

## Overview of the Research Process in Economics

This supplement gives you an overview of the steps you will take in completing your research project:

- Step 1: Developing an effective research question
- Step 2: Surveying the literature on the topic
- Step 3: Analyzing the issue or problem using economic theory
- Step 4: Testing your analysis
- Step 5: Interpreting the results and drawing conclusions
- Step 6: Communicating the findings of your research project

Each of the assignments in this course is designed to complete one or more of these steps; these are the pieces of your final research paper. It is important to keep in mind that you will revise your work often throughout the semester. You will present your work to the class to work on how to best communicate your findings.

### Step 1: The research question

It is important to keep several things in mind when choosing your topic. First, you should be able to state your question succinctly in one or two sentences. Second, your research question must have a testable hypothesis. Here are some examples of research questions that students have asked in the past:

- Do union jobs systematically pay higher wages than nonunion jobs?
- Does class attendance affect student performance in macro principles courses?
- Does pollution affect housing prices?
- Are changes in stock prices consistent with efficient markets?
- Do school expenditures affect student performance?
- Do social programs affect HIV and AIDS incidence?

### Step 2: Literature review

The literature on a topic refers to research that has been completed on this topic. The objective of the literature review is to identify and become familiar with the major studies that have been published on a topic.

### Step 3: Application of economic theory

Remember, the objective of your research project is to explain some aspect of a significant issue or problem. This analysis provides your explanation. It is the conceptual or theoretical analysis of the issue, where theory is applied to shed light on the problem. In the past, many students have found this to be the most difficult part of the research process. This analysis is central to the research process. The single most important determinant of how successful your research will turn out is the hypothesis you work with.

### Step 4: Testing the analysis

Economists and other social scientists use a modified version of the scientific method. To test a hypothesis empirically, we compare the theoretical implications from step 3 to real-world observations. We do this by using data. First, you need to locate a good data set, one with enough information for you to adequately test your hypothesis. Second, you need to use a statistical method to test your hypothesis.

### Step 5: Interpreting the results and drawing conclusions

It is not enough to simply report the findings from your empirical analysis, a good research paper relates this directly to the hypothesis and even to earlier work on the topic. The interpretation of your results is far more challenging than simply reporting numbers.

### Step 6: Communicating your findings

This step is how to best communicate your results in writing and in an oral presentation. The purpose of your written research paper is to convince the reader of why this is an important research question and how your research answers this question. The oral presentation is another way economists share research findings.