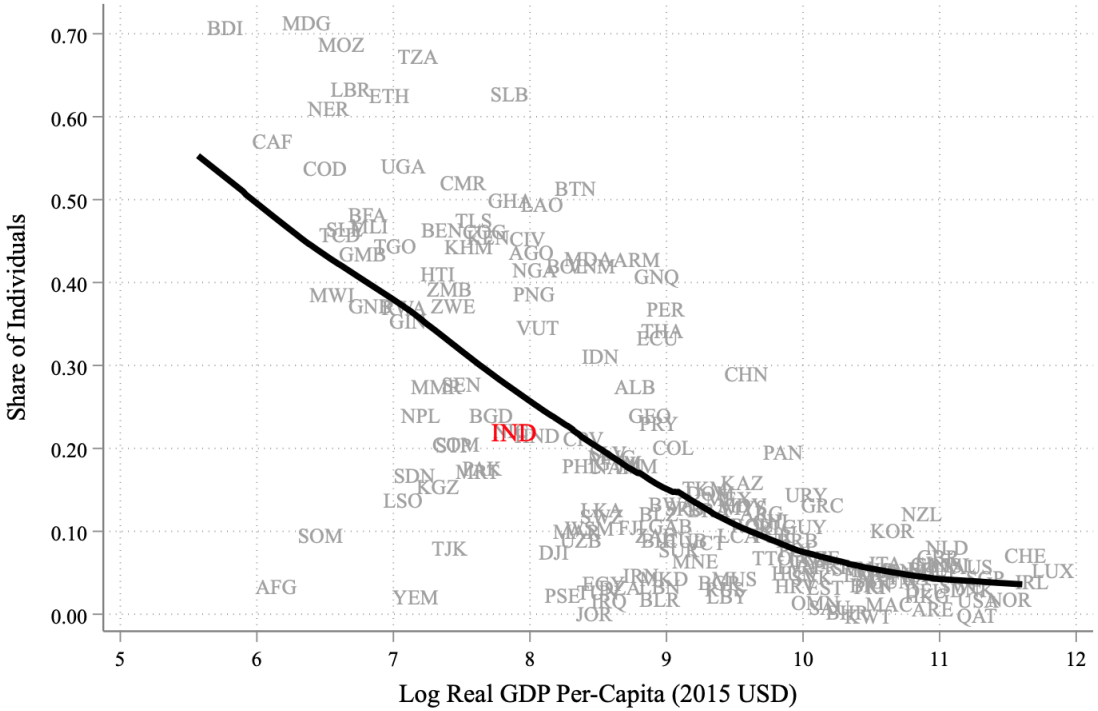
Gender Gaps in Entrepreneurship

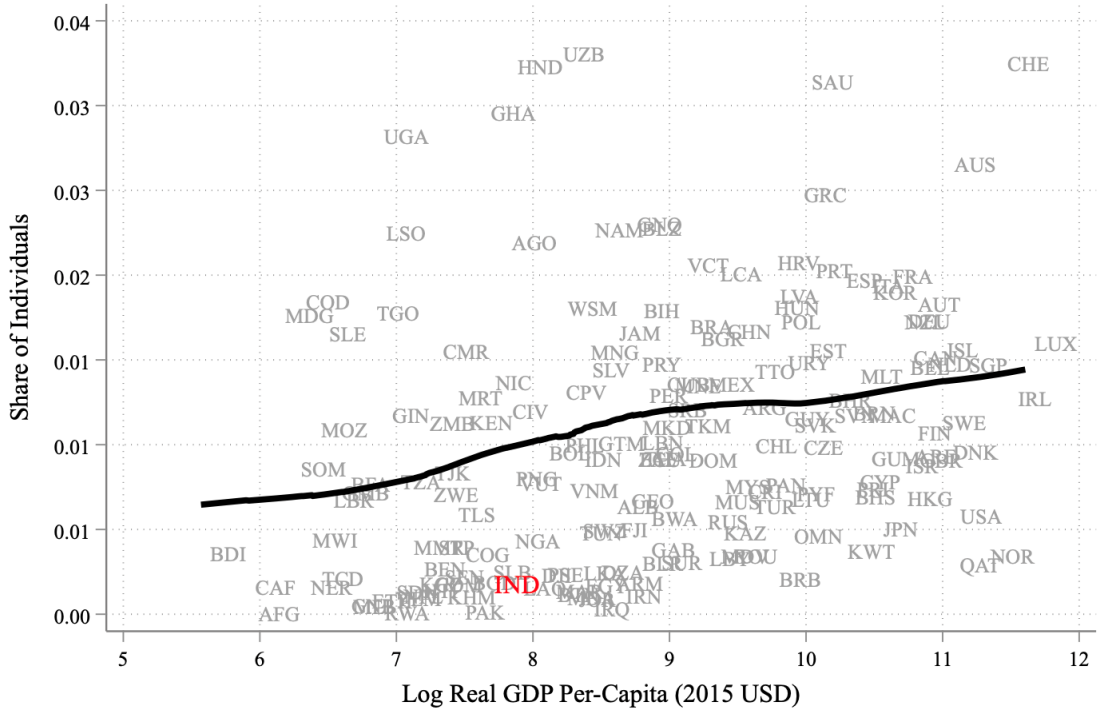
Entry Barriers and Growth Constraints

Gaurav Chiplunkar
University of Virginia

Joint work with Penny Goldberg, Yale University

Entrepreneurship and economic development





