A Minimal Book Example

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Chapter 1

Prerequisites

This is a *sample* book written in **Markdown**. You can use anything that Pandoc's Markdown supports, e.g., a math equation $a^2 + b^2 = c^2$.

The **bookdown** package can be installed from CRAN or Github:

```
install.packages("bookdown")
# or the development version
# devtools::install_github("rstudio/bookdown")
```

Remember each Rmd file contains one and only one chapter, and a chapter is defined by the first-level heading `#`.

To compile this example to PDF, you need XeLaTeX. You are recommended to install TinyTeX (which includes XeLaTeX): https://yihui.name/tinytex/.

Chapter 2

Basic_knowledge

2.1 How to write a empirical paper

As a mindset, a good empirical paper rely on topics, method and writing skills.

Basically, there are seven parts in an empirical paper. Let's see the ordered list below:

1. Abstract
2. Introduction
3. Conceptual (or Theoretical) Framework
4. Econometric Models and Estimation Methods
5. The Data
6. Results(& Robustness check)
7. Conclusions

2.1.1 Abstract

The capstone of your paper! Take care of it like your first and only baby because it really dominates if the reader will go into the rest of content.

2.1.2 Introduction

there are a few things that should appear in the introduction.

- States the basic objective and justify why that is important.
- Entails a literature review in usual, which indicates what has been done and how previous work can be improved upon. But, be humble and polite in order not to hurt someone else.
- Most Researcher will summarize what is discovered in this paper. This can be a useful way to grab the audience's attention.

2.1.3 Conceptual or Theoretical Framework

1. Often, there is no need to write down an economic theory unless you build a new one.

2. We may spend the effort on specify the intuition and factors(or variables) that need to be controled in the model. It will bring you extra benefit on the model section because the reader may already know the variables you use.

2.1.4 Econometric Models and Estimation Methods

1. Describe the general approach you used to answering the question.
2. Writing the equations with error term will be helpful to discuss further on whether the assumption is satisified or not.
3. Specifying the model clearly, and then discuss the estimation methods.

   It sounds like the relationship between causality equation and real model equation. It's not talking about the estimation result table.

   Any assumption in the estimation method should be justified. For example, there are three assumption in IV, including the weak IV test. Don't tell the audience you want to do with IV, and jump to the causality interpretation in a blink! You even yet explain it is suitable or not….
4. Show the model(equation) in LaTeX, including the key explanatory variable( ) and controlled variable( )
5. Do the functional form decisions, or the robustness check.

   some variables should appear in log form or in levels or square? (For example, pre-processing or capturing a diminishing effect)

2.1.5 The Data

Honestly, I am not sure if the Data section should be mentioned before entering the model or not?

- Describe the data carefully so that the other researchers may reproduce your research.
  - Data accessible?
  - all applicable public data sources should be included in the appendix
  - a copy of questionnaire of your survey should be presented in the appendix
  - a table of summary statitics, such as maximum, minimum, mean, sd, distribution of each variable.
  - the unit( ) of the variable.
  - Are they cross-sectional, time series, pooled cross sections, or panel data?
  - the quantity of your observations.

2.1.6 Results(& Robustness check)

the results should include your estimates of **any** models formulated in the model section? So, it may be more than 1 model in whole paper?

- the most important thing is to discuss the interpretation and strength of your empirical result.
  - Does the coefficients get the expected sign? (or it may be a method or data problem)
  - Is the coeffiecients significant in statistics?
  - Describe the magnitude of the coefficients on your major key explantory variable.

2.1.7 Conclusions

- Be careful on your conclusion writing because it's also the section your audience may start with.
- You may summarize what you learn, also, discuss caveats( ) to the conclusion drawn.
- You may also mention the suggestion of future research.

2.1.8 One more thing

To pose a question, you need to locate your area first.

There are several source for you to locate specific paper once your had decided your research area( )

>> >>

- EconLit
- The Social Sciences Citation Index(SSCI)
- Google scholar(set the ranking and the publication year as your clue)

2.1.8.1 On the dataset

1. Always do the data exploring (be specific, inspecting, cleaning, and summarizing) at first, and decide how to handle the missing value.

   Usually, we set any numerical codes(or character) for missing value.

a	b	c
1	2	3
2	3	4

$f(x) = x^2$

$$\beta_1^1 \alpha_2^2$$