# How to write a successful proposal

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The UNU-WIDER Visiting PhD fellowship asks for a research proposal that contains:

- a. Title of your research
- b. General description of your proposed research (max. 500 words)
- c. Description of your main research questions or hypotheses (max. 300 words)
- d. Description of the methods or approaches you will use to answer your research questions (max. 500 words)
- e. Description of your main data and information sources (max. 300 words)
- f. Explanation on how the proposed research relates to your PhD thesis or dissertation (max 200 words)
- g. Explanation on how the Visiting Fellowship at UNU-WIDER could contribute to your research (max. 200 words)

In the research proposal, you should summarize the research question, data, proposed methods for the analysis, and preliminary results (optional) in sufficient detail to warrant an evaluation.

This document aims to provide input for young scholars when writing their research proposals. It draws examples, mostly, from my own research papers. UNU-WIDER aims to promote diversity and inclusion in development economics and understands that training and resource access are unevenly distributed. To start, I highly recommend that you read carefully <a href="David Evans's">David Evans's</a> blog about <a href="how to write the introduction of your development paper">how to write the introduction of your development paper</a>. This is a masterpiece of Evans and I could not do anything better than follow his suggestions. In addition, I will use the content of some slides presented by Professor <a href="Lowell Taylor">Lowell Taylor</a> in a recent UNU-WIDER workshop.

### The research proposal is similar to the introduction of a journal article

First, it is essential to realize that the research proposal is similar to the introduction of a development economics paper. The main difference is that you may not have results yet, so you need to be very clear on 1) what you **want to do** instead of **what you did**, 2) what is your research question, 3) what are the methodology and the data you will use, and potential solutions in case your preferred methodology cannot be used, and 4) what is your contribution. Remember, you should write 1500 to 2000 words.

In a good introduction, you (typically) start with four elements

- 1. Introduce the 'big topic' your work addresses
- 2. Explain how your research relates to the 'big topic'
- 3. Indicate how your work builds on the extant literature
- 4. say what you find (not essential in the extended abstract)

In the research proposal, you should:1

- 1. Introduce your big question (1-2 paragraphs) and explain how your research will answer it (1 paragraph)
- 2. Explain your setting (2 paragraphs)
- 3. Describe your methodology (data you will use and empirical strategy) (3 paragraphs)
- 4. Explain the contribution to the literature (2-3 paragraphs)
- 5. Provide preliminary evidence (if available)

# Introduce your Big Question:

Let's see some **introduction of a big topic**, starting with my own paper about affirmative action in Brazil:

"Affirmative action programs have long been a subject of intense debate, with critics often emphasizing the negative consequences of such policies. Critics argue that affirmative action leads to a mismatch between minority students and the institutions they attend, claiming that they are admitted under lower standards and subsequently struggle to keep up academically. Although it is true that some students may face initial challenges, in principle these effects could be temporary. Affirmative action programs provide opportunities for talented individuals who might have otherwise been overlooked due to systemic disadvantages. By providing access to quality college education, these programs may enable students to bridge the gap and catch up to their peers. Most previous studies, however, have focused on mismatch effects, overlooking the potential catch-up effects associated with affirmative action programs." (130 words) (Oliveira et al, 2024)

<sup>&</sup>lt;sup>1</sup> You can write as many paragraphs as you want. These are just suggestions.

I recommend using one or two paragraphs to introduce your "big topic." Then, you should start the next paragraphs by saying clearly what you will do or explaining **how your research relates to the "big topic"**:

"In this study, we examine the effects of affirmative action on mismatch, measured by grade point average (GPA) and dropout rates, and catch up, measured by the GPA at the beginning and at the end of their major for those students who eventually graduate. In addition, our rich administrative data allow us to investigate the margins of adjustment used by students benefiting from affirmative action. In Brazil, prospective students usually take a university-specific entry examination – the so-called "vestibular" – and must choose a major before the exam. 1 Prospective students compete with others only within the chosen major, and admissions are solely based on the entry exam score. Once in college, it is highly costly to switch majors. If students' expectations about their major are not realized, the most common option is to drop out and retake the entry exam the following year. If students decide to stay, they face another rigidity: the curriculum. In Brazil, students have relatively few options for elective courses; in our sample, only about 6% of the courses are elective. This reduces students' margins of adjustment when experiencing difficulties early in college." (185 Words) (Oliveira et al, 2024).

