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# Multigenerational mobility in India

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# SOCIAL MOBILITY - WHY SHOULD WE STUDY IT?

- Intergenerational Mobility is an under-researched area in Development Economics. Quite puzzling, given the focus on poverty, inequality and (in)equality of opportunity.
- Emerging interest amongst the researchers and policy makers on Intergenerational Mobility.
- Multi-generational Mobility largely missing except for a few developed economies.

# LITERATURE

- Intergenerational mobility in developing countries [1]
  - **Educational mobility** (Azam and Bhatt, 2015; Emran and Shilpi, 2015; Hnatkovska, Lahiri and Paul 2013;Hertz et al., 2007)
  - **Occupational mobility** (Clark (*forthcoming*), 2019; Iversen, Krishna and Sen, 2017; Azam, 2015; Motiram and Singh, 2012; Hnatkovska, Lahiri and Paul, 2013; Emran and Shilpi, 2011; Bossuroy and Cogneau, 2013)
- Multigenerational mobility studied mainly in developed countries (Lindahl et al., 2015; Long and Ferrie, 2015; Zeng and Xie, 2014; Lucas and Kerr, 2013)
- Multigenerational mobility not studied in Indian context

[1] Iversen, Krishna and Sen(2019) provides an in depth review.

# Our contribution and preview of results

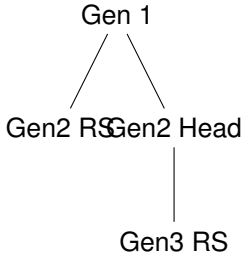
- Contributes towards Multi-generational Mobility.
- Multi-generational Mobility work in a developing country.

## Findings

- Backward caste people are showing $\Downarrow$ mobility compared to general caste.
- urban people exhibit $\Uparrow$ mobility compared to rural people (not shocking!).

# DATA

We use the India Human Development Survey-II (IHDS-II) a nationally representative dataset collected by the *University of Maryland* and the *National Council of Applied Economic Research* (NCAER) in 2011-12.



# OCCUPATIONAL CATEGORIES

- **Category 1:** Professional (Occupation codes 00-29)
- **Category 2:** Clerical and other (Occupation codes 30-49)
- **Category 3:** Farmers (Occupation codes 60-62)
- **Category 4**: Higher status vocational occupations (Occupation codes 50-52, 56-59, 79, 84-87).
- **Category 5:** Lower status vocational occupations (often caste based, traditional): 53-55, 68, 71-78, 80-83, 88-93, 96-98
- **Category 6:** Agricultural and other manual labourers, including construction workers (Occupation codes 63-67, 94, 95, 99)

