Jan 17, 2024

Conditional Distribution $\{Y, X\} \sim P$

$P_{Y|X}$

Summary Measures of conditional distributions:—

i) $E[Y|X]$ ⊛ Major focus of the class
ii) $M(Y|X)$ → Median
iii) $q_\alpha(Y|X)$ → Quantiles

* X is multidimensional (what does this mean?)

(X could be different for different cases but we want to make sure we are comparing apples to apples)

→ Oh, it probably means the controls of the regression. There could be multiple controls. In different research studies, the models may have different controls. (This is what controls mean, conditional probability!)

* Statistical Variability: how different sampling strategies lead to different inferences.

* Identification Problem → Measurement issues
                           → Missing data

Even if we know P:

Extrapolation Problem   Selection Problem / Endogeneity Problem.

↓

What happens to Y outside the support of X.

Goldberger:
* Read ch 1 - 13.

1. First 6 weeks: weekly psets
2. Second 6 weeks: around 4 psets.

Matlab tutorial | Welcome to use any software. With Stata, one assignment on MoM might be tough.

Exams
Midterms → 75 min
Final → 3 hrs.

Open book - No computers/internet.