

Persistence of Occupational Disparity among Social Groups: Evidence from India

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□ Structure of the Paper

- **Introduction**
- **Related Literature**
- **Data and Methodology**
- **Results and Discussion**
- **Conclusion**

□ Background of the Study

- The concept of intergenerational social mobility refers to the transformation of the social position of a family from one to next generation.
- So, the difference between a person's current income, wealth, or occupation and that of the previous generation is to be explained.

□ Related Literature

- The study on social mobility was started by Sorokin (1927), and later on Blau (1956) and Lipset and Benedix (1959) etc.
- The parametric approach, where son's education or occupation or income is regressed on father's education or occupation or income, and (Solon, 1992; Gang and Zimmerman, 1999; Bowels et al., 2005; Checchi et al., 2008).
- However, for comparability scholars have developed some summary measures of mobility from the transition matrix (Praise, 1955; Shorrocks, 1978 and 1983; Sommers and Colinsk, 1979; Bartholomew, 1982; Van de Gaer et al., 2001).

□ Related Literature ...

- The first attempt to evaluate intergenerational mobility in India was done by Driver (1962), where occupational mobility was assessed by using the data of a specific geographical area.
- Kumar et al. (2002a, 2002b) evaluated the occupational mobility across generations by using small electorate data from the center for the Study of Developing Societies (CSDS) for 1971 and 1996.
- Desai and Kulkarni (2008) have shown that the between-group educational disparity is confined only at the primary level of education, but not at the higher levels of education.
- With various types of outcomes, we find some other studies like Motiram and Singh (2012), Hnatkowska et al. (2013). Azam and Bhatt (2015) etc.

□ Objectives

- First, instead of a straightforward application of the existing summary measures of mobility, we define two group-specific summary measures of the relative strength of upward and downward occupational mobility and apply these summary measures to examine the persistence of occupational disparity across Indian social groups.
- Second, we categorize occupations in a different way by taking into account skills and status of jobs associated with different occupations according to the occupational hierarchy of Indian labour market.

□ Methodology

- Intergenerational mobility for explaining the persistence of between-group inequality.
- First group-specific measure for the persistence of group disparity.
- Second group-specific measure for the persistence of group disparity.
- Summary measure of overall intergenerational occupational mobility.
- Classification of occupations: **Blue collar jobs**, **Pink collar jobs** and **White collar jobs**.

(Refer to Full Paper for Detail Interpretation)

□ Results and Discussion

□ Intergenerational mobility across the social groups

□ Table 1(a)

Table 1(a): Sample characteristics (First Cohort: 21 to 30 Years)

| Occupational Categories | Panel A: HC | | | | Panel B: OBC | | | | Panel C: SC | | | | Panel D: ST | | | | Panel E: All-India | | | |
|-------------------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|--------------------|-----------------|-------------------|-----------------|
| | Fathers | | Sons | | Fathers | | Sons | | Fathers | | Sons | | Fathers | | Sons | | Fathers | | Sons | |
| | Sample Proportion | 95% C.I. | Sample Proportion | 95% C.I. | Sample Proportion | 95% C.I. |
| Blue Collar Jobs | 0.528 (0.014) | 0.50, 0.542 | 0.5 (0.015) | 0.471, 0.529 | 0.628 (0.007) | 0.614, 0.642 | 0.132 (0.008) | 0.116, 0.147 | 0.719 (0.002) | 0.715, 0.722 | 0.675 (0.004) | 0.667, 0.683 | 0.729 (0.010) | 0.709, 0.749 | 0.706 (0.011) | 0.684, 0.728 | 0.667 (0.004) | 0.659, 0.675 | 0.641 (0.004) | 0.633, 0.645 |
| Pink Collar Jobs | 0.304 (0.013) | 0.278, 0.329 | 0.306 (0.013) | 0.280, 0.331 | 0.259 (0.007) | 0.244, 0.272 | 0.282 (0.006) | 0.268, 0.294 | 0.199 (0.005) | 0.189, 0.209 | 0.225 (0.005) | 0.215, 0.235 | 0.192 (0.009) | 0.174, 0.209 | 0.213 (0.009) | 0.195, 0.230 | 0.224 (0.004) | 0.216, 0.221 | 0.247 (0.004) | 0.239, 0.254 |
| White Collar Jobs | 0.168 (0.009) | 0.154, 0.187 | 0.194 (0.012) | 0.170, 0.217 | 0.113 (0.006) | 0.101, 0.124 | 0.585 (0.005) | 0.575, 0.595 | 0.082 (0.006) | 0.070, 0.094 | 0.095 (0.006) | 0.083, 0.106 | 0.078 (0.005) | 0.068, 0.087 | 0.081 (0.006) | 0.069, 0.092 | 0.109 (0.002) | 0.105, 0.113 | 0.112 (0.003) | 0.106, 0.117 |

