



Munich Personal RePEc Archive

# **Socio-economic differentials in intergenerational educational mobility among women in India**

Choudhary, Akanksha and Singh, Ashish

SJM School of Management, Indian Institute of Technology Bombay,  
Mumbai, India

4 October 2016

Online at <https://mpra.ub.uni-muenchen.de/76442/>

MPRA Paper No. 76442, posted 02 Feb 2017 22:57 UTC

# **Socio-economic differentials in intergenerational educational mobility among women in India**

Akanksha Choudhary<sup>1\*</sup>, Ashish Singh<sup>1</sup>

<sup>1</sup>SJM School of Management, Indian Institute of Technology Bombay, Mumbai, India

\* Choudharyj.akanksha@gmail.com

## **Abstract**

A few studies have related daughters' education to their fathers in India but there is little to no evidence when it comes to intergenerational relation between daughters and mothers' education. Using India Human Development Survey 2011-12, we investigate intergenerational educational mobility for women (15-49 years) (vis-à-vis their mothers). We have used mobility matrices/measures for the estimation. Findings indicate that intergenerational educational mobility at the all-India level is about 0.69, that is, 69% of the women acquire a level of education different from their mothers. Of the overall mobility, about 80% is contributed by upwards mobility whereas the rest is downwards. Mobility is greater in urban areas and is highest among the socially advantaged "Others" (or upper) caste group. Also, the upwards component is substantially lower for socially disadvantaged groups compared to Others. Further, there are large inter-regional variations, with situation being worst in the central and eastern regions which comprise of the underdeveloped states of India. Moreover, mobility (overall and upwards) increases consistently as one move up the income distribution. Furthermore, income is not able to neutralize the caste based gaps in overall mobility as overall mobility among the Others of the poorest income group is more than the overall mobility among Scheduled Castes/Tribes of the richest income group.

## **1. Introduction**

"If you educate a man you educate an individual, but if you educate a woman you educate a household" (Sierra 2013). The above statement in some sense explains the significance of educating women in any society. Of late research, has shown that, if a mother is educated it has substantial effect on education, health and other aspects of development of children (UNICEF 2015). A mother's education thus forms one of the most basic pillars of the development of a society as a whole.

It has been said that images shape aspirations and native people become the images of teachers, principals, coaches, experts, and role models in provincial educational systems for a child and his/her learning and aspirations start from there (Chiefs of Ontario 2012). Among all of the surrounding people, a mother plays an important role in her children's education, especially for a girl child in a society like India, where education of a boy is considered to be

necessity while a girl's education is known to be a luxury which not everyone can afford (Choudhary and Singh 2016; NCWE 1959).

A good education for children in any society is not only important from normative point of view but also leads to economic returns. Existing evidence shows that, on an average, each additional year of education boosts a person's income by 10 per cent and increases a country's gross domestic product (GDP) by 18 per cent (UNICEF 2015). Some researchers estimate that if every child learned to read, around 170 million fewer people would live in poverty. Also, the benefits of girls' education extend to their own children who are often healthier and more educated because their mothers went to school (UNICEF 2015). Further, educated mothers often participate in household decisions and they have higher bargaining power resulting into better education for their daughters (Chudgar 2011; Schultz 2002; Singh et al. 2013; Tansel 2002). Advantages of women's education are now well known; still the extent of women education is much lower than men in India (Singh 2014). Women contribute nearly fifty percent of the India's population but their contribution in education and income generating activities is much lower (Singh 2012a). Therefore, it is important to study the improvements and advancements in girls' education in India.

Immediately after independence various reforms started to improve levels of education among women in India. Several committees were formed and programs were launched, such as – “National Committee for Women education”, “Hansa Mehta committee”, “Bhaktavatsalam committee”, “Kothari Commission”, “Sarva Shiksha Abhiyan”– dedicated to cater the educational needs of women in the country (Kaur 2013). While improvements in educational access have made some impact on improving girls' access to education, there are fundamental systemic issues that constrain progress towards gender equality in education (CREATE 2008a, b, 2009).

As education of women as children depends a lot on their mothers' education, if women start with lower educational attainment (and society suffers from severe gender discrimination), then lower educational attainment among women will either tend to persist over generations or there will be incremental improvements in educational attainment of women over generations (Choudhary and Singh 2016). That said it is important to have a more careful look at the existing studies on whether mothers' and daughters' education are interrelated. A careful search reveals that there are indeed a few studies which have manifested that children's educational attainments, especially daughters', are directly related to that of their mothers' (Behrman et al.1999; Choudhary and Singh 2016; Chudgar 2009; Comi 2004; Lam and Duryea 1999; Lillard and Willis 1994; Peter and Sahn 1999).

