

# **Rural roads, small business creation, and the gender-gap in entrepreneurship**

Sumit Agarwal, Pulak Ghosh, Abhiroop Mukherjee,  
S. Lakshmi Naaraayanan

***Discussion: Pedro Rosa Dias***

# Context and research questions

- Can access to new roads lead to the creation of small businesses in villages in rural India?
- What channels contribute to this?
  - Access to markets and credit
  - Reduction of the gender gap in entrepreneurship, caused by:
    - A possible erosion of patriarchal social norms (along the lines of Goldin (2013), Bertrand (2021) etc).
    - Better access to childcare / schools
    - Better access to credit
- What effect did road-induced business creation have on employment, especially female employment?

# Identification

- Paper exploits random variation in the probability of road building across a village population threshold, in a well-known public infrastructure programme: PMGSY.
- Convincing identification strategy, used in a similar context by Asher and Novosad (2017, 2020).
- Complex data matching endeavor: administrative data on roads is hand-matched to census data on Micro, Small and Medium Enterprises – timing of business creation . Data on schools' location is then added to this dataset.
- Recovers LATE – focus is on village-level business creation. Focus on different margins than Asher and Novostad (2020): gender entrepreneurs, in addition to overall effect on the number of firms.
- Treatment definition: *if at least one previously unconnected house in a village becomes connected to a new road, then that village is treated*. Would there be scope for an analysis of intensity of treatment (e.g. percentage of households newly connected)?

# Results – business creation and gender

- Business creation in villages just above the population threshold nearly doubles ; but not in villages just below that threshold, where it almost stagnates.
- This suggests that more granular data can reveal effects that were undocumented in previous research (Asher and Novosad, 2020)!
- Business creation caused by roads is inclusive in terms of gender (more women entrepreneurs), but not caste, SES etc. Channels:
  - Financing constraints? Perhaps, but no data to show it...
  - More time available for women to be entrepreneurs? Villages with improved access to better schools / childcare indeed show more female entrepreneurship. Yet could there be common unobserved factors explaining both (e.g. better governance, social norms...)?
  - Relaxation of social norms?
    - Indeed data show higher female entrepreneurship in treated villages where relatively more men emigrate from!
    - Yet no data on norms is used – interacting treatment with measures of adherence to traditional social structures would allow a more robust test of this hypothesis.

# Results – business creation and employment

- Business created in response to road building don't employ more people than other businesses. Yet they employ relatively more women!
- Is this because, on average, businesses created by women entrepreneurs require skills that female employees are more likely to have? Or has this to do with the purported relaxation of social norms?
  - More information about the sectors of economic activity where entrepreneurial expansion took place would be helpful here!
- Longer term questions: quality and survival of new businesses. Relevant in terms of policy.