Guidelines to Write a BA Thesis

Institute for International Political Economy
Vienna University of Economics and Business

1 General Information

1.1 Objective

The goal of completing a **bachelor's (BA) thesis** is to learn to independently write an scientific paper that addresses a specific research question. At our Institute, this implies the following: Finding a phenomenon that needs explanation; deriving a research question from this situation; coming up with three possible explanations; and finally applying these three explanations to the phenomenon to adjudicate which of them is the most convincing explanation.

Writing a BA thesis is required to obtain your BA degree. However, we hope to provide you with the motivation and the tools to write an oustanding thesis. We aim to help you write a thesis that fulfills your degree requirements and serves as a strong writing sample to help you obtain your first job.

You can propose a topic of your choice or select a topic suggested by a supervisor at the Institute for International Political Economy. The official language of our Institute is English but it is sometimes possible to write a thesis in German.

You will be awarded 8 ECTS credits for the BA thesis. The WU estimates that the workload for preparing the BA thesis is about 200 working hours, i.e. around 25 full-time working days.

1.2 Eligibility

We are happy to supervise BA theses as long as they meet the following requirements.

First, the topic of your thesis should be in the field of International Political Economy. Further, it should be related to the Politics of Money. That is, it should investigate how politics shape issues of investment, finance, trade, or debt and how these issues shape politics.

Second, the thesis cannot be merely a theoretical discussion but must include some empirical component. In other words, your thesis must feature both a theoretical argument (i.e., an explanation of a particular phenomenon) and an empirical component that allows for adjudicating how good your new explanation is in comparison to existing explanations for the same phenomenon.

Third, ideally, you should have taken at least one class with your supervisor. While exceptions can be made, it is strongly recommended that you are already familiar with your supervisor's work.

1.3 The Process

Please follow this process when writing a BA thesis at our Institute:

1. Identify a puzzle and derive a preliminary research question (see Section 2 for specific instructions). Write an initial email to our Institute to determine whether the puzzle is a good fit and choice. We will then schedule a meeting.

2. During this initial meeting, you will discuss and further develop your research question with a potential supervisor in our Institute. Feel free to ask for any clarification you may need regarding your BA thesis.

3. If you and your potential supervisor agree to move forward, your supervisor will officially register your BA thesis within the BACH system. You will be notified by email to your WU account that the thesis agreement has been registered. Following this, write your thesis proposal (see Section 3 and submit it to your supervisor. This document represents the plan for the content and timeline of your thesis. The proposal is just the initial plan, which can be subject to change.

4. Wait for your supervisor's feedback, and schedule a meeting to discuss your thesis structure if necessary.

5. Work on your thesis and contact your supervisor if you need help. Once your draft is complete, please submit it to your supervisor for comment. It is possible to schedule a few more meetings if need be.

6. Wait for your supervisor's feedback, and schedule a meeting to discuss if necessary. Incorporate any feedback into the final version of your thesis.

7. Submit your final thesis online using WU LEARN. Note that the system will automatically check your thesis for plagiarism at this stage.

8. Your supervisor will grade your thesis within four weeks of submission. You will be automatically informed of your grade by email. Finally, schedule a meeting with your supervisor if you'd like to receive final feedback.

2 First Step: The Initial Email

Your first contact should be an email to our Institute that outlines a potential puzzle and derives a preliminary research question.

2.1 The Puzzle

All significant research begins with identifying the variation you want to explain. Finding an interesting research question can be achieved by introducing a particular puzzle involving actors (such as countries, firms, politicians, etc.) that chose diverging paths when faced with the same situation. Identifying such a puzzle is critical, but it is also one of the most challenging aspects of research.

Puzzles concern variation in outcomes. For example, "Why did peace hold in Mozambique but not in Angola?". The outcome you are trying to explain (here, whether peace held) is the dependent variable. Examining cases in which your dependent variable actually varies gives you leverage to answer your question. You can identify factors that remained consistent in one set of cases (where peace held) but not in others (where it did not). These factors that might explain the outcome are independent variables.

Puzzles can include all kinds of apparent contradictions or paradoxes. They may arise from comparing two units of analysis, such as two countries that took divergent paths despite very similar preconditions. Puzzles may also arise by observing units of analysis over time, such as actors that suddenly change actions or strategies that seemingly contradict their previous behaviour patterns.

SOME EXAMPLES:

1. Colombia and Ecuador are two very similar neighboring countries. They are located in the same geographical region, have the same political system, same culture and language, same colonial history, etc. In 2013, China offered loans to both countries. Yet, only one of the countries, Ecuador, has accepted these loan offers while the other, Colombia, has explicitly rejected them.

2. Both Lithuania and Latvia joined the European Union in 2004. About a decade later, on January 1, 2015, Lithuania introduced the Euro as its new currency. While the European Union needed to approve this step, the initiative for introducing the Euro originated from the Lithuanian government. In contrast, the government of neighboring Latvia never asked the EU whether it could also introduce the Euro as its currency.

3. The majority of Nigerian provinces have populations that include both Muslims and Christians. Yet, instances of interreligious violence between Christians and Muslims do not occur in all provinces. Rather, violence seems to occur primarily in Jos, Barkin Ladi, and Riyom, but not in the neighboring provinces of Bassa or Bokkos despite a very similar ethno-religious makeup.