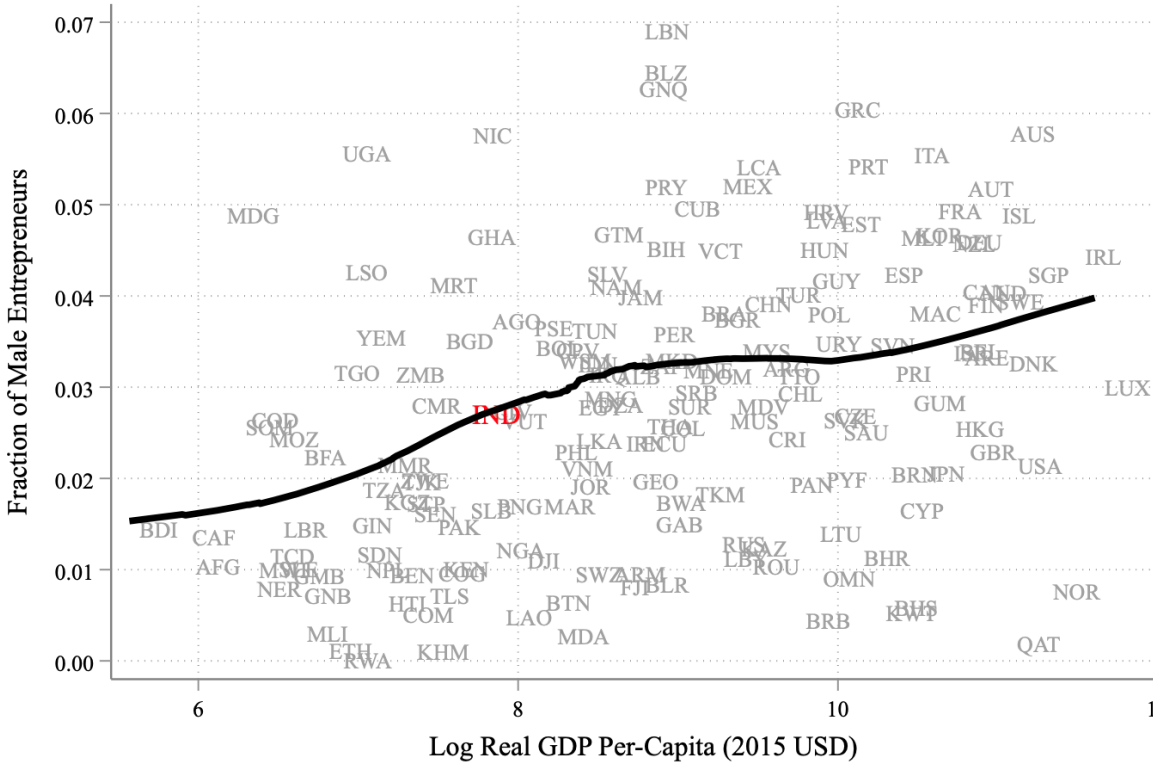
Data: World Bank data from 186 countries in 2022.

Own-Account Enterprises (OAE)

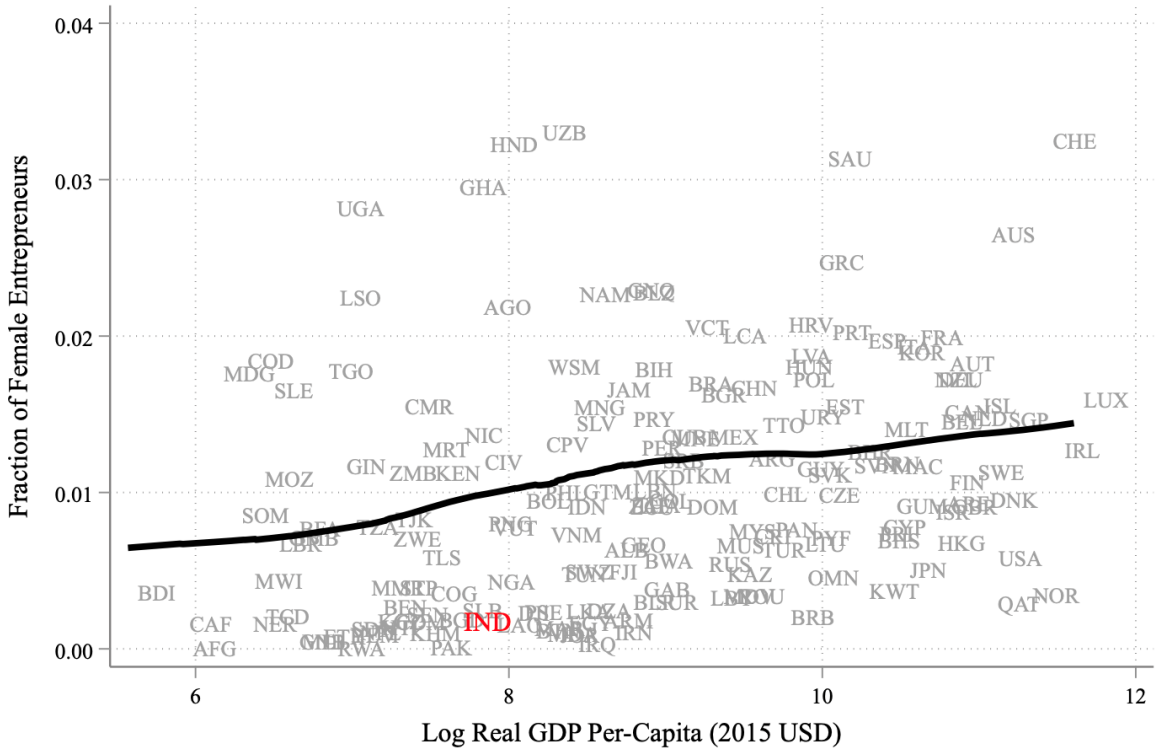
Entrepreneurship

- With economic development, transition from OAEs → Entrepreneurship
- India is an outlier in entrepreneurship for its level of economic development

