

No data in the void

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## Normative choices are un-avoidable

- **Decision making based on data** is growing in importance.
  - Quantitative policy research,
  - algorithmic decision making using machine learning,
  - clinical medical research, ...
- In any such setting we need to carefully specify
  - the **goals** we want to achieve, and
  - the **policies** we might possibly use to achieve them.
- Data alone can not
  - allow us to avoid **value judgements**, and
  - do not relieve us from **taking sides** in distributional conflicts.

# Formal frameworks to think about normative choices

Two complementary frameworks.

- **Statistical decision theory**

- Loss function

What is our ultimate objective?

- Action space

What is the space of conceivable policy options?

- Identifying assumptions

What prior beliefs are imposed?

- **Social welfare functions**

- Measures of individual welfare

How do we define and compare wellbeing?

- Aggregation across individuals

What weight do we assign to improvements for different people?

# Examples of normative choices in empirical economics

- **Experimental design**
  - Maximize estimator precision?
  - Or participant welfare?
  - Or welfare through policy choice based on experiment?
- **Reforming the publication system**
  - Aim to to restore the validity of statistical tests?
  - Or help decisionmakers via published results?
  - Or maximize some form of social learning?
- **Tests for discrimination** (in both econ and machine learning)
  - Conventional definitions of bias / discrimination / unfairness
    - justify inequalities based on “merit,”
    - ignore within-group inequalities,
    - define fairness as the behavior of profit maximizing competitive firms with full information.
  - We could instead ask “what is the impact on inequality between / within groups?”