MOST COMMON MISTAKES:

1. Make sure that the outcome you are trying to explain actually differs across the units of your analysis. Proposing to explain why country A had a growth rate of 5.1% and country B a growth rate of 5.2% is not a good idea. In other words, the dependent variable must exhibit 'true' variation.

2. Make sure you compare two units of analysis (i.e. countries, firms, politicians, organizations, etc.) that are as similar as possible. Comparing the growth rate of Germany to that of Antarctica is not feasible, for example, but comparing Germany to France might be.

2.2   Research Question

In the next step, identify your research question from the puzzle. Developing the research question is typically straightforward if the puzzle has been identified correctly.

In the first step, you asked why one unit (firm, country, etc.) behaved differently than the other unit. In the second step, however, you must generalize your research question. Your generalized research question should focus on the variation in the dependent variable across many cases. In other words, you should create a research question inspired by your puzzle, but not narrowly focused on the initial two units of analysis.

Importantly, ensure that your research question is analytical, not descriptive. Descriptive research attempts to describe or identify what *is*, while analytical research attempts to establish *why* it is that way. Descriptive research uses description, classification, measurement, and comparison to describe what phenomena are. Analytical research usually concerns itself with cause-effect relationships.

You must propose an analytical, not descriptive, research question. As a general rule, 'why'-questions are preferable to 'how' or 'what' questions. For example, "How did the US international trade balance fluctuate during the past decade?" is an example of a descriptive research question. In contrast, "Why did the US trade balance continuously deteriorate while Canada's did not?" is an example of an analytical research question.

SOME EXAMPLES:

1. Why do some countries borrow from China while others do not? (Not: Why did Ecuador obtain a loan from China while neighboring Colombia did not?)

2. Why did some countries introduce the Euro while others did not? (Not: Why did Lithuania introduce the Euro while Latvia did not?)

3. Why does inter-religious violence occur in some locations but not others? (Not: Why does inter-religious violence occur only in Jos, Barkin Ladi, and Riyom, but not in Bassa or Bokkos?)

MOST COMMON MISTAKES:

1. Make sure you pose an analytical (as opposed to descriptive) question. The most fool-proof way to ensure your question is analytical is to ask a 'why' question. To stick with the previous examples, the following would *not* be appropriate research questions:

    (a) How did the debt portfolio of Ecuador and Colombia change over time?

    (b) What was the process by which Lithuania decided to introduce the Euro?

    (c) What does inter-religious violence look like in the Nigerian province of Jos?

2. Make sure that your research question is not pre-determined. For example, comparing one basketball team whose players are all 2,10 metres tall against another team

of 1,55 metres players and asking "Why does team A always win against team B?" is not meaningful. Your research question must capture a true *puzzle*.

3 Second Step: The Thesis Proposal

Your proposal should be no more than 2000 Words. It should embody your plan for the substance and writing timeline of your thesis. The idea is that the Thesis Proposal is worked out in such detail that writing your BA thesis is simply the execution of a well thought-out plan. Your proposal should contain the following sections:

3.1 A Puzzle

As noted in Section 2, working on your thesis begins with identifying the variation you want to explain. This can be achieved by introducing a puzzle involving actors that made diverging decisions when faced with the same situation. Please incorporate the feedback you received from your supervisor during the initial meeting when writing this section of your proposal.

3.2 Your Research Question

Again, as noted in Section 2, your research question should follow your puzzle. You must propose an analytic, not descriptive, research question for your thesis. As a general rule, 'why' questions are preferable to 'how' or 'what' questions. Please incorporate the feedback you received from your supervisor during the initial meeting when writing this section of your proposal.

3.3 Significance

You should explain why finding an answer to the research question would matter 'for the real world.' There is no point to social science if it comes up with answers that do not matter.

SOME EXAMPLES:

1. Understanding the motivation for why some countries obtain Chinese loans (but others do not) will help in assessing the likely effects that these loans will have on economic growth and development. Identifying the motives is key in predicting whether Chinese loans will help lift millions out of poverty or just increase corruption among the elite.

2. Many deadly wars characterise the history of Europe. At the core of the European Union is the idea that common economic policies will help bring lasting peace to Europe. Analyzing why countries follow these ideas (or do not) provides insights into the prospects of this approach.

3. Understanding what type of institutions mitigate conflict might help prevent inter-religious violence between Christians and Muslims. This, in turn, might inform the design of policy interventions by governments and foreign donors and increase the effectiveness of these interventions in reducing death and destruction.

MOST COMMON MISTAKES:

1. The importance of your research should pertain to broader societal issues. In other words, do not stick to the narrow topic of your thesis. For example, stating that "Understanding why some governments borrow from China is important because then we know why governments borrow from China" is meaningless. Instead, explain the implications of why it matters that we understand how governments make this decision.

3.4   Preliminary Overview of Existing Explanations

Please provide a brief summary of two existing plausible explanations for your research question. There is no need for a lengthy literature review at this point. However, we do want you to understand the current work that has already attempted to address this question.

Importantly, the plausible explanations should focus on your generalized research question. For example, assume that your puzzle concerns Kenya's has better environmental performance than Tanzania's. Consequently, your research question is, "Why is the environmental performance of some countries better than others?" Your literature review should not solely focus on academic research about Kenya and Tanzania. Instead, it should focus on possible explanations to the generalized research question of why *some countries* have better environmental performance *than others*.