Source: Indian Human Development Survey, Second Round, 2011-12.

Note: Numerical figures in the parentheses are standard error of sample proportions; 95% C.I. implies 95 percent confidence interval.

□ Results and Discussion

□ Intergenerational mobility across the social groups

□ Table 1(b)

Table 1(b): Sample characteristics (First Cohort: 31 to 40 Years)

| Occupational Categories | Panel A: HC | | | | Panel B: OBC | | | | Panel C: SC | | | | Panel D: ST | | | | Panel E: All-India | | | |
|-------------------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|--------------------|-----------------|-------------------|-----------------|
| | Fathers | | Sons | | Fathers | | Sons | | Fathers | | Sons | | Fathers | | Sons | | Fathers | | Sons | |
| | Sample Proportion | 95% C.I. | Sample Proportion | 95% C.I. | Sample Proportion | 95% C.I. |
| Blue Collar Jobs | 0.559 (0.014) | 0.531, 0.586 | 0.497 (0.014) | 0.469, 0.524 | 0.644 (0.007) | 0.630, 0.657 | 0.619 (0.005) | 0.609, 0.629 | 0.736 (0.006) | 0.724, 0.747 | 0.685 (0.006) | 0.673, 0.696 | 0.746 (0.011) | 0.724, 0.768 | 0.714 (0.012) | 0.690, 0.737 | 0.693 (0.004) | 0.685, 0.701 | 0.676 (0.004) | 0.668, 0.684 |
| Pink Collar Jobs | 0.283 (0.015) | 0.253, 0.312 | 0.280 (0.014) | 0.253, 0.307 | 0.246 (0.006) | 0.234, 0.257 | 0.259 (0.007) | 0.245, 0.272 | 0.185 (0.005) | 0.175, 0.195 | 0.193 (0.005) | 0.183, 0.203 | 0.179 (0.010) | 0.159, 0.199 | 0.205 (0.009) | 0.187, 0.223 | 0.203 (0.004) | 0.195, 0.210 | 0.210 (0.004) | 0.202, 0.218 |
| White Collar Jobs | 0.157 (0.011) | 0.135, 0.179 | 0.223 (0.012) | 0.199, 0.246 | 0.109 (0.004) | 0.101, 0.117 | 0.124 (0.005) | 0.114, 0.134 | 0.079 (0.003) | 0.073, 0.085 | 0.092 (0.004) | 0.084, 0.099 | 0.075 (0.007) | 0.061, 0.089 | 0.079 (0.008) | 0.063, 0.095 | 0.104 (0.003) | 0.098, 0.110 | 0.114 (0.003) | 0.108, 0.119 |

Source: Indian Human Development Survey, Second Round, 2011-12.

Note: Numerical figures in the parentheses are standard error of sample proportions; 95% C.I. implies 95 percent confidence interval.

□ Results and Discussion

□ Intergenerational mobility across the social groups

□ Table 1(c)

Table 1(c): Percentage distribution of individuals by occupational categories (Third Cohort: 41 to 50 Years)

