

Lecture 23

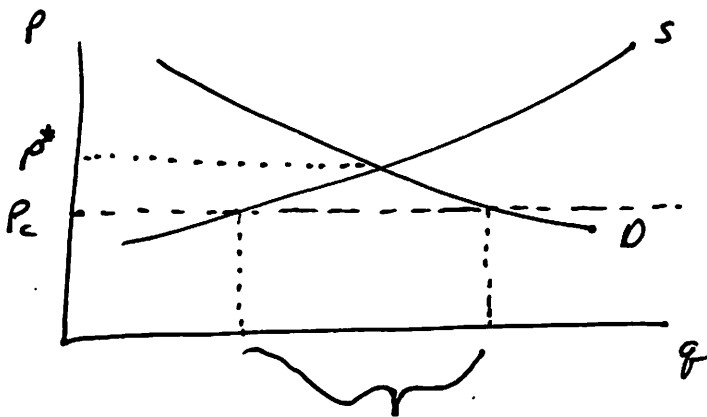
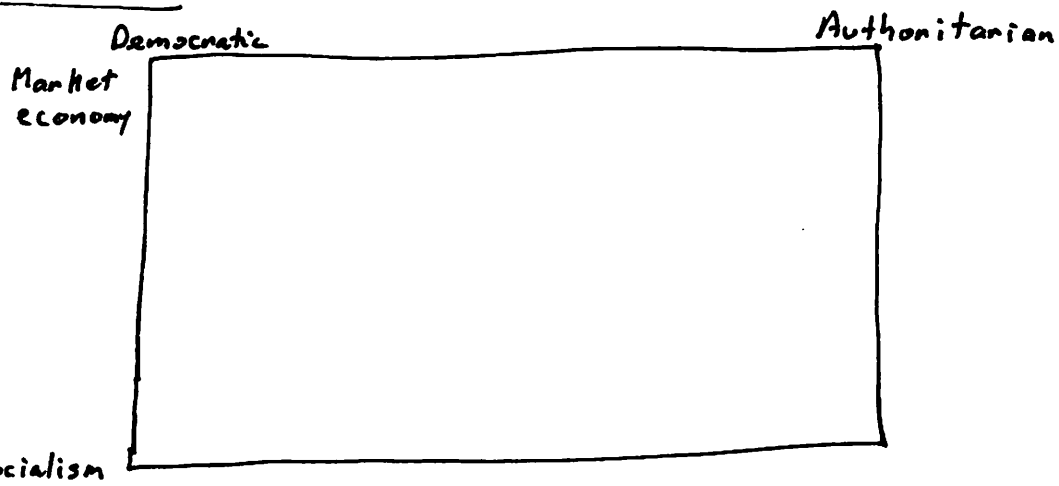
Chapter 20: Development

Chapter 21: Critical Thinking about Research

- Alternative systems
- Development: macro
- Development: micro (random experiments)

OTHER SYSTEMS

Tragedy of Commons



- Selection bias; survivor bias; charter schools; medical studies; road races
- Causality
 - Correlation versus Causation
 - Random experiments; intention to treat
 - Regression discontinuity; harsh prisons
 - Difference-in-Differences; Ivy league versus Pac 12; minimum wage
- Statistical significance
- Regression Analysis; Voting example:
$$V = a + bg$$

Brooklyn marathon -- better with age?

200 at-risk

100 offers - random

60 say yes

$\text{mean GPA}(60) > \text{mean GPA}(140)$

What can we conclude?

IVY LEAGUE FOOTBALL RULE

INSURY after \leftarrow INSURY before

Did rule work?

$$\text{effect} = [\text{INSURY after (IVY)} - \text{INSURY before (IVY)}] \\ - [\text{INSURY after (PAC12)} - \text{INSURY before (PAC12)}]$$

$$V = a + bg$$