3.5   Preview of Your Explanation

You should briefly introduce your (preliminary) answer to the research question. Here you outline your explanation as to why we observe the variation in the outcome. Importantly, you must make this argument first in the abstract ("I propose that factor X can explain why ABC happens"). Next, you should illustrate your explanation regarding the puzzle that motivated your introduction. For example, "Factor X was present in one country which is why it did ABC. However, factor X was absent in the other country, which is why it did not do ABC."

SOME EXAMPLES:

1. I argue that Chinese loans have distinct distributional consequences across different constituencies in the recipient country. For example, Chinese loans often fund specific infrastructure projects. These can provide job opportunities for workers, even if not all jobs go to locals. Consequently, I expect workers to be in favor of Chinese loans. In contrast, the domestic financial sector is likely to be negatively affected by Chinese loans. After all, domestic finance provided most funding for infrastructure projects in the past but now faces strong external competition. As a result, I expect the financial sector to oppose the government taking out Chinese loans. Against this background, I hypothesize that governments will implement the preferences of the strongest societal interest group. Consequently, if Labor is more politically influential than Finance, I expect politicians to borrow from China. In contrast, if Finance is politically stronger than Labor, I expect politicians to decline Chinese loan offers. I argue that this explanation can be applied to Colombia and Ecuador, where Finance is strong in the former and Labor is politically influential in the latter. This explains why Colombia turned down Chinese loan offers, while Ecuador accepted them.

2. My theoretical argument assumes that politicians respond to voters' preferences. Politicians will initiate the process of joining the Euro if the population wants to join the Euro. However, this implies that we need to explain popular opinion in some countries favors joining the Euro while popular opinion in others does not. I argue that a public discourse emphasizing the economic arguments for joining the Euro (such as ease of doing business and lower price levels) does not increase a population's willingness to join the Euro. Instead, I argue that public discourse stressing the historical dimensions of tighter economic integration (specifically, that tighter integration might imply a lower likelihood of wars between European countries) leads to higher support for joining the Euro. I argue that Lithuania's tumultuous history of wars with neighboring countries led to a public discourse highlighting the non-economic benefits of joining the Euro. In contrast, public discourse in Latvia focused primarily on the economic benefits. Consequently, this explains why there was not much support for joining the Euro in Latvia.

3. Previous explanations focused on the actions of politicians, as some might use inter-religious hatred as an electoral strategy. However, not all politicians in Nigerian districts use hateful language that could incite violence. To explain the differences among Nigerian politicians, I point to the differences in institutions. For example, some electoral laws might require two candidates from opposite ethnic and religious groups to run together on a joint ticket. In these cases, it is unlikely that the two candidates would use hateful language for electoral purposes, as their mutual electoral success depends on support from both ethnic and religious groups. In contrast, if electoral rules allow individuals to run on single tickets, hateful language might be an effective electoral strategy to rally one's ethnic and religious groups behind the candidate. I argue that the differences in inter-religious violence across Nigerian districts correspond to the differences in electoral laws. Specifically, laws in the districts of Bassa and Bokkos require joint candidacies, while electoral rules in Jos, Barkin Ladi, and Riyom do not. I argue that this explains relative peace in the former districts, while the latter experience frequent inter-religious violence.

MOST COMMON MISTAKES:

1. Make sure your summary of your argument is brief. There is no need to explain all the nuances of your argument. Leave this for the body of the thesis. Instead, focus on what is most important to give readers a general idea of your explanation.

3.6   Plan for Adjudicating Among Explanations

You should summarize the evidence you plan to use to examine which of the three explanations (the two existing ones and your original explanation) is most convincing. Your evidence may be a qualitative case study, a statistical analysis, a survey experiment, results of several focus groups, qualitative interviews, etc. Please confer with your supervisor regarding which empirical approach is appropriate for your topic and doable given your skill set.

3.7   Timeline

Please include a preliminary timeline for completion. Note that this timeline should suit your personal circumstances and goals and be realistic and doable. Also, note that

this timeline is preliminary – we understand that delays happen and things come up. Nonetheless, it is good to have a plan.

4 Third Step: The BA Thesis

4.1 Overall Structure of the Thesis

The thesis must include the following sections:

- **Cover sheet:** It is mandatory to fill out, date, and sign either the German or English cover sheet and submit it along with the BA thesis. Both versions are attached at the end of this document.

- **Abstract:** Your abstract should be a short write-up of no more than half a page. The abstract usually starts with a brief background to stress the importance of the thesis. It then states the research question, mentions the methods and data used to answer the question, and presents the main findings. The abstract usually ends with a few conclusions and policy recommendations.

- **Table of contents:** The manuscript must strictly follow the structure outlined in the table of contents. All section titles listed in the table must be present in the manuscript.

- **List of figures and tables:** List all figures and tables along with the page where they appear in the manuscript. Note that the manuscript must also include an introduction to all figures and tables. For readability, limit the number of figures and tables presented in the main text and use the appendix section for additional supporting material if need be.

- **List of abbreviations (if any):** Use abbreviations only if they improve readability. In the text, define each abbreviation at its first use and then use it consistently throughout.

- **Introduction:** The introduction describes your research topic with special emphasis on the specific research question your thesis will address. The introduction should closely follow your Thesis Proposal (see Section 3). It generally starts by introducing the puzzle you developed in your Thesis Proposal. It also demonstrates the importance of the research question. This section also explains what literature gap the research question fills and to which audience your thesis is relevant (e.g., policy-makers). Conclude your introduction by briefly describing the structure of your thesis.