| Occupational Categories | Panel A: HC | | | | Panel B: OBC | | | | Panel C: SC | | | | Panel D: ST | | | | Panel E: All-India | | | |
|-------------------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|--------------------|-----------------|-------------------|-----------------|
| | Fathers | | Sons | | Fathers | | Sons | | Fathers | | Sons | | Fathers | | Sons | | Fathers | | Sons | |
| | Sample Proportion | 95% C.I. | Sample Proportion | 95% C.I. | Sample Proportion | 95% C.I. |
| Blue Collar Jobs | 0.57 (0.014) | 0.543, 0.597 | 0.544 (0.014) | 0.516, 0.571 | 0.682 (0.007) | 0.683, 0.696 | 0.658 (0.007) | 0.644, 0.671 | 0.749 (0.005) | 0.739, 0.756 | 0.724 (0.006) | 0.712, 0.736 | 0.782 (0.011) | 0.760, 0.803 | 0.75 (0.012) | 0.725, 0.773 | 0.711 (0.004) | 0.703, 0.719 | 0.687 (0.004) | 0.679, 0.695 |
| Pink Collar Jobs | 0.284 (0.014) | 0.256, 0.311 | 0.264 (0.014) | 0.236, 0.291 | 0.221 (0.007) | 0.207, 0.235 | 0.226 (0.006) | 0.214, 0.238 | 0.184 (0.005) | 0.174, 0.194 | 0.198 (0.005) | 0.188, 0.208 | 0.175 (0.010) | 0.155, 0.195 | 0.185 (0.009) | 0.167, 0.203 | 0.193 (0.004) | 0.185, 0.201 | 0.202 (0.004) | 0.194, 0.210 |
| White Collar Jobs | 0.145 (0.010) | 0.125, 0.164 | 0.191 (0.013) | 0.167, 0.216 | 0.096 (0.004) | 0.088, 0.103 | 0.115 (0.007) | 0.101, 0.128 | 0.065 (0.005) | 0.055, 0.074 | 0.077 (0.004) | 0.069, 0.085 | 0.053 (0.007) | 0.039, 0.067 | 0.065 (0.008) | 0.049, 0.081 | 0.096 (0.002) | 0.092, 0.099 | 0.111 (0.003) | 0.105, 0.117 |

Source: NSSO 68th Round of employment and unemployment Survey, 2011-12.

Note: Numerical figures in the parentheses are standard error of sample proportions; 95% C.I. implies 95 percent confidence interval.

□ Results and Discussion

□ Intergenerational mobility across the social groups

□ Table 1(d)

Table 1(d): Percentage distribution of individuals by occupational categories (Fourth Cohort: 51 to 60 Years)

| Occupational Categories | Panel A: HC | | | | Panel B: OBC | | | | Panel C: SC | | | | Panel D: ST | | | | Panel E: All-India | | | |
|-------------------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|--------------------|-----------------|-------------------|-----------------|
| | Fathers | | Sons | | Fathers | | Sons | | Fathers | | Sons | | Fathers | | Sons | | Fathers | | Sons | |
| | Sample Proportion | 95% C.I. | Sample Proportion | 95% C.I. | Sample Proportion | 95% C.I. |
| Blue Collar Jobs | 0.598 (0.014) | 0.571, 0.625 | 0.57 (0.014) | 0.543, 0.597 | 0.712 (0.007) | 0.698, 0.726 | 0.682 (0.007) | 0.668, 0.696 | 0.785 (0.006) | 0.773, 0.797 | 0.757 (0.006) | 0.745, 0.769 | 0.803 (0.011) | 0.781, 0.825 | 0.772 (0.012) | 0.748, 0.795 | 0.748 (0.004) | 0.740, 0.756 | 0.717 (0.004) | 0.709, 0.725 |
| Pink Collar Jobs | 0.29 (0.013) | 0.265, 0.315 | 0.274 (0.013) | 0.249, 0.299 | 0.203 (0.007) | 0.189, 0.217 | 0.217 (0.006) | 0.205, 0.229 | 0.156 (0.005) | 0.146, 0.165 | 0.177 (0.005) | 0.167, 0.187 | 0.154 (0.009) | 0.136, 0.172 | 0.178 (0.009) | 0.160, 0.195 | 0.163 (0.005) | 0.153, 0.173 | 0.187 (0.004) | 0.179, 0.195 |
| White Collar Jobs | 0.112 (0.010) | 0.092, 0.131 | 0.156 (0.012) | 0.132, 0.179 | 0.085 (0.004) | 0.077, 0.093 | 0.101 (0.005) | 0.091, 0.111 | 0.059 (0.003) | 0.053, 0.065 | 0.066 (0.004) | 0.058, 0.074 | 0.043 (0.007) | 0.029, 0.056 | 0.050 (0.008) | 0.034, 0.066 | 0.089 (0.004) | 0.081, 0.096 | 0.094 (0.003) | 0.088, 0.099 |

Source: Indian Human Development Survey, Second Round, 2011-12.

