My research profile in 5 slides

I. Sebastian Buhai

SOFI/NIPE/CEPREMAP

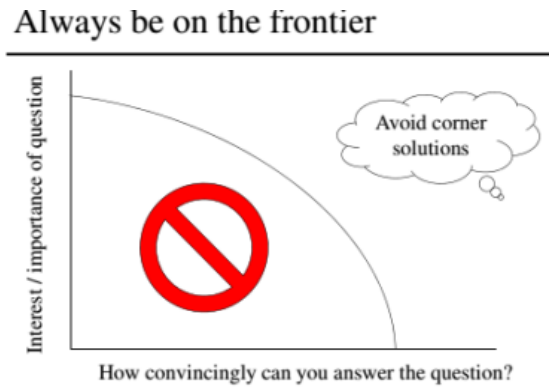
October 2024

Where I am coming from & my fascination for Economics

- Jean Tirole, 2017: *"...I was trying to understand society. I liked the rigor of mathematics and physics, and I was deeply interested in the human and social sciences... I was immediately captivated by economics because it combines a quantitative approach with the study of individual and collective behavior... Economics not only documents and analyzes individual and collective behavior, it also aspires to recommend better public policy."*

Guiding research principles

- *Strive for scientific excellence*, whether in fundamental or in applied research
  - one implication: in own research, as in assessing others, I strongly prioritize *quality over quantity*
- *No research "ideology"*: I learn, apply, and develop eclectic research approaches, if *scientifically sound*
  - one implication: I often collaborate across Econ subfields, and am open to interdisciplinary approaches
    - the burden of proof that *Economics is not insular* falls on us, its practioners
- *Seek to optimize the interest-originality-feasibility relationship* in my research
  - "always be on the frontier" (borrowed from Amy Finkelstein):



Main research interests and thematic

- I am primarily a *Labor Economist* and *Micro-econometrician*
  - with eclectic, further interests in *(Empirical) IO*, *Social and Economic Networks*, *(Applied) Microeconomics* in general
- Broad research themes I('ve) work(ed) on:
  - worker-firm dynamics under uncertainy and (partly) irreversible specific investments
    - focus on bargaining & rent division, wage formation, worker turnover, intra-firm inequality, costs of/ return to firm-specific human capital
  - importance of non-pecuniary job aspects for firm productivity, employee welfare, and societal inequality
  - causes of persistent gender or racial inequality, in earnings/ employment
  - business cycles, public subsidies, structure of firm employment adjustment
  - impact of incentive pay schemes on wage growth and worker turnover
  - firms' role for inequality, via employment adjustment & worker reallocation

Main research methodology competences

- On the (applied) theory side:
  - *real option theory*—and *dynamic optimization* more generally
  - *(non-cooperative) game theory*
  - *search and matching theory*
  - *microeconomics theory*
  - *microeconometrics theory*
- On the empirical analysis side:
  - all of: *measurement, model testing, model estimation for counterfactuals*
  - applied *cross-sectional and panel-data econometrics*
    - both *descriptive* and *structural econometrics* approaches (i.a., state-of-the-art EIO/ Labor)
    - extensive experience with *cross-sectional/ longitudinal datasets: e.g., various surveys, register LEED*
  - *simulation & calibration* techniques
- More recently I have also got interested in:
  - *agent-based modeling* (e.g., labor network flows; social and economic networks, generally)
  - *optimal transport theory* (applications in economics)

(Rationale for) My research modus operandi

- I use both *theoretical* and *empirical* methods, prefering to *combine them*:
  - *theory* gives conceptual framework—*model(s)*—and is key to interpreting data
    - Keynes (1938): "*Economics is a science of thinking in terms of models joined to the art of choosing models which are relevant to the contemporary world.*"
    - Rodrik (2015): "*Models make economics a science*".
  - *data & empirical analysis* can enrich theory, e.g., by (in)validating its hypotheses/ conclusions—thus improving (or overturning) it
  - vis-à-vis the *atheoretical* vs *structural* modeling polemic—Frisch (1933):
    - "*[N]o amount of statistical information, however complete and exact,can by itself explain economic phenomena. If we are not to get lost in the overwhelming, bewildering mass of statistical data that are now becoming available, we need the guidance and help of a powerful theoretical framework.*"
- My ideal: combine theory and empirics through *"abduction"* (Sherlock Holmes, 1900ish or Jim Heckman, 2000ish), i.e. learn by trial & error (as in other sciences) and, hence, have *back-and-forth between theory and empirics*
  - "*It's more than a theory, it's a likelihood.*" (Sherlock Holmes in "Elementary", season 5, episode 6; inspired by Kei Hirano)