Pattern driven entirely by women entrepreneurs



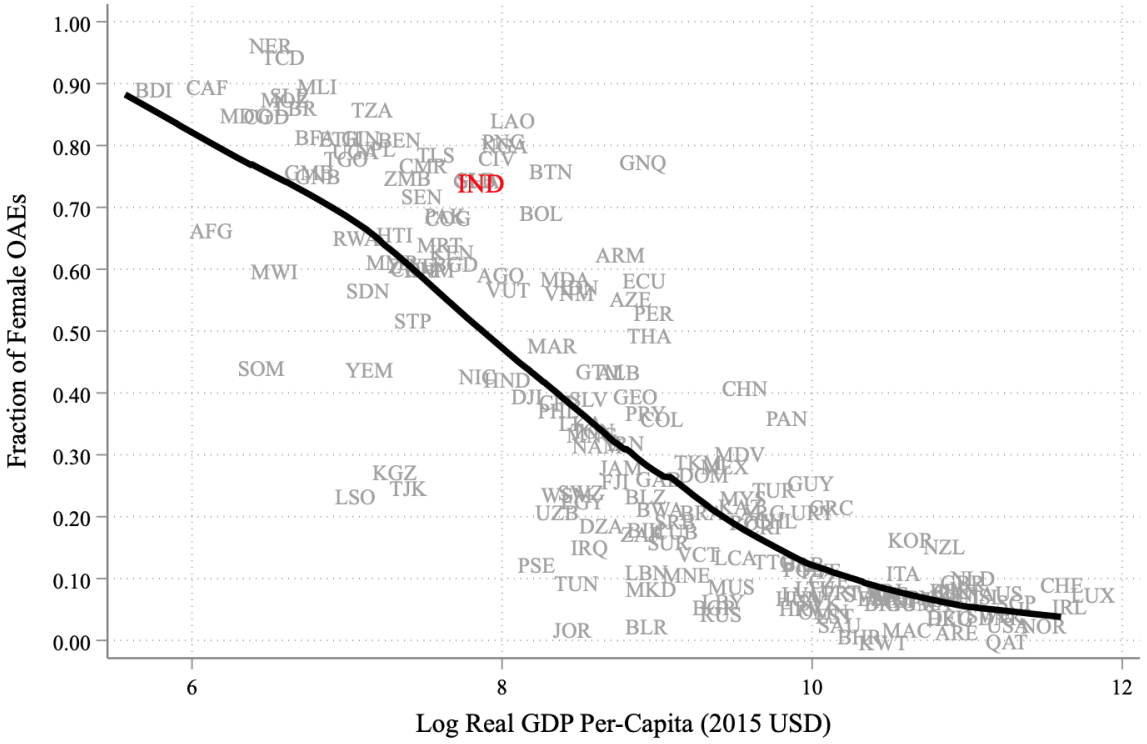
Male



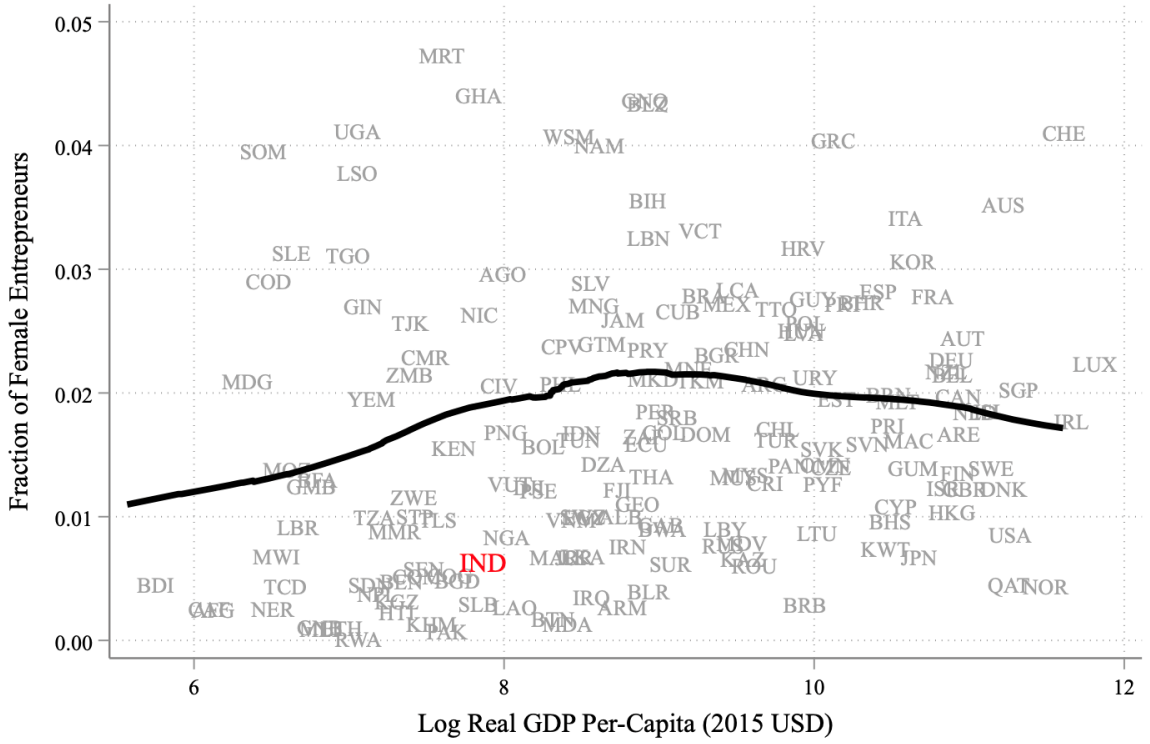
Female

- Outlier in entrepreneurship → all driven by