Note: Numerical figures in the parentheses are standard error of sample proportions; 95% C.I. implies 95 percent confidence interval.

□ Results and Discussion

□ Explanation based on ‘transition’ matrices

□ Table 2(a)

Table 2(a): Occupational Transition Matrices (First Cohort: 21 to 30 Years)

| | Panel A: HC | | | Panel B: OBC | | | Panel C: SC | | | Panel D: ST | | | Panel E: All-India | | |
|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|--------------------|------------------|-------------------|
| | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs |
| Blue Collar Jobs | 0.654 | 0.239 | 0.107 | 0.809 | 0.123 | 0.068 | 0.869 | 0.088 | 0.043 | 0.922 | 0.063 | 0.015 | 0.822 | 0.119 | 0.059 |
| Pink Collar Jobs | 0.279 | 0.435 | 0.286 | 0.509 | 0.349 | 0.142 | 0.624 | 0.289 | 0.087 | 0.679 | 0.169 | 0.152 | 0.499 | 0.339 | 0.162 |
| White Collar Jobs | 0.217 | 0.256 | 0.527 | 0.369 | 0.364 | 0.267 | 0.388 | 0.364 | 0.248 | 0.388 | 0.325 | 0.287 | 0.314 | 0.403 | 0.283 |

Source: Indian Human Development Survey, Second Round, 2011-12.

Note: Category one includes ‘White collar jobs’, Category two comprise ‘Pink collar jobs’, and Category three consists of ‘Blue collar jobs’.

□ Results and Discussion

□ Explanation based on ‘transition’ matrices

□ Table 2(b)

Table 2(b): Occupational Transition Matrices (Second Cohort: 31 to 40 Years)

| | Panel A: HC | | | Panel B: OBC | | | Panel C: SC | | | Panel D: ST | | | Panel E: All-India | | |
|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|--------------------|------------------|-------------------|
| | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs |
| Blue Collar Jobs | 0.666 | 0.203 | 0.131 | 0.866 | 0.093 | 0.041 | 0.911 | 0.054 | 0.035 | 0.928 | 0.043 | 0.029 | 0.863 | 0.388 | 0.049 |
| Pink Collar Jobs | 0.287 | 0.452 | 0.261 | 0.486 | 0.196 | 0.118 | 0.639 | 0.265 | 0.096 | 0.611 | 0.185 | 0.204 | 0.72 | 0.169 | 0.111 |
| White Collar Jobs | 0.27 | 0.25 | 0.498 | 0.559 | 0.322 | 0.319 | 0.6 | 0.15 | 0.25 | 0.385 | 0.346 | 0.269 | 0.398 | 0.217 | 0.383 |

Source: Indian Human Development Survey, Second Round, 2011-12.

Note: Category one includes ‘White collar jobs’, Category two comprise ‘Pink collar jobs’, and Category three consists of ‘Blue collar jobs’.

□ Results and Discussion

□ Explanation based on ‘transition’ matrices

□ Table 2(c)

Table 2(c): Occupational Transition Matrices (Third Cohort: 41 to 50 Years)

| | Panel A: HC | | | Panel B: OBC | | | Panel C: SC | | | Panel D: ST | | | Panel E: All-India | | |
|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|--------------------|------------------|-------------------|
| | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs |
| Blue Collar Jobs | 0.704 | 0.177 | 0.119 | 0.875 | 0.088 | 0.037 | 0.914 | 0.055 | 0.031 | 0.94 | 0.043 | 0.017 | 0.873 | 0.084 | 0.043 |
| Pink Collar Jobs | 0.328 | 0.423 | 0.249 | 0.492 | 0.373 | 0.155 | 0.623 | 0.312 | 0.065 | 0.595 | 0.238 | 0.167 | 0.472 | 0.357 | 0.171 |
| White Collar Jobs | 0.227 | 0.279 | 0.494 | 0.45 | 0.26 | 0.29 | 0.543 | 0.239 | 0.218 | 0.522 | 0.261 | 0.217 | 0.366 | 0.247 | 0.386 |

Source: Indian Human Development Survey, Second Round, 2011-12.