I recommend only one paragraph for this step. Be direct and concise. Your research question must be very clear. Because this is essential for your proposal, let's see more examples:

"We fill this gap in the literature by using 25 years of administrative employment data from Brazil to study the dynamics of local labor market adjustment following the country's trade liberalization in the early 1990s." (Dix-Carneiro and Kovak 2017)

"In this paper I attempt to identify network effects among Mexican migrants in the U.S. labor market. While community networks serve many roles, my specific objective is to test whether the network improves labor market outcomes for its members." (Munshi 2003)

"We contribute by analyzing the expansion of private secondary schooling in 22 rural districts in a large Indian state. During the period we study—2004 through 2014—private high schools opened in more than two hundred villages in these districts. We estimate impacts on socioeconomic stratification and on student achievement using student-level data for approximately-four million high school students." (Bagde, Epple and Taylor 2023)

# Setting (Context, Background)

The next step is to explain your setting. I know a bit about Brazil but very little about Senegal, Somalia, or Indonesia. So, explain clearly the context you are studying and why this is important. Also, try to make sure that you explain all the main elements of the setting you are studying so the team evaluating the proposal doesn't need to google it. Googling takes time, so clearer proposals may be less time-consuming, increasing their chances. I recommend 2 paragraphs for describing your setting.

Let me stop here momentarily and show the first page of one of my recent papers (Da Mata et al, 2024). It contains these first three elements in 394 words:

#### 1 Introduction

Governments worldwide have been devising policies to tackle persistent unemployment and improve the skills of more vulnerable workers. One key initiative is promoting vocational training programs, which aim to enhance worker-firm matching and ease the transition from education to work. Vocational training for younger workers is extensively available worldwide—for instance, according to OECD (2020), 22% of 15-19 year-olds are enrolled in vocational education across member countries of the Organization for Economic Cooperation and Development. Since public funds present high opportunity costs and returns to policies vary considerably (Hendren and Sprung-Keyser, 2020), a growing literature has been assessing the effects of vocational training programs (Card, Kluve, and Weber, 2010, 2018). An important aspect is that the returns to a specific policy are subject to aggregate shocks and may depend on the economic cycle (Rosenzweig and Udry, 2020). Lower-skilled and more vulnerable workers—the target population of most labor market policies—are usually hit hardest during recessions. Evaluating the returns to job training programs during economic downturns is then crucial to those workers.

In this paper, we study the effects of a "high-dosage" vocational training program in one of Brazil's poorest states, where the labor market is characterized by high informality, low educational attainment, and high unemployment. The program, called PROSUB ("Programa Subsequente" in Portuguese), offers training for disadvantaged individuals with a secondary degree from state-sponsored schools. The main goal is to help students overcome barriers to enter the formal labor market.

Four features of the program stand out: (i) target population, (ii) length and content of the program, (iii) government participation, and (iv) size of the program. Unlike many vocational training programs worldwide, all high-school graduates from public schools can apply for PROSUB, regardless of age or job market experience. Importantly, the program offers a mix of classroom training and internship for 24 months. More specifically, the intensive program offers an 18-month classroom training (6 months for general subjects such as math and Portuguese plus a 12-month period for occupation-specific subjects) coupled with a 6-month on-the-job training. Additionally, while government-run training centers are integral to PROSUB, many vocational programs in developing countries evaluated by the literature were provided (entirely or partly) by private institutions. Lastly, the program offers approximately 8,000 slots annually in a large variety of courses at dozens of government-run training institutes spatially distributed throughout the state territory.

### Methodology

The methodology section should describe two central elements of your research. The first is the data you will use. The second is the empirical strategy. For the data, be clear whether it is a survey, primary data collection, administrative data, etc. Also, make sure to inform whether the data is publicly available or not, and the basic information that can be found in the dataset(s). See, for example, this part in Oliveira et al (2023):

"RAIS: employment and income. The labor market outcomes stem from RAIS (Relação Anual de Informações Sociais), a matched employee— employer data set maintained by Brazil's Ministry of Economy. The RAIS data set contains information on each formal worker at each plant in Brazil, as all formal establishments in Brazil are legally obligated to submit information to RAIS. We use yearly information for the period 2006–2020, which allows us to follow all students from one to eight years after enrollment. We construct a set of dummies of

formal employment, which equals one if the individual is formally employed in December of each year and 0 otherwise. We also collect information on earnings in December of each year. For a few individuals who have two or more jobs, we considered only the job with higher earnings. Note that RAIS has information only for workers in the formal labor sector."

For the methodology, you don't need to explain what DiD, RDD, or PSM are. You should mention the methods you are using, the hypotheses, and the treated and control groups (in case you have an identification strategy). Additionally, it is important to provide a basic specification so the reader has a clear idea of the econometric specification. See an example of my work in progress Galle et al (2024):

$$\ln(y_{it}) = \sum_{k=2011, k \neq 2015}^{2021} \theta_k \mathbf{1}[t=k] \times \mathbf{1}[i=carbontax] + \gamma_t + \mu_{pt} + \alpha_i + \epsilon_{it}, \qquad (2)$$

where  $y_{it}$  is an outcome of interest for firm i in year t.  $\mathbf{1}[i=carbontax]$  is an indicator for whether a firm is liable for a carbon tax (i.e., has filed a return).  $\gamma_t$  and  $\alpha_i$  are year and firm fixed effects, respectively. We also control by the time-trend  $\mu_{pt}$ , which is the interaction of province and year-fixed effects. Our coefficients of interest are  $\theta$ 's. We exclude 2015 as the baseline year to accommodate anticipatory effects upon the release of the first Carbon Tax Bill but before the actual implementation of the tax. Further, the year 2015 corresponds to the year for which we apply coarsened exact matching.