under-representation of women in entrepreneurship

Could India's low FLFP explain this?



Female OAE | FLFP



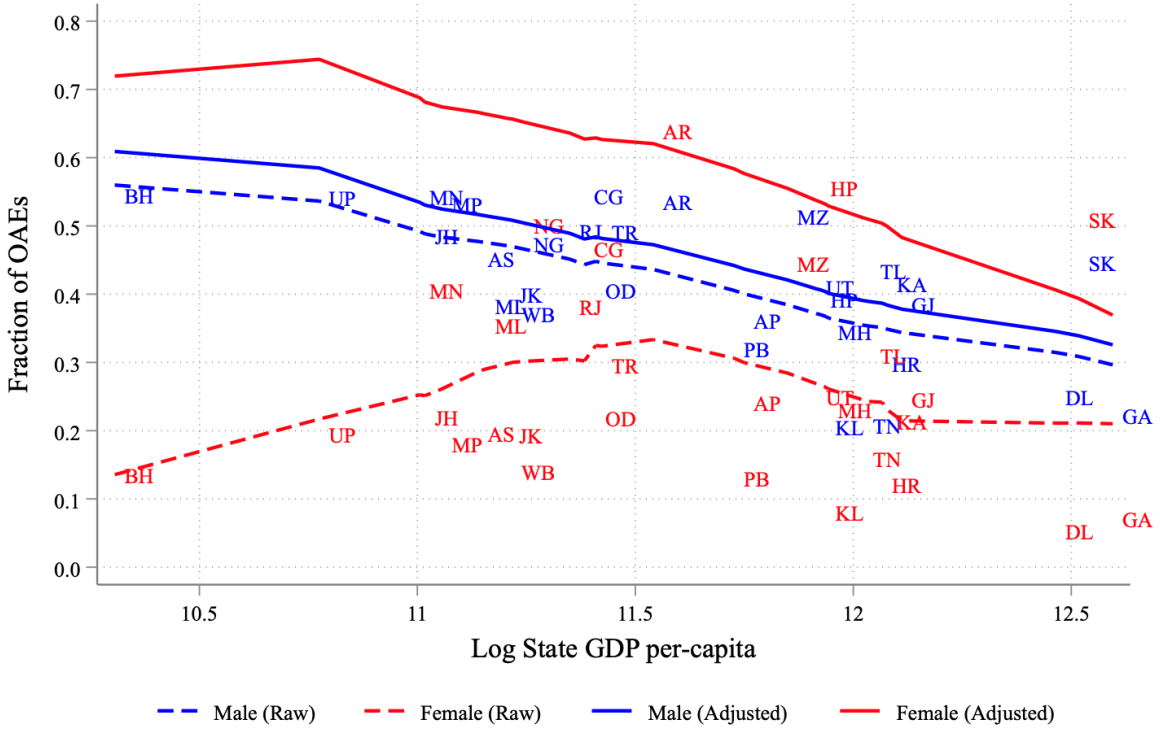
Female Entrepreneurship | LFP

Conditional on FLFP:

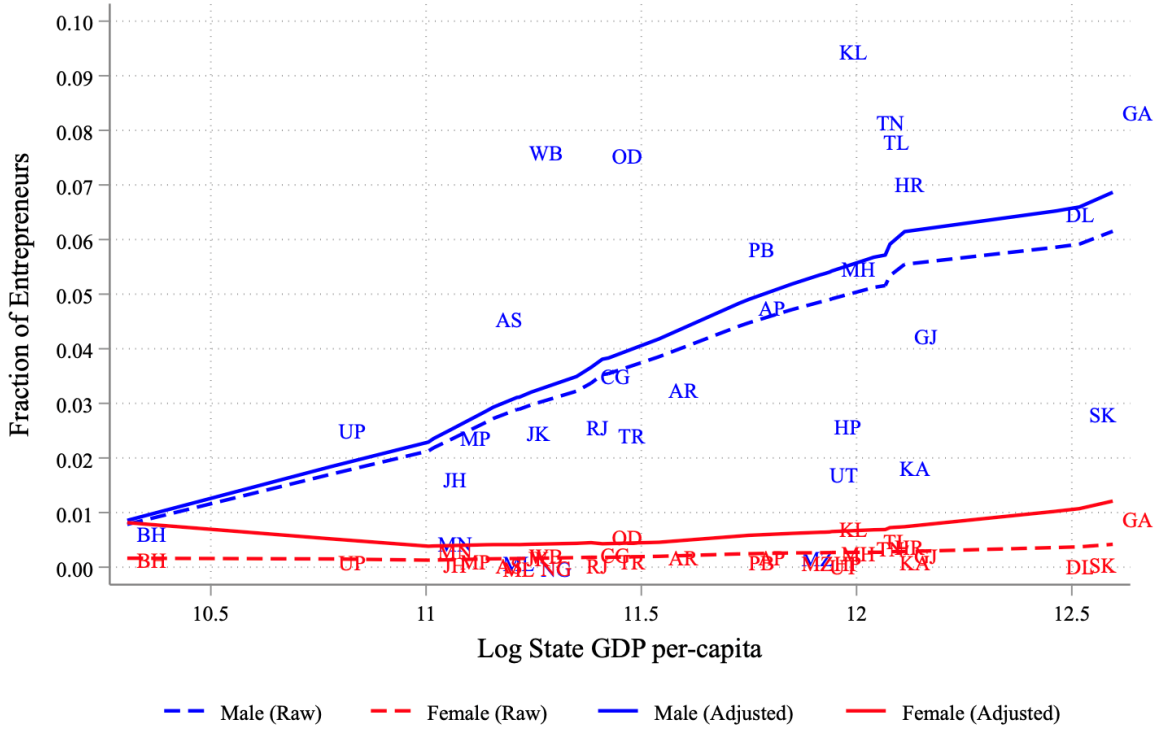
Too many women-owned OAE (entry)

Too few women entrepreneurs (scale)

Cross-country patterns also true across Indian states



OAE



Entrepreneurship

- Conditioning for low FLFP flips the gender gap in OAEs

…but not in entrepreneurship

Why women entrepreneurs? How can one interpret these patterns?

- Removing excess barriers faced by women entrepreneurs:
  "Aggregate Implications of Barriers to Female Entrepreneurship", Chiplunkar and Goldberg, Econometrica 2024

  - increases number of women entrepreneurs → (by design)
  - has multiplier effects on FLFP → women employ women
  - substantial productivity, efficiency, and income gains → productive women become entrepreneurs, (low productive) male entrepreneurs exit in equilibrium

- Empirical patterns discussed previously suggest:
  - low entrepreneurship → low FLFP (entry) + low entrepreneurship | LFP (scale)
  - need to examine barriers to both labor supply and growth

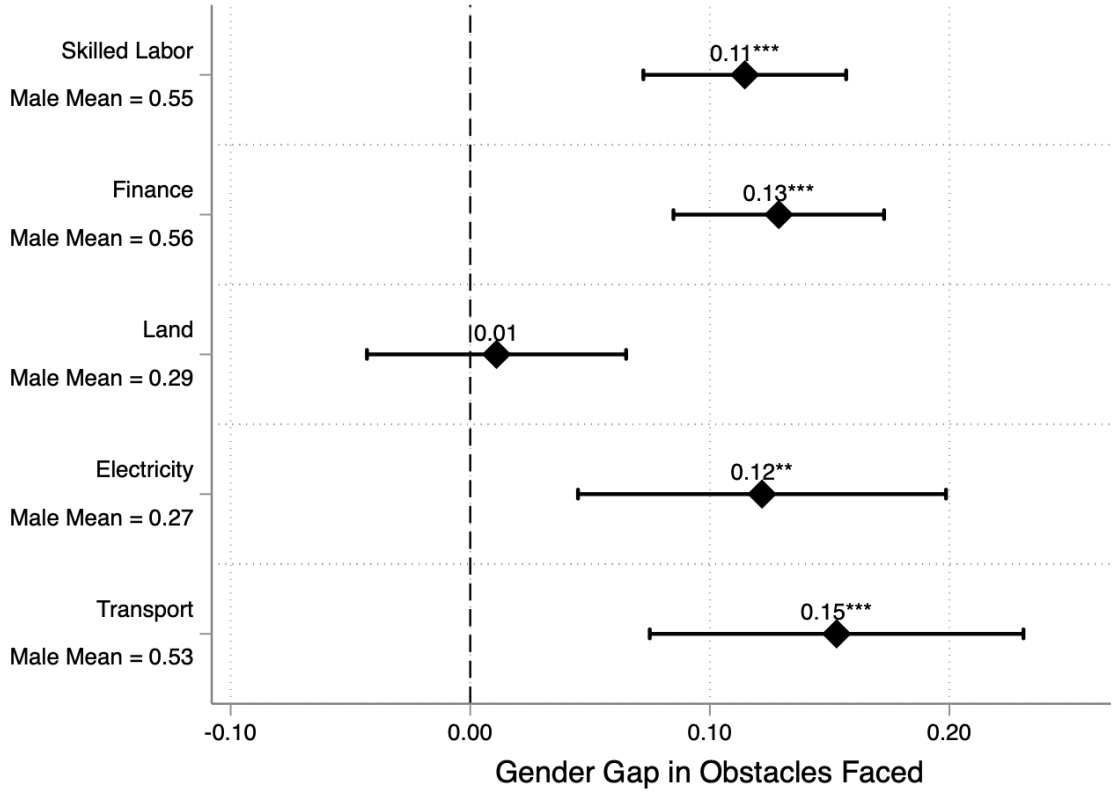
What constrains women in entrepreneurship?
Evidence from individual and firm surveys

