

# Intuition to Panel Data

Mary Kaltenberg

June 2017

## Overview

This lecture will provide a broad overview of three panel data regression models: Pooled OLS, Fixed Effects and Random Effects. The aim of this session to provide the intuition on when to apply these methods and be able to interpret the output in stata. The course is structured interactively so that for each topic an exercise will follow before moving onto the next model.

You should have working knowledge of OLS and Stata in order to fully utilize this lecture. Please bring laptops with Stata installed.

## Reading Materials

### Required

1. **Chapter 14.2 - end** in Wooldridge, Introduction to Econometrics
2. **Chapter 5** in Mostly Harmless Econometrics Angrist & Pischke

**OR**

**Chapter 10** in Stock&Watson

Angrist, J. D., & Pischke, J. S. (2008). Mostly harmless econometrics: An empiricist's companion. Princeton university press.

Stock, J. H., & Watson, M. W. (2003). Introduction to econometrics (Vol. 104). Boston: Addison Wesley.

Wooldridge, J. M. (2015). Introductory econometrics: A modern approach. Nelson Education.

### Additional resources

**Chapter 10** in Panel Data, Wooldridge

More technical, but if you have basic linear algebra knowledge it is very accessible.

Wooldridge, J. M. (2010). Econometric analysis of cross section and panel data. MIT press.

\*Note: It is not necessary to have the most recent version of the book