# MOBILITY PATTERNS ACROSS GENERATIONS

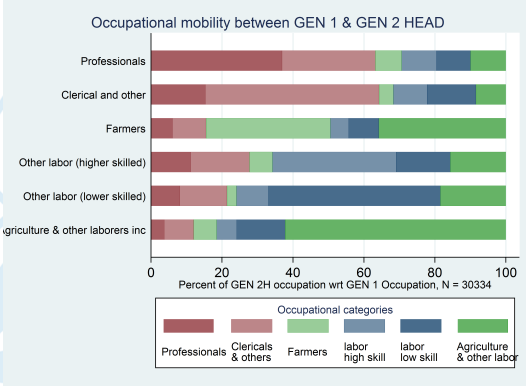



Figure: Gen 1 & Gen 2

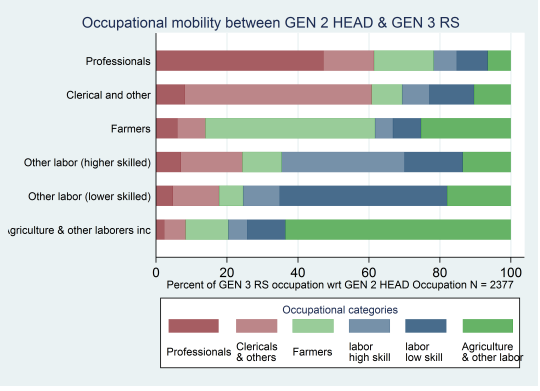
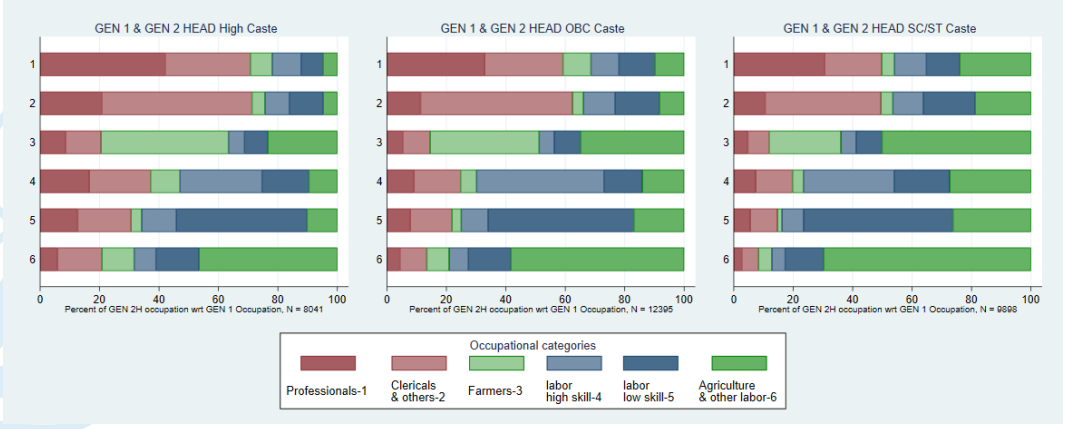
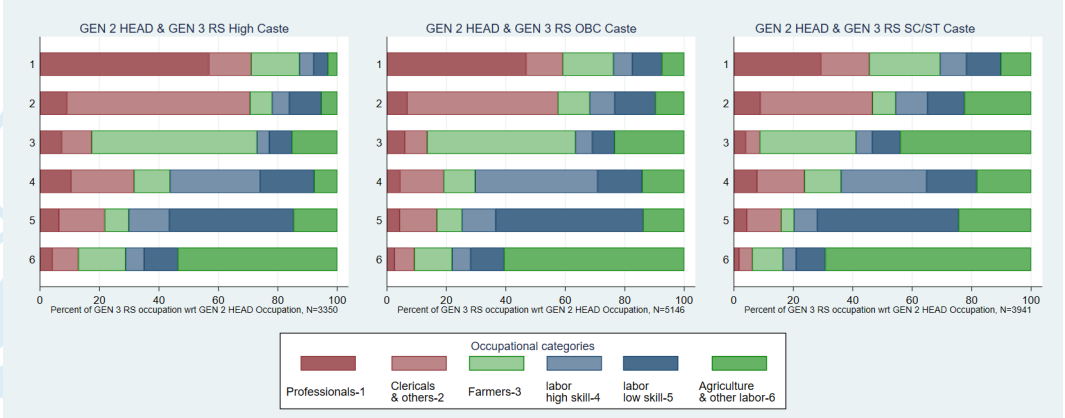



Figure: Gen 2 & Gen 3

# GEN 1 HEAD & GEN 2 CASTE



# GEN 2 HEAD & GEN 3 CASTE



# MODEL-1

We use Solon (2004, 2014) adaptation of the Becker-Tomes model.

$$O_{i,c} = \beta_0 + \beta_1 O_{i,p} + \beta_2 O_{i,gp} + \Pi X_i + \epsilon_i \quad (1)$$

where

- $O_{i,c}$ = Child's occupation
- $O_{i,p}$ = Parent's occupation
- $O_{i,gp}$ = Grandparent's occupation
- $\Pi X_i$ = Control
- $\epsilon_i$ = Error term

# MULTIGENERATIONAL MOBILITY

| | Gen 2 ocp(1) | Gen 3 ocp(2) | Gen 3 ocp(3) | Gen 3 ocp(4) | Gen 3 ocp(5) | Gen 3 ocp(6) |
|---|---|---|---|---|---|---|
| Gen 1 occupation | 0.412*** | | | 0.333*** | 0.136*** | 0.137*** |
| | (0.00619) | | | (0.00920) | (0.0127) | (0.0126) |
| Gen 2 occupation | | 0.486*** | 0.490*** | | 0.441*** | 0.445*** |
| | | (0.0102) | (0.0102) | | (0.0105) | (0.0106) |
| Gen 2 age group | | | 0.0985*** | | | 0.105*** |
| | | | (0.0267) | | | (0.0268) |
| Constant | 2.538*** | 2.110*** | 1.825*** | 2.717*** | 1.766*** | 1.461*** |
| | (0.0495) | (0.0509) | (0.0878) | (0.0460) | (0.0557) | (0.0868) |
| Observations | 36626 | 12796 | 12796 | 16308 | 12739 | 12739 |

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

# MODEL-2

We use Difference in Differences (DiD) method to exploit multigenerational nature of our data and test for mobility across different social groups

$$O_{ij} = \beta_0 + \beta_1 S_{ij} + \beta_2 G_{ij} + \beta_3 S_i * G_{ij} \quad (2)$$

where

- $O_{ij}$ = Child's occupation
- $S_{ij}$ = Social group dummy (eg. religion/caste)
- $G_{ij}$ = Generation/time dummy
- $S_i * G_{ij}$= Interaction term

# MULTIGENERATIONAL MOBILITY - DID

| | Occupation (1) | Occupation (2) |
|---|---|---|
| Time | -0.00737 | 0.126*** |
| | (0.0244) | (0.0163) |
| Treatment=Social group (SC,ST) | 1.152*** | |
| | (0.0167) | |
| DiD (SC,ST) ⇓ | 0.0839** | |
| | (0.0339) | |
| Treatment=Location | | -0.579*** |
| | | (0.0139) |
| DiD (Location) ⇑ | | -0.366*** |
| | | (0.0284) |
| Constant | 3.391*** | 4.192*** |
| | (0.0121) | (0.00806) |
| Observations | 48874 | 82386 |

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

# CONCLUSION

- Persistence is high!
- In-spite of having affirmative policies (quotas) for lower castes, lower caste people are showing $\Downarrow$ mobility compared to general caste, quite puzzling! Affirmative targeted policies not working?
- urban people exhibit $\Uparrow$ mobility compared to rural people (not shocking!).

# THANK YOU