

Big Answers for Big Questions: The Presumption of Macro

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Welfare, Knowledge and Research

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

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
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Macro motivates, guides Micro

- Macro Medicine → obesity epidemic
 - Macro Biology → global warming
 - Macro Econ → China, India, Africa
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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
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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
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Natural Macro Experiments

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

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

See NBER growth meetings in last decade

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

- ❑ Just need MANY trials?
 - ❑ Will always need GE Models to fill in gaps
 - ❑ And Macro Evidence as a reality check
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Fuzzy lines b/w Micro, Macro

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