- **Existing Explanations:** This section reviews existing explanations to answer the same research question that your thesis is attempting to answer. Note that Section 4.2 provides detailed instructions for developing and writing this section.

- **Your New Explanation:** Here you introduce your original explanation for the phenomenon encapsulated in the motivating puzzle. Note that your explanation must be new and distinct from the existing theories. Section 4.3 offers additional instructions for writing this section.

- **Search strategy or methods:** In the remainder of the thesis, your task is to determine which explanation is the most convincing. This requires empirical evidence. In this section, you transparently describe how you collected the empirical

evidence. In particular, the author must list the sources they used along with their search strategy. This section must describe your data collection procedure(s) and the data analysis techniques. This section is important for the reader to replicate the research and assess potential biases.

- **Empirical evidence or results:** Present the empirical evidence you found here. First, describe the sources you used (i.e., databases, newspaper articles, interviews, etc.) Next, use your evidence to test each theory's ability to explain your puzzle. The goal is to analyze which of these explanations is most convincingly able to explain the puzzle as judged by your evidence.

- **Conclusion:** This section restates the research question and summarizes your main findings, i.e., which explanation is most convincing and why. Highlight your paper's contribution to the academic understanding of the problem you worked on, but also acknowledge its limitations. Lastly, the conclusion should identify some policy recommendations based on your findings (i.e., if the third explanation is most convincing, then factor X is key. Policies A, B, and C are designed to strengthen factor X.).

- **Reference list:** You must quote all sources listed in this section in your manuscript and vice versa. Please use APA style.

- **Appendix (if any):** This section presents all supporting material (e.g., survey questionnaire) that was not included in the main text for readability.

- **Acknowledgment:** Mention any funding you may have received to conduct the research. Then thank people and organizations that provided support to you.

4.2 How to Write a Literature Review Introducing Existing Explanations

In your introduction, you found a puzzle and developed a research question. For example, you might have identified that Colombia and Ecuador are two neighboring countries that seem very similar. They are located in the same geographical region, have the same political system, same culture and language, and same colonial history. In 2013, China offered loans to both countries. Yet, only one of the countries, Ecuador, has accepted these loan offers while the other, Colombia, has explicitly rejected them. You consequently ask, "Why do some countries accept Chinese loan proposals while others do not?"

Most likely that you are not the first to investigate this research question; many other scholars have already attempted to provide an answer to this question, and that is fine. The purpose of this section is to identify the most convincing *types* of explanations and briefly summarize them.

To obtain an overview of the existing work on this research question (and how to best summarize it), I strongly recommend that you follow the process outlined below.

1. Find relevant journal articles or books

First, you must obtain an overview of the existing explanations that scholars have already proposed. One common approach is the following:

- Identify an 'anchor.' This involves identifying a journal article A that is *directly* related to your topic. This article should be a '99% fit'. Do not be satisfied with an article that only addresses your research question tangentially; rather, take your time to find a paper that tries to answer your exact research question (even if it uses different cases to motivate the question).

- Once you have found your 'anchor' article, you can use it to find additional relevant literature. First, 'go back in time.' This involves examining the work that the authors cite in article A. Finding the anchor paper might lead you to additional articles B and C that are also relevant.

- Second, 'go into the future' to find relevant articles. This involves examining papers that cite article A. One way to do this is to google the title of article A in scholar.google.com, and then click on the link "cited by XX" underneath the search result. This might lead you to identify articles D and E that might also be of relevance.

- Repeat steps 2 (going back in time = looking through references) and 3 (going into the future = looking for citations) for articles B through E to identify even more papers that speak to your topic.

2. Classify the journal articles

Step 1 should result in about 30 articles. Stop here – no need to read hundreds of articles. Read these articles and make notes on the different explanations the authors propose. Once you have a good idea of the explanations 'out there', classify these explanations into larger 'schools of thought.'

- For example, the explanation proposed in articles A and C might be pretty similar, as they both assume that analyzing the self-interested decisions of domestic

politicians can best explain the outcome. In contrast, articles B, F, and D focus on international actors and argue that their interventions produced the outcome you are interested in explaining. Lastly, articles E and G propose an institutional explanation.

- In short, classify the articles you collected by the *type of explanation* that they represent.

3. Evaluate the types of explanations

Step 2 should result in about 3 to 4 'schools of thought', each representing a different type of explanation found in multiple articles. Each of these schools of thought has strengths and weaknesses. The literature review should briefly address the shortcomings (as a way to introduce why your new explanation is superior to the existing theories, or at least a good complement).

- For example, you might find that institutional explanations are not well suited to explain the phenomenon you are interested in. After all, institutions are slow to change; once in place, they tipically remain for a long time. Yet, over the period under consideration, the behavior of actors changed multiple times. As the institutional context did not change, this type of explanation is less suited to explain variation in the dependent variable.

- You might also find that most explanations of an international phenomenon (say, international war) focus on international factors that might explain war. Those might be, for instance, migration flows across borders, security alliances between governments, or economic sanctions. In light of such a situation in the literature, you might argue that existing approaches ignore the role of domestic politics. Maybe there are some groups within the countries that might benefit from war, while others do not. Depending on the internal political dynamics, a country might declare war independent of possible international factors.