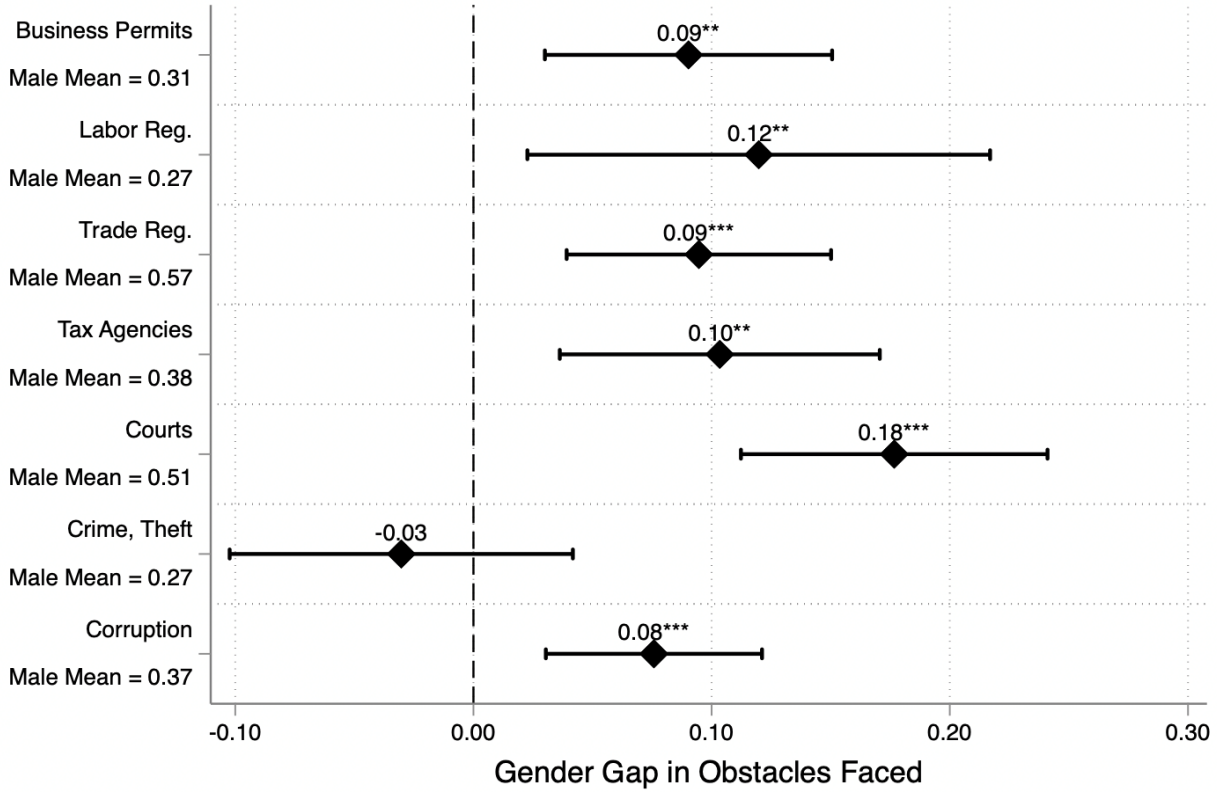
- Examine evidence from firm-level and individual-level surveys
  - Firm-level: World Bank Enterprise and Microenterprise surveys (WBES)
  - Individual-level: Global Entrepreneurship Monitor surveys (GEM)

- From WBES: "On a scale of 1-5, what is the severity of X as an obstacle to firm operations and growth"

- Estimate regressions of the form: $D_i = \alpha_{FE} + \beta Female_i + \varepsilon_i$
  where $D_i = 1$ if X is a moderate, major, or severe obstacle

Growth: Access to inputs and policy environment





- Greater barriers in access to labor, finance, electricity, and transport inputs
- Greater barriers in access to business permits, navigating labor and trade regulations, courts, corruption, and tax agencies

Entry: Aspirations and norms

- GEM survey: representative survey of adults regarding entrepreneurial aspirations and perceptions in society

- Women are less likely (than men) to:
  - have aspirations or skills to start a business
  - know other entrepreneurs (networks) and business opportunities
  - less likely to think society perceives entrepreneurship as a desirable and respectable career

- All gender gaps disappear once you condition on LFP participation

→ selection of women who enter the labor force

Towards a unified framework

- Extensive margin labor supply
  - gender gaps in aspirations, skills, networks, and social perceptions discourage women from participating in the labor force (and hence entrepreneurship)

- Intensive margin barriers to firm growth
  - gender gaps in access to key inputs and in navigating the policy environment

- Need a unified framework that can incorporate both entry and growth barriers that impact female entrepreneurship

- Helps separate the lack of female entrepreneurship into the supply and demand side constraints

Theoretical model

- Consider individuals of gender g in occupation o where:
  o is {home, wage, OAE, and entrepreneurship}

