Big Answers for Big Questions: The Presumption of Macro

Discussion by Pete Klenow
Stanford University and NBER

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Welfare, Knowledge and Research

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\frac{\partial \text{Welfare}}{\partial \text{Research}} = \frac{\partial \text{Welfare}}{\partial \text{Knowledge}} \cdot \frac{\partial \text{Knowledge}}{\partial \text{Research}}
\]

Micro  \( \gg 0 \)  Low  High

Macro  \( \approx 0 \)  High  Low
Micro vs. Macro Medicine?

- Micro = clinical trials, lab work
- Macro = trends in ...

  - life expectancy
  - heart disease
  - cancer
  - autism
  ...

Micro vs. Macro Biology?

☐ Micro = lab work

☐ Macro = populations
evolution of traits
ecosystems
animal behavior
...

Robert Sapolsky (Stanford) famously does both.
Macro motivates, guides Micro

- Macro evidence tells us the disease, its severity, and its symptoms

- Tells us where policy-related randomized trials are most urgent

  - Example: Bloom on Indian management
Macro motivates, guides Micro

- Macro Medicine → obesity epidemic
- Macro Biology → global warming
- Macro Econ → China, India, Africa
Growth, Development Accounting

- Inputs (K vs. H vs. TFP)
  - Alwyn Young for East Asian growth
  - Many for rich vs. poor

- Sectors (Ag vs. Non-ag, I vs. C)
  - Brandt et al. on Chinese growth
  - Caselli for rich vs. poor
Correlations and Trends

- Developing import most of their equipment
- Return on capital is no lower in developed
- Lifespan has converged more than incomes
- Skill premium increases with trade, FDI
Natural Macro Experiments

- Weather
- Geography
- Accidents
- Common shocks, different initial conditions
But Macro ≠ CCGRs

- Endogenous growth (Lucas, Romer, etc.)
- Poverty traps (Lucas, Prescott, etc.)
- Political economy (Acemoglu, etc.)
- Complementarities (Kremer, Jones, etc.)
But Macro ≠ CCGRs

See NBER growth meetings in last decade

- Dominated by “quantitative theory”
- Uses aggregate, sectoral, micro data
- Uses barriers from Doing Business, etc.
GE and Randomized Trials

- Just need MANY trials?

- Will always need GE Models to fill in gaps

- And Macro Evidence as a reality check
Fuzzy lines b/w Micro, Macro

- Studies across regions within countries
- Studies across industries within countries
- Studies across demographic groups