4. Write up

Now you can start writing your literature review. Make sure that you include the following points for each of the 'schools of thought':

- Shortly summarize the main argument of the school of thought (e.g., "It is all about self-interested politicians.").

- Introduce starting points and assumptions common to all articles following this approach (e.g., "This approach assumes that politicians are office-motivated, rather than working for their constituencies. Instead of accurately representing their voters, this approach suggests that politicians pursue their own goals. These might include ...").

- Explicitly describe the causal mechanism. Show how this school of thought assumes that a leads to b, resulting in c.

- Cite papers A and C as examples of the respective approaches to answering your question. Each citation should be accompanied by a single sentence summarizing the respective article.

- Provide evidence that the two units of analysis forming your research puzzle vary with respect to this factor — and that the dependent variable varies following this hypothesis.

MOST COMMON MISTAKES:

1. Do not simply list the different papers *A* through *F* without classifying them. The purpose of this section is for you to identify the underlying *types* of explanations. Grading will be based less on the number of papers your find but on the intellectual work required to identify commong starting points, assumptions, and patterns across the various articles.

2. Make sure to summarize the kind of explanation first, and only subsequently use articles *A*, *B*, and *E* as *examples* of the two *types* of explanations. Do not simply summarize the papers and leave it to the reader to identify commonalities across them.

3. The worst approach to writing a literature review is simply listing the articles, such as "Article *A* says X. Article *B* states Y. Article *C* notes Z." The literature review should consolidate existing work by identifying commonalities, not simply listing them.

4.3 How to Write a Theory Section Introducing Your New Explanation

Social science is about expanding the boundaries of knowledge. In other words, we are engaged in the business of finding *new* answers. The main reason for requiring a thesis at the end of your studies is to encourage students to transition from the role of a passive 'consumer' of existing ideas to that of an active 'producer' of new ideas. The literature review requires you to 'consume' the current literature, while the theory section will ask you to become a 'producer.'

In your literature review, you identified several types of existing explanations. In addition, your task was to identify potential shortcomings of these existing explanations. Your theory should attempt to fill at least one of the identified gaps. Importantly, it should also contain your *original* explanation that other scholars have not previously suggested. This third hypothesis has to be new - no other scholar must have ever proposed your explanation. Creating a new theory is a difficult task. However, this is the essence of (social) science.

The theory section should include two parts. First, you should outline your theoretical framework. Describe the fundamental assumptions that you make. For example, do you assume that leaders' individual decisions determine states' behaviour, or is the state primarily an area of contestation where politicians implement the preferences of the strongest interest group? Do you assume that actors are mainly motivated by economic facts and make decisions by rationally examining the expected utility of the various options available? Or are individuals driven by a logic of appropriateness that makes them adhere to moral and normative expectations, even if the resulting decisions are not technically rational? In this part, you should outline what overarching factors are likely to drive the explanation for your research question.

After outlining the theoretical context of your explanation, you must now derive specific observable implications of your theory. In other words, you must specify the causal mechanism that connects the independent variable you identified in your theory with the variation in the dependent variable. Outlining the causal rocess is key: Explain the proposed causal mechanism explicitly. Show how a leads to b, which in turn results in c.

In this context, you should also refer back to your motivating puzzle. Provide evidence that the two units of analysis forming your research puzzle vary with respect to this factor — and that the corresponding values on the dependent variable vary in accordance with this hypothesis.

Lastly, you will need to state your hypothesis in the clearest of terms using the following format:

> In comparing [unit of analysis], those having [one value on the independent variable] will be more likely to have [one value on the dependent variable] than will those having [a different value on the independent variable].

Most common mistakes:

1. There must be variation across the units of analysis in the independent variable. In other words, trying to explain the difference in growth rates between countries A and B with institutional quality being the independent variable, will not work when country A has good institutions and country B also has good institutions.

2. There must be a plausible connection between the variation on the dependent variable (DV) and independent variables (IV). Two patterns are generally acceptable:

   - If IV high, then DV high — if IV low, then DV low.
   - If IV high, then DV low — if IV low, then DV high.

3. The independent variable must be substantively different than the dependent variable. Hypothesizing that growth-promoting policies result in growth is redundant.

4. Make sure your hypothesis is a plausible answer to the research question.

4.4 How to Write an Empirical Section Introducing Your Evidence

Introduce and analyze the evidence collected to adjudicate among the competing hypotheses. Briefly tell the reader what you did (e.g. a qualitative case study, a statistical analysis, a survey experiment, etc.) and what findings you uncovered.

SOME EXAMPLES:

1. In this study, I conduct a 2x2 "most similar" case study comparing four countries, Ecuador, Peru, Colombia, and Bolivia. The analysis is primarily based on interviews I conducted with experts in Vienna in person. In addition, I also interviewed some individuals from Ecuador, Peru, Colombia, and Bolivia via Zoom. I find that the relative strength of societal interest groups matters. Chinese loans generally have positive effects on domestic Labor but adverse effects on domestic Finance. Consequently, politicians will implement the preferences of Labor (i.e. borrow from China) in countries where workers have greater political influence. This is the case in Ecuador and Bolivia. In contrast, countries in which Finance dominates typically do not borrow from China, as evidenced by politicians in Colombia and Peru turning down Chinese loan offers.