Note: Category one includes ‘White collar jobs’, Category two comprise ‘Pink collar jobs’, and Category three consists of ‘Blue collar jobs’.

□ Results and Discussion

□ Explanation based on ‘transition’ matrices

□ Table 2(d)

Table 2(d): Occupational Transition Matrices (Fourth Cohort: 51 to 60 Years)

| | Panel A: HC | | | Panel B: OBC | | | Panel C: SC | | | Panel D: ST | | | Panel E: All-India | | |
|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|--------------------|------------------|-------------------|
| | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs | Blue Collar Jobs | Pink Collar Jobs | White Collar Jobs |
| Blue Collar Jobs | 0.693 | 0.183 | 0.124 | 0.875 | 0.093 | 0.032 | 0.909 | 0.077 | 0.014 | 0.952 | 0.029 | 0.018 | 0.872 | 0.091 | 0.038 |
| Pink Collar Jobs | 0.253 | 0.433 | 0.314 | 0.492 | 0.424 | 0.084 | 0.525 | 0.414 | 0.061 | 0.625 | 0.292 | 0.083 | 0.422 | 0.404 | 0.173 |
| White Collar jobs | 0.161 | 0.278 | 0.561 | 0.349 | 0.279 | 0.372 | 0.348 | 0.274 | 0.378 | 0.583 | 0.083 | 0.333 | 0.259 | 0.238 | 0.502 |

Source: Indian Human Development Survey, Second Round, 2011-12.

Category one includes ‘White collar jobs’, Category two comprise ‘Pink collar jobs’, and Category three consists of ‘Blue collar jobs’.

□ Results and Discussion

□ Persistence of between-group occupational disparity

Table 3: Computed values of intergenerational occupational mobility

| | | M | IP1 | IP2 |
|-------------------|-----------------------|-------|--------|--------|
| First age Cohort | Higher Castes | 0.496 | -0.071 | -0.011 |
| | Other Backward Castes | 0.545 | -0.361 | -0.196 |
| | Scheduled Castes | 0.565 | -0.502 | -0.353 |
| | Schedule Tribes | 0.517 | -0.455 | -0.253 |
| | All-India | 0.519 | -0.326 | -0.170 |
| Second age Cohort | Higher Castes | 0.461 | -0.069 | -0.034 |
| | Other Backward Castes | 0.539 | -0.455 | -0.236 |
| | Scheduled Castes | 0.524 | -0.491 | -0.302 |
| | Schedule Tribes | 0.539 | -0.433 | -0.181 |
| | All-India | 0.528 | -0.289 | -0.148 |
| Third age Cohort | Higher Castes | 0.459 | -0.097 | -0.027 |
| | Other Backward Castes | 0.487 | -0.347 | -0.187 |
| | Scheduled Castes | 0.519 | -0.509 | -0.281 |
| | Schedule Tribes | 0.535 | -0.467 | -0.252 |
| | All-India | 0.461 | -0.296 | -0.133 |
| Fourth age Cohort | Higher Castes | 0.437 | -0.023 | 0.025 |
| | Other Backward Castes | 0.443 | -0.346 | -0.142 |
| | Scheduled Castes | 0.399 | -0.349 | -0.133 |
| | Schedule Tribes | 0.474 | -0.479 | -0.285 |
| | All-India | 0.407 | -0.228 | -0.063 |

□ Conclusion

- We invoke the non-parametric approach to intergenerational mobility in this study, and initially apply the descriptive analysis based on the ‘mobility’ or ‘transition’ matrix.
- The study finds substantial downward mobility across all social groups, which have been tried to be reconciled by the theory of ‘equality/inequality of opportunity’.
- Findings also point out that the downward occupational mobility is low for the advantaged social groups compared to the disadvantaged social groups in India, but contrary is true for upward occupational mobility.

□ Conclusion....

- The values of IP1 and IP2 display that the relative strength of occupational ascents is consistently greater for HCs compared to OBCs, SCs and STs.
- This difference leads to the increase in inter-group occupational disparity from the previous to the current generation.
- The computed values of the standard summary measure reveal that in the first, second and third age cohorts overall mobility of sons from their fathers is greater in samples of disadvantaged social groups compared to the advantaged social group.

Thank You