

Part One

- 1- Panel data econometrics: data preparation and setting, graphs, and description
- 2- One way and two way error components
- 3- Diagnostic test: panel unit root, auto correlation, cointegration, etc.
- 4- Specification tests: Hausman, Chow, Wald, etc.
- 5- Pooled OLS: when to use, shortcoming and benefits



Part Two

- 1- Fixed effects: model formation, usage, benefits and shortcomings
- 2- Random effects: model formation, usage, benefits and shortcomings
- 3- Between effects: model formation, usage, benefits and shortcomings
- 4- GLS and differenced models
- 5- Dynamic fixed effects



Part Three

- 1. Simultaneous equation models and the problem of endogeneity
- 2. Single Vs. system of equation models
- 3. Dynamic panel models
- 4. Arellano and Bond estimator (GMM method)
- 5. GMM specification and post estimation tests
- 6. Selection of instruments
- 7. Difference Vs. System GMM (When and how)



Part Four

- 1. DCC under GMM
- 2. Dynamic Threshold
- 3- Intro. to Global VAR