## Effort, Opportunity and Inequality: Caste and Religious Differences in Earnings in India

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Sociologists have long examined the relationship between ascribed characteristics such as a race, ethnicity, religion, and place of origin on the one hand and material well being of the individuals on the other (DiPrete & Grusky, 1990). In recent years economists have also begun to develop an interest in this area (Roemer, 1998) with recent theoretical approaches in both disciplines developing a far more nuanced understanding of the way in which socio-economic conditions of the family of origin are linked to individual outcomes.

Following the early articulation by John Roemer (Roemer 1998), economists tend to distinguish between advantages over which individuals have some control, referred to as "effort" and advantages over which individuals do not have control, referred to as "circumstances" (Bourguignon, Ferreira, & Menendez, 2007; Roemer, 1998). However, precise distinction between effort and circumstances remains ambiguous. For example, when studies of earnings inequality by race or ethnicity control for education, it is assumed that education refers to effort while the coefficient for race refers to circumstances.

This simple analysis, however, fails to satisfy critics from the right as well as from the left. Two lines of criticism are worth noting: (1) Most studies focus mainly on years of schooling. This simple control fails to distinguish between quality of schooling which has been shown to have considerable impact on earnings outcomes (Psacharopoulos & Velez, 1993). (2) Education itself a function of race, class and other social conditions (Behrman & Taubman, 1976; Bowles & Gintis, 1976; Breen & Jonsson, 2005). If educational quality is also determined by social origin – and a large body of literature documents that to be the case – then it is hard to empirically demonstrate that observed effect of social origin on earnings is due to labor market inequalities and not inequality in quality of education.

Inadequacies of analytical models have particularly striking consequences when confronted with strident debates about the necessity for affirmative action or lack thereof. Recent debates around caste and religion in India are particularly interesting. Does caste still dominate life chances of Indians in modern India? In spite of a large body of qualitative and a somewhat more limited body of qualitative literature (Basant & Shariff, 2009; Gupta, 2000; Kapur, Prasad, Pritchett, & Shyam Babu, 2010; Thorat & Newman, 2009) on this topic, the empirical limitations outlined above have limited our ability to reach a definitive conclusion.

A large number of studies have documented the linkage between socioreligious background and educational attainment as well the quality of education (Desai, Adams, & Dubey, 2009; Desai & Kulkarni, 2008; Deshpande, 2000; The Probe Team, 1999). Given this observation, it is difficult to definitively attribute observed

socio-religious differentials in earnings inequality to unequal opportunity in the labor market rather than to unequal opportunity in education.

Using a unique new dataset, the India Human Development Survey (IHDS) of 2005 (Desai, et al., 2010), we examine the inequality in labor market outcomes for men of different caste, ethnic and religious background keeping in mind a need to separate the labor market inequalities from educational inequalities. Table 1 presents descriptive statistics for annual earnings from all sources including farm and nonfarm activities and years of completed education. The IHDS is a nationally representative sample of 41,554 households spread across India. We restrict our analysis to about 33,000 males aged 25-54 to avoid dealing with differences in labor for participation.

Table 1: Median Annual Earnings and Education For Men aged 25-54

	Annual Earnings in Rs.	Years of Educ.
High caste	24000	10
OBC (Middle castes)	14875	8
Dalit (Lowest castes)	14000	5
Adivasi (Scheduled tribes)	9317	3
Muslim	17500	5
Sikh, Jain, Christian etc.	30000	10

We focus our attention on caste and religious inequalities in earnings, keeping in mind a need to separate these from educational inequalities. We do this in three ways:

- 1. The first analytical innovation is relatively simple and feasible due to better quality data. In addition to years of education, we also control for educational performance by including controls for division in secondary and college examinations (for men who have attained those levels) as well as English fluency and rudimentary computing skills. Our preliminary results show that caste and religious differences in earnings are attenuated with better controls for skills and performance but remain large and significant.
- 2. The second analytical innovation is more substantively meaningful and relies on a key indicator whose impact on earnings will be positive or negative depending on whether labor markets reward effort or a privileged social background. Family background determines the average amount of education an individual is likely to obtain. In families where college education is the norm, a high school graduate is an under performer. If markets reward effort and persistence as has been argued (Heckman &

Rubinstein, 2001), individuals whose educational attainment outstrips that of other family members should be rewarded. If instead, markets respond to the social location of individuals (Bourdieu, 1984), such individuals would be penalized for coming from a low social class. In order to study this, we include a variable for the difference between individual's education and that of his brother with the highest level of education.

Our preliminary analysis shows substantial penalties associated with coming from a lower social class rather than reward for effort and persistence, i.e. the coefficient for educational achievement vis-à-vis brothers is negative and statistically significant. Moreover, this penalty is greater for people from lower castes.

3. Social class of origin is more visible in a rural society where social networks are denser. Hence we should see greater impact of the difference between individual's own education and that of his siblings in rural areas and in urban areas. Preliminary results support this expectation.

This distinction between inequality of opportunity and inequality of effort in earnings outcomes is particularly important given the present debates around affirmative action in modern India. While the disadvantage of lowest castes is less contested, substantial debates surround the affirmative action for middle castes (known as Other Backward Classes). These middle castes are numerically dominant, nearly 50% of the population; and have gained tremendous political power since 1970s (Jha, 1980). Hence, whether they are really disadvantaged in the labor market remains open to debate. Economic disadvantages of Muslims are frequently attributed to their low educational attainment and whether they remain disadvantaged in the labor market apart from educational deprivation is also of substantial policy interest.

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