It is difficult to establish the length of the methodology section, but maximum 3 paragraphs sounds reasonable.

#### Contribution to the literature

The following step is to indicate how your work **will contribute** to the literature (Note again that you can use verbs in the future tense when your research is yet to be finished). However, avoid extensive literature reviews. Instead, mention the most relevant papers in literature and how your work will add to it. Proposals based on early-stage research may have problems informing how the paper innovates, or the main contributions, or use the common "as far as our knowledge goes, this is the first paper to'. That is fine. However, you should place your research, and your potential contribution into the relevant literature. Below is an example from the Da Mata et al (2024). I recommend 2 or 3 paragraphs for this part.

"This paper relates to the growing number of studies that generate experimental and lottery-based evidence of vocational training programs. Consistently with our findings, most papers find positive returns of vocational training for women in developing countries, such as Attanasio, Kugler, and Meghir (2011) and Attanasio, Guar´ın, Medina, and Meghir (2017) for Colombia; Acevedo, Cruces, Gertler, and Martinez (2017) for the Dominican Republic; Maitra and Mani (2017) for India; Field, Linden, Malamud, Rubenson, and Wang (2019) for Mongolia; and Camargo, Lima, Riva, and Souza (2020) for another program in Brazil. In a recent study comparing standard training courses and on-the-job training, Alfonsi, Bandiera, Bassi, Burgess, Rasul, Sulaiman, and Vitali (2020) find an improvement in employment rates of youth in Uganda but with different dynamics over time—returns to training courses emerge slowly but were long-lasting. A few papers found no

impact on labor market outcomes (e.g., Hirshleifer, McKenzie, Almeida, and Ridao-Cano, 2016 in Turkey)." **(154 words).** 

## **Preliminary Evidence**

In the research proposal, we do not expect you to have results yet. However, descriptive statistics may help in explaining your research project. For example, one of my recent working papers studies the long-run effects of a significant exogenous and long-lasting event in cocoa production in Brazil on education and the labor market. We mentioned that

"We explore the witches' broom outbreak in cocoa farms in the world's second most important cocoa production region until 1988, the southeast of Bahia's state in northeast Brazil [...] In 1985, this region produced 80% of Brazilian and 62% of Latin American cocoa (IOCC, 1993). Data and historical documents report that cocoa production decreased by 80% in the first 10 years after the disease".

If I apply for this call, I could use one of the two figures below, followed by a short paragraph explaining it to motivate the proposal.

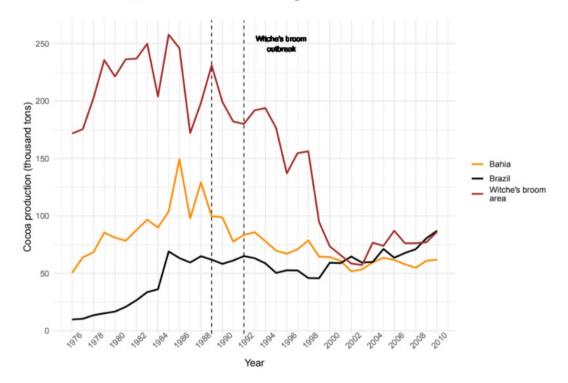
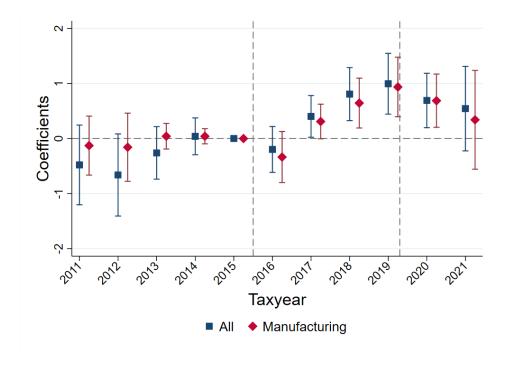


Figure 3: Trends in Cocoa production 1976 to 2010

15 Witche's broom log(prod. value) ı 0 1980 1985 1990 1995 2000 Year Cocoa Cotton Crop Sugarcane Beans Corn Pepper Cassava

Figure 4: Trends in Agricultural Production Values by Crop

In addition, if you have preliminary results from your estimations, please let us know the preview of it and potentially show some graphs or tables. For instance, I have a work in progress on Carbon Tax in South Africa. If I apply for this research grant, I will show one of the results, as shown in the figure below. This figure shows the effect of announcing (2015) and implementing (2019) the policy on firms' sales.



I don't have any recommendation regarding the number of paragraphs for the preliminary evidence. It depends on how developed your research project is at the moment.