2. This thesis presents the findings of a survey experiment. Using a small survey of individuals in a pedestrian zone, I designed a survey experiment to understand how respondents' attitudes towards the introduction of the Euro varied if exposed to different information about the monetary, historical, and political aspects of the monetary union. I find that respondents become significantly more supportive of their country joining the Euro when exposed to information that tighter economic integration might imply lower likelihood of wars between European countries. In contrast, I find that merely providing economic arguments, such as improved efficiency or lower prices, do not increase respondents' support for the Euro.

3. To answer these questions, I collected monthly data on instances of inter-religious violence by coding Nigerian newspaper articles published between 2015 and 2022. I then combined these data with information on the ethnic composition of the population, the political dynamics, institutional characteristics, and the economic situation within Nigerian districts for this period. I subsequently analyzed how characteristics of the electoral system appear to be related to instances of inter-religious violence. I found that districts whose electoral rules require two candidates from different ethnic groups to run on a joint ticket are significantly less likely to experience inter-religious violence than districts that allow candidates from a single ethnic group to

run for office individually. This is likely driven by the fact that individuals in joint campaigns are less likely to use hateful language towards other ethnic groups, as this would undermine the electoral chances of both candidates.

Most common mistakes:

1. Make sure that your summary of your findings is short - no need to explain all details of your empirical strategy.

2. Ensure that you both present the data you collected (i.e. interviews, statistical results, etc.) and your interpretation of these findings. In other words, make sure you tell the reader what these data mean - they should not have to draw these conclusions themself.

4.5   Formatting Rules

Please follow these formatting rules:

- Language: English (but some supervisors at the Institute might accept German).

- Gender-neutral wording: Please follow WU's recommendations.

- Length: Approximatively 30 pages excluding the reference list and appendix.

- Page format: DIN A4, with 2.5cm margins.

- Font: Times New Roman in the font size 12pts. Please use font 10 for figures and tables.

- Line spacing: 1.5 lines.

- Alignment: Block text with syllable separation.

- Page numbers: Use Roman numerals for preceding directories. Use Arabic numbers from the introduction on.

4.6 Assessment Criteria

The main assessment criteria include:

- Identification and description of a puzzle

- Quality of the research question (analytic vs. descriptive)

- Clear articulation of the topic's significance.

- Knowledge of the relevant literature. Appropriate identification and summary of existing explanations.

- Plausibility and originality of your explanation.

- Quality of the evidence presented to adjudicate among competing explanations.

- Independence of work, which clearly separates your arguments from content taken from other sources. In particular, you must specify all sources to avoid plagiarism.

- Coherence of the thesis structure, which focuses on addressing the research question throughout the thesis.

- Logical consistency of the arguments provided throughout the thesis.

- Objectivity of the argumentation. The conclusions must be justified by evidence and your opinions clearly separated from facts.

- Correct language use, grammar, and orthography.

- Correct citations

5 Examples

5.1 Investor Friendliness Across Countries

5.1.1 Initial Email

Indonesia and Malaysia are two comparable countries. In terms of geographical location, both are neighboring countries in Southeast Asia. They share cultural roots, partly because both were shaped by a history of colonization at the hand of European powers (Richardson 2007). Similarly, the common colonial legacies resulted in a similar set of political institutions that do not vary much with respect to their form and quality (Acemoglu and Smith, 2017). Both countries obtained independence at roughly the same time after the second world war. In addition, they were historically exposed to very similar economic factors, as both countries lie along prominent trade routes that connected East Asia to the rest of the world. Today, this fact provides both countries with similar access to trade and opportunities for economic liberalization (Albrecht 2012). In addition, both countries are also similar in resource endowments. For instance, the U.S. Energy Information Administration (2016) indicates that proven crude oil reserves in Indonesia are at 3.7 billion barrels while Malaysia currently has about 3.6 billion barrels. Importantly, Sovacool (2010) found that both Indonesia and Malaysia have managed to circumvent the resource curse, indicating that the natural resource endowments of both countries have not been detrimental to the growth of both countries.

Given these similarities, many observers expected Indonesia and Malaysia to follow parallel development trajectories. However, this was not the case. Rather, the economic development of both countries diverged over time, resulting in significant differences today. This is particularly the case for investment friendliness, which is the basis of economic growth. Malaysia is significantly more investment friendly than Indonesia, ranking higher than Indonesia in registering property, getting credit, and paying taxes among other topics. As a result, the World Bank (2017) ranks Malaysia 24th in the world for ease of doing business, while Indonesia is ranked 72nd. Data from the UN Conference on Trade and Development (2017) further indicates that inward FDI stock in Malaysia accounted for 41% of GDP and only 25.2% in Indonesia in 2016.

The divergence between Malaysia and Indonesia represents a puzzle: Why is Malaysia able to develop a more investment-friendly economy when Indonesia, endowed with similar oil reserves, geographic location, and colonial history, lags significantly behind Malaysia in terms of investment friendliness? For this reason, my research paper will attempt to answer the following research question: Why are some countries more investment-friendly than others?