Human cap. gap

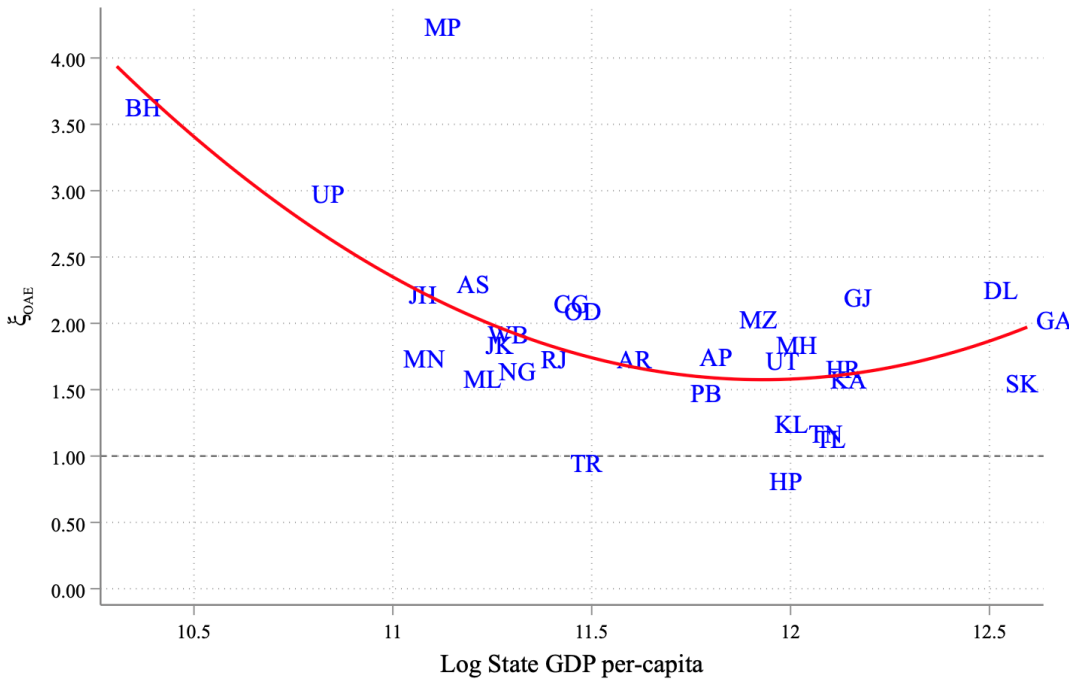
Gender emp. gap → $\left(\frac{p_{of}}{p_{om}}\right)^{\theta} = \frac{1}{\lambda_{of}} \times \frac{h_{of}}{h_{om}} \times \frac{w_{of}}{w_{om}}$ ← Gender wage gap

Labor demand distortion

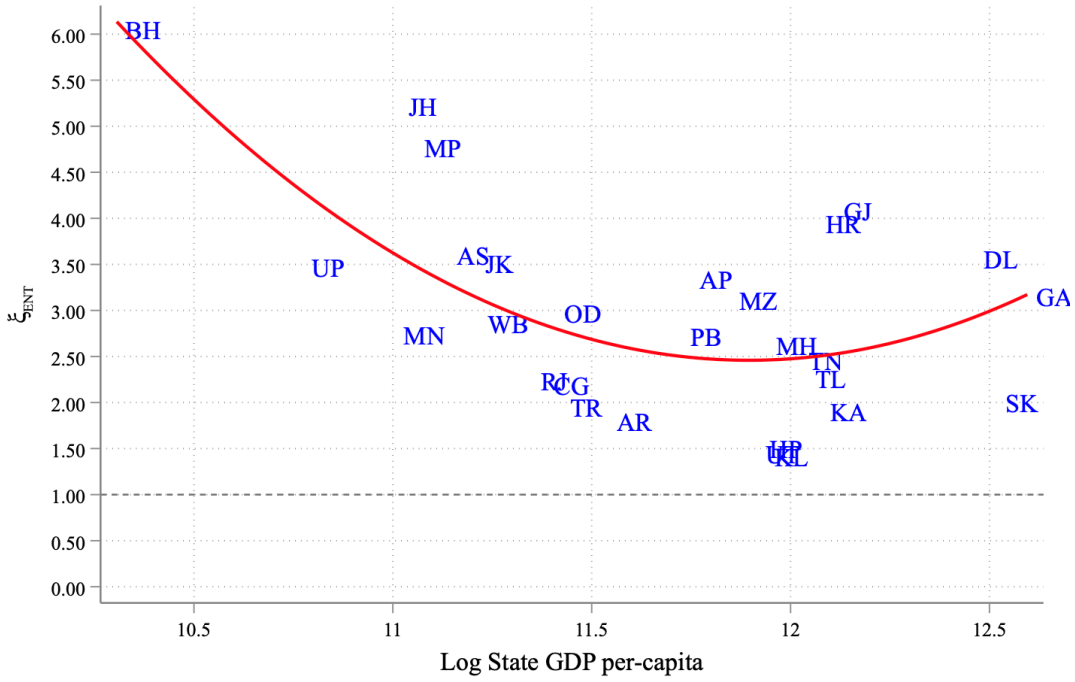
Relative earnings → $\frac{w_{og}}{w_{Hg}} = \frac{1}{\xi_{og}}$ ← Labor supply distortion

- We can use PLFS data + model to back out supply and demand distortions

Labor supply distortions (ξ_{og})



