging topic can go unnoticed if it lacks visual appeal.
- Even if initially outside your comfort zone, incorporate humor or captivating anecdotes into your presentation. Often, the effectiveness of a presentation hinges on maintaining audience engagement and interest. Vary your tone of voice, use gestures, and emphasize key points. Should you find your audience disengaged or

7

⁵ For virtual presentations, ensure that you have the presentation loaded, confirm that the microphone and camera are operational, and endeavor to join the meeting a few minutes ahead of the scheduled time to avoid any delays.

- inattentive, it is your responsibility to capture their interest and encourage them to follow along.
- Select content for your presentation carefully, ensuring all information presented is coherent and meaningful. When incorporating figures, pay close attention to colors and shapes to ensure clarity and allow for succinct description. Tables introduced should be self-explanatory and easily visible from any location in the room. Avoid the frustration of presenting dense tables in small fonts with the disclaimer, "Although it cannot be seen clearly, this table proves that...".
- When faced with a question or observation, ensure you fully comprehend it. If needed, request further clarification. Avoid improvising or fabricating answers, as this can be easily perceived and diminish your credibility. If you lack a satisfactory response, it's advisable to note the question and acknowledge that you hadn't considered that aspect, promising to reflect on it for future revisions of your work. Embrace opportunities for questions and debates; these moments are invaluable for verifying your understanding, improving communication, and receiving feedback that can enhance your work.
- Remember, you selected the topic. Highlight its appeal. Reciprocate your audience's attention by offering them valuable insights in return. By presenting your findings, models, and methodologies, you're imparting new knowledge to your attendees. Ensure it is engaging.

6 Suggestions for comments

Here are guidelines for providing feedback on others' work:

• Usefulness. The role of an effective commentator is often misunderstood. Their purpose is neither to appease nor to criticize for the sake of criticism. Instead, their role is to assist and provoke thought. Use this opportunity to pose detailed questions about the subject matter, demonstrating that you have thoroughly engaged with the work.

- Begin with a summary of your understanding of the work's objectives, then proceed to make substantial comments on the core aspects such as the question, model, method, and tests. Effective commentary in this area will guide the authors on how to enhance their communication of the research question and what to concentrate on for a more comprehensive answer.
- If you identify issues related to form, such as writing or typographical errors, document them and communicate these findings directly to the author. However, avoid dedicating your public commentary time to these matters.
- Few experiences are as enriching as engaging in rigorous academic debates. These discussions enhance our capacity to provide insightful and constructive feedback. Recipients of such feedback should appreciate the effort someone has made to contemplate the challenges at hand and offer their advice and suggestions. If our points are not understood, it is our responsibility to clarify them effectively. A productive academic debate is characterized by respect, humor, and passion. Ideally, every good academic debate concludes with participants expressing gratitude for the new insights gained from one another, and, optionally, enjoying a good beer together.

Embrace the process and remember, this is among the most thrilling aspects of the profession!