5.1.2 Thesis Proposal: Example Significance

The similarities noted above represent ceteris paribus conditions. This implies that explanations based on factors such as geographic location, colonial history, institutional quality, exposure to trade, and resource endowments do not apply: As Indonesia and Malaysia do not differ with respect to these factors, they cannot explain the observed differences in investment friendliness. This begs the question of what alternative explanations might exist that *can* explain the divergence. Finding answers is important for two reasons. First, the business friendliness of Malaysia's economy and the resulting disparity between the economic progress of both countries resulted in significant differences in GDP per capita

between the two countries. The IMF (2017) indicates that the GDP per capita in Malaysia is 10,490 USD, while Indonesia's is less than half of that, at 4,120 USD. This implies that my study might allow policy makers to identify the factors that inhibit economic growth in Indonesia — with potential consequences of lifting millions of people out of poverty. Moreover, this research can provide examples of beneficial practices in the economic development of resource-rich countries that will enable the evasion of said hurdles, providing investment security and economic stability. Second, answering the research question also has significance beyond the two cases that motivate my research question. The academic literature has provided several potential explanations for differences in investment climate. They primarily focus on differences in political institutions, specifically in the quality of institutions, differences in exposure to international trade, or differences in natural resource endowment. However, none of these explanations apply to my cases as Indonesia and Malaysia do not differ with respect to these potential factors. The puzzle identified in this paper represents a challenge, as it points to a gap in the existing literature. Due to their similarities in culture, geography, and resource endowments, possible hypotheses explaining the divergences in Indonesia's and Malaysia's economic development can be vital in identifying beneficial developmental practices.

5.1.3   Thesis: Example Literature Review

The divergence between Malaysia and Indonesia represents an interesting puzzle: Malaysia was able to develop a more investment friendly economy than Indonesia, even though both countries are endowed with similar oil reserves, geographic locations, and colonial history. For this reason, my research paper will attempt to answer the following research question: Why does Indonesia lag behind Malaysia in terms of investment friendliness? More generally, why are some countries more investment-friendly than others?

A number of existing studies have examined the determinants of differences in investment climate. One prominent type of explanation focuses on the quality of political institutions. Institutions are defined as the 'rules of the game' (Nordhaus, 1993) that govern the economic interactions between actors. As such, explanations based on institutional arguments make the assumption that institutions can shape the incentives of individuals, for example, by generating trust between market participants (Ross, 2003) or providing parties with legal recourse in case of disagreements (Mahane, 2014).

The causal mechanism underlying this type of explanation is straightforward. Good institutions provide good rules of the game, making for a good 'game' between market participants. Specifically, good institutions have two effects. First, they foster transparency, and because of transparency market participants are more likely to have relevant information and less likely to cheat. Second, they provide enforcement mechanisms - such as the rule of law, a judicial system, and the like — that allow parties to obtain their rights after a deal has been completed. As a result, good institutions generate trust among market participants because they positively affect the precondition for business as well as allow for legal recourse should a transaction go wrong.

With respect to my research question, therefore, good institutions foster a more dynamic business environment and heighten investor confidence, encouraging both private and foreign investments. Good institutions include an efficient regulatory environment, protection of property rights, and the overall effectiveness of the government. These qualities minimize political and regulatory risks for investors, thus cultivating a more welcoming market for investments. A number of studies utilize this approach. For example, Daude and Stein (2007) found that deterrents to foreign direct investments include excessive

regulations, unpredictable policies, and insufficient property rights protection. Similarly, Waheed (2015) stated that advancements in the rule of law encourage domestic private investment both in the short run and long run. Furthermore, Morrissey and Udomkerd-mongkol (2011) found that good governance and political stability increase private and foreign investments across a sample of developing countries. Differences in institutional quality are therefore a possible explanation for the divergences in business environment.

This explanation could potentially explain the differences between Malaysia and Indonesia. The World Bank's Database on Political Institutions offers quantitative information on the quality of countries' institutions. It shows that, on average between 2014 and 2017, the average score of Indonesia's institutions was only 34.7 while the average quality of Malaysia's institutions was 76.3 for the same period. As a result, Malaysia may have a better business environment than Indonesia because it has higher institutional quality.

A second type of explanation focuses on domestic financial market conditions as likely determinants of investment friendliness. This approach assumes that economic inputs matter for investment decisions. In addition, it assumes that it is the price and availability of local financial products that determine whether an investor will decide to invest in a particular geographical location, while foreign financial market conditions do not enter the equation.

The causal mechanism suggested by this approach suggests that better availability of financial resources establishes the necessary preconditions for investment as they lower the prices of financial inputs. In addition, a functioning domestic financial market also facilitates the process of investing as it represents a venue for information exchange and allows market participants to meet. Potential investors with easier access to credit are more likely to invest as the forum itself reduces uncertainty.

As a result, a number of studies have shown that good financial market conditions will encourage and attract investments. Jongwanich and Kohpaiboon (2008) found that shortages in credit availability deterred the recovery of Thailand's private investment sector after the great recession of 2007-2009, indicating that the availability of credit serves as an important determinant of domestic private investment. Additionally, Ibrahim (2011) found that rising real stock prices correlate with increasing aggregate investments, while stock price volatility correlates with decreasing aggregate investments, inferring that a healthy and stable financial market encourages investment. Ndikumana's (2000) research took on a broader perspective on the effects of financial market conditions, finding that higher development in the financial sector leads to higher domestic investments by analyzing a variety of financial indicators for financial development across sub-Saharan Africa. Therefore, differing financial market conditions across countries can account for differences in investment environment.