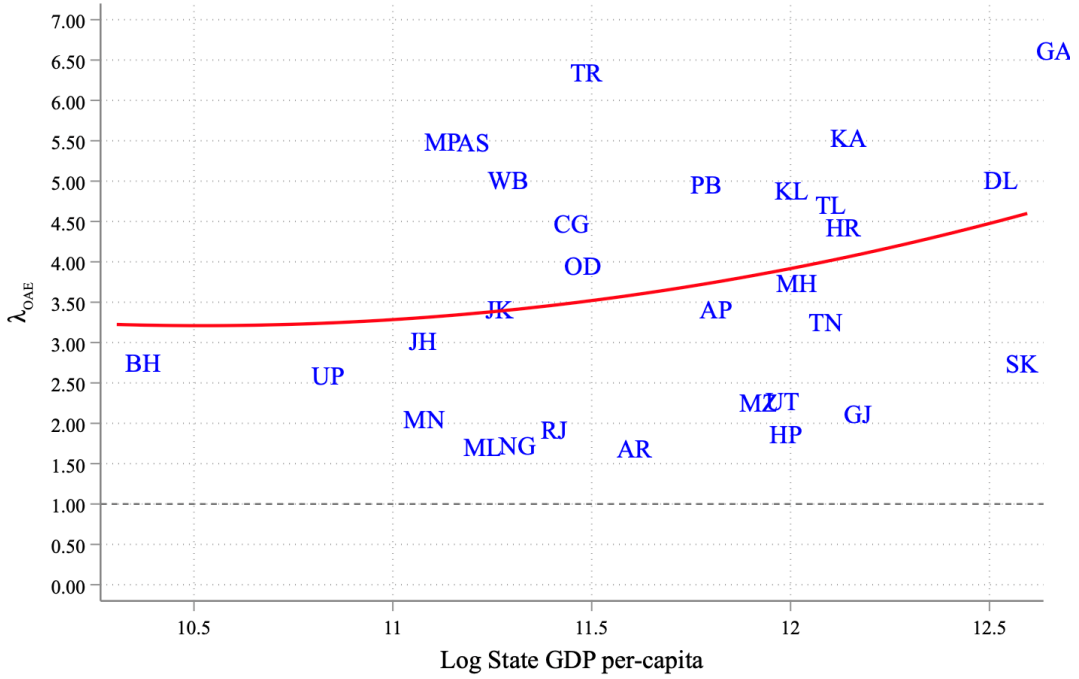
OAE



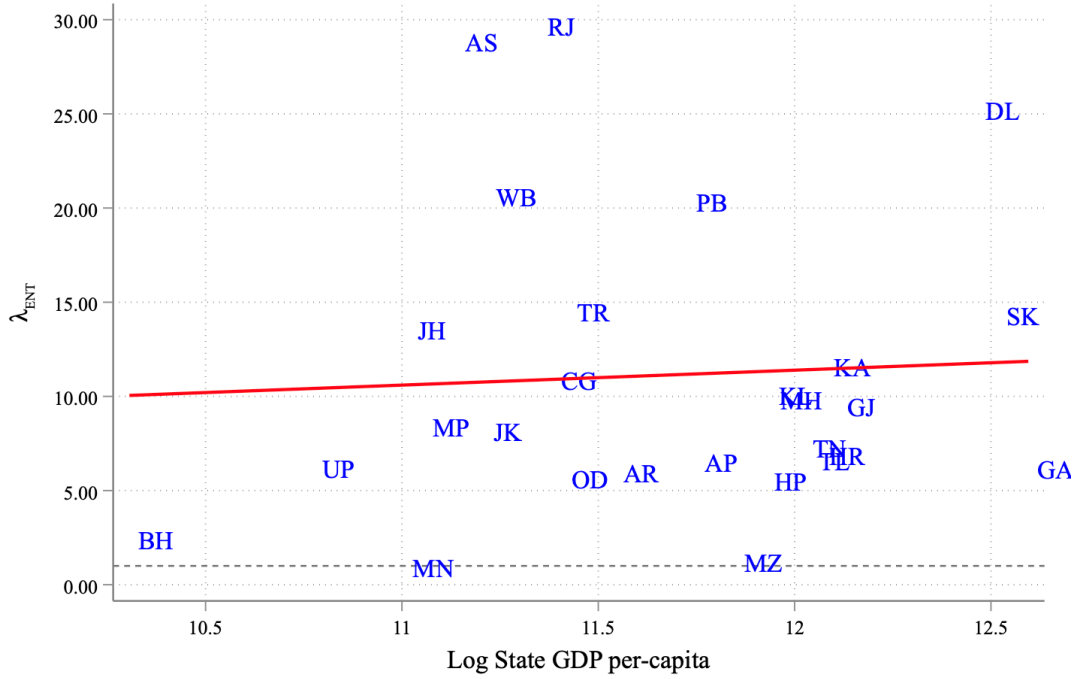
Entrepreneurship

- Estimates for both OAE and Entrepreneurship are greater than 1 across all states
- Lower in richer states as compared to poorer ones
- Barriers to entrepreneurship almost 1.5-2x more than OAE

Labor demand distortions (λ_{og})



OAE



Entrepreneurship

- Estimates for both OAE and Entrepreneurship are greater than 1 across all states
- Unlike supply-side barriers, no correlation across state income levels
- Relatively much larger than supply-side barriers

Implications for policy

- Policy efforts to improve FLFP remain fundamental, esp. in poorer states
- Barriers to growth (across all states) are under-emphasized, but arguably more important → require structural, demand-side policy interventions
  (access to inputs, skills training, networks, markets, etc.)
- State-specific policies are important. For e.g. need FLFP policies in poorer states, but demand-side policies in richer ones
- Our approach highlights a data + theory approach to (macroeconomic) policymaking. Need to combine it microeconomic insights and feedback loops

Thank you!

Email: ChiplunkarG@darden.virginia.edu