This explanation provides a plausible explanation for the differences in investor climate in Indonesia and Malaysia. Data from the International Monetary Fund's 'International Financial Statistics' shows that average interest rates on bank loans (one of the primary measures of capital availability to local companies) in Indonesia were at 4.6% between 2014 and 2017, while the prevailing interest rates in Malaysia amounted to 8.5% on average for the same period of time. This implies that access to finance was more difficult in Malaysia than in Indonesia, which could explain why Indonesia's investor friendliness is superior.

5.1.4   Thesis: Example New Explanation

I propose a third, new, explanation for differences in investment climate across countries.

I argue that the magnitude of government-sponsored fuel subsidies can also determine the investment friendliness of a country. I propose the following causal mechanism: High government fuel subsidies take away from spending on national public goods, deterring growth and development that can lead to the establishment of a business-friendly domestic market. For this reason, I hypothesise that higher government fuel subsidies will likely correlate with lower investment friendliness.

There is prima facie evidence that this mechanism may operate in Indonesia and Malaysia. Recall that the former has a worse business investment climate than the latter. According to my hypothesis, this should be the case because Indonesia provides significantly more fuel subsidies than Malaysia. Data from the International Energy Agency in 2016 indicates that energy subsidies in Indonesia lie at about 11,212 million USD while Malaysia's is at 511 million USD. Therefore, it is possible that this disparity can explain the differences in investment friendliness in that higher government fuel subsidies is indicative of a worse business environment.

In summary, possible explanations of differences in investment environment can be explained by country-specific institutional quality, financial market conditions, and government fuel subsidies. Specifically, I will examine the relative merit of three competing explanations:

- In comparing countries, countries with better institutions are more likely to be more investment-friendly than those with bad institutions.

- In comparing countries, countries with more robust financial market conditions will likely be more investment-friendly than those with less developed financial market conditions.

- In comparing countries, countries with less government fuel subsidies are likely to be more investment-friendly than those with more government fuel subsidies.

5.2   Solar Investment Across Indian States

5.2.1   Initial email

Punjab and Haryana are two states in India that are comparable. Punjab is located in the northwestern part of the subcontinent and is bordered by Haryana to the south and southeast. Their shared geography allows for identical climate and land conditions. In its current state, Punjab came to exist in 1966, when most of its Hindi-speaking areas were divided to form the new state of Haryana. For this reason, Haryana's culture is heavily influenced by Punjab. The states' respective sizes and populations are similar as well. Both claim a shared capital - the city of Chandigarh, which became a union territory at the states' border when Punjab was split to form Haryana. Naturally, both were subject to British colonial rule as Haryana had not become a separate state yet. In addition, Punjab and Haryana are both agricultural states, having led the agricultural boom in India in the early 1960s. GDP, human development measured by HDI, and literacy rates are comparable; both states rank i the top tier of Indian districts for HDI.

The two states' shared climate and geography are particularly interesting at a time when climate change due to carbon emissions increasingly necessitates the adoption of renewable energy. Both states have similar climatic, social, and economic conditions. Despite their similarities, however, Punjab and Haryana are significantly different in their renewable energy contributions - specifically, solar energy. Specifically, despite similar

financial opportunities, solar exposure, natural resources, and land conditions, Haryana lags behind Punjab in terms of how much solar power it generates. In 2016, when Haryana laid out a new solar power policy, it claimed to implement projects to generate 4,000 megawatts (MW). This claim is still far from the target, however. The total installed capacity of solar power in Haryana is 148 MW, while Punjab has achieved an installed capacity of 906 MW (Rajeshwari 2018). Furthermore, as of 2018, Punjab is regarded as one of the top 10 states with cumulative solar installations while Haryana does not make the list (Mercom India, 2018).

This difference in solar energy investment represents a puzzle: Why is Punjab able to invest in and implement solar energy generation while Haryana, with its similar climate, geography, history, culture, and economic growth, lags behind in terms of solar power generation? For this reason, my research paper will attempt to answer the following question: Why is Punjab investing in solar energy policy while Haryana is not?

5.2.2 Thesis Proposal: Example Significance

Since the divergence between Punjab and Haryana cannot be explained by any of the factors mentioned above, as they do not vary significantly, an alternate explanation is needed. Furthermore, the literature on this topic does not specifically address the reasons for these differences in these states. Rather, the literature discusses states or regions in India (such as North and South Indian states or climatically and economically different states) that cannot be compared in terms of the economic and climactic factors Punjab and Haryana share. This paper attempts to fill this research gap and possibly "solve" the puzzle. Answering this research question also has several policy implications. Haryana's abundance and intensity of sunshine available throughout the day create significant potential for solar energy, just as Punjab's comparable climate does. Taking advantage of these resources would eliminate the need for electricity transfer to rural areas and improve the quality of life by providing electricity for agricultural use (Suman et al. 2018). More specifically, solar energy systems such as solar water pumping and solar rooftop programs can reduce household power bills. These SRT systems can also offer an environmentally feasible, inexpensive back-up power supply - which is especially advantageous considering frequent supply interruptions in most urban and rural areas (DTE, 2019). Additionally, the tariff for solar power has fallen to a record low, which can be credited to the Indian government's solar energy campaign to mitigate greenhouse gas emissions (Tribune 2019). This drastic fall has motivated foreign investment. As this cost continues to fall in India, Haryana has as much opportunity as Punjab to attract various avenues of investment and become a leading example in the transition to clean energy.

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