Consequently, this paper examines the intergenerational educational mobility for women (15-49 years) in India with a special focus on socioeconomic differentials. While doing so a nationally representative dataset which covers all the states and union territories of India except Andaman and Nicobar Islands and Lakshadweep Islands is used. Examination has been done by – rural/urban areas, geographical regions, social groups, income groups and their interaction as well. The paper also separates the overall intergenerational educational mobility into upwards and downwards mobility. Separation of overall mobility into the downwards and upwards components gives a bird's eye view of whether women are performing better than their mothers or not, as far as their educational attainments are concerned. India has been chosen for the present study because, first, even after various initiatives by government to improve women education in India, women are not at par with men when it comes to education levels; second,

women are still a discriminated or second gender in India; and finally, the scholarship on this subject is rather limited in India.

The present study finds that the overall mobility at the all-India level is about 0.69. It is constituted by 80% upwards component and 20% downwards. Overall mobility for urban areas is greater than that of rural areas. The overall mobility is highest among the socially advantaged “Others” caste group (the upper castes). Also, the upwards component is substantially lower for socially disadvantaged groups compared to “Others” group. It is also observed that there are large inter regional variations, with situation being worst in the central and eastern regions which comprise of the most deprived (in terms of economic and demographic characteristics) states of India. Further, the overall mobility (and its upwards component) increases consistently as one moves from the lower parts of the income distribution to the upper parts of income distribution. Moreover, income is not able to neutralize the caste based gaps in overall mobility as overall mobility among the Others in the poorest income group is more than the overall mobility among SCs or STs in the richest income group.

Given the above, the outline of the paper is as follows: in the next section a brief literature review is presented; and in the one after that, data is described. These are followed by Section 4, which documents the methods and measures used in the analysis. Results are presented in Section 5 and Section 6 concludes the paper with some ensuing discussion.

## **2. Literature review**

The scholarship on Intergenerational educational mobility in India is quite limited. There are a few studies done but they are mostly limited to men and mainly explore mobility in son-father pairs. A critical review of these studies is presented below:

Hnatkovska et al. (2012) have investigated intergenerational educational, occupational and income mobility among males (male household heads and their male children/grandchildren) using the various rounds of nationally representative “National Sample Surveys (NSS)”. As this study is limited to males, nothing can be deduced regarding the extent of intergenerational educational mobility among women. Majumder (2010) has also looked into intergenerational educational mobility using NSS data from the 1993 and 2004 rounds, and has severe limitations related to sample selection. First, it includes less than 20 per cent of the eligible sample in the analysis in both the rounds (see Choudhary and Singh 2016 for details); therefore, its estimates for girls/daughters have to be taken with a bit of caution (Majumder 2010, p. 469). Second, the study also does not include married women in the analysis.

Jalan and Murgai (2008) has used National Family Health Survey (NFHS) (1998–1999) and notes that National Family Health Surveys are not suitable for study of intergenerational mobility, especially for women. The reason being the parental education is known only for child-parent pairs which were living in the same household at the time of survey. Given the extent of low age marriages in India, the women aged 15 years or above are mostly either the daughter-in-law or wife of household heads, a group for which parental education cannot be obtained from the survey.

One study which is relevant in the present context is Choudhary and Singh (2016) which has studied intergenerational educational mobility among young women in India using mother daughter pair. The above study suffers from the following limitations: first, it includes only young women aged 15-24 years in the study; second it is limited to only six Indian states. Furthermore, Choudhary and Singh (2016) might suffer from underreporting of upwards mobility, because women (in the age group 15-24) who were in school or college at the time of survey were not included in the analysis. So, all the women who were in higher studies (say, college) but whose mothers would have completed lesser years of schooling were dropped from the sample resulting in underestimation of upwards mobility. In addition, Choudhary and Singh (2016) has not looked into how mobility varies across the income classes or how mobility across different social groups varies over income classes.

The above review shows that, the scholarship on intergenerational educational mobility among women in India is quite limited primarily due to unavailability of appropriate data. That said the present paper examines intergenerational mobility in education for women aged 15-49 (with respect to their mothers) using a large and nationally representative data set.

### **3. Data and Methods**

#### **3.1. Data description**

The data is taken from the India Human Development Survey (IHDS) 2011-12. This survey is a nationally representative, multi-topic survey of 42,152 households across India. These households are spread across 33 states and union territories, 384 districts, 1420 villages and 1042 urban blocks located in 276 towns and cities. The survey covers all states and union territories of India with the exception of the islands of Andaman/Nicobar and Lakshadweep. Two one-hour interviews in each household covered health, education, employment, economic status, marriage, fertility, gender relations, and social capital. The IHDS was jointly conducted by University of Maryland and the National Council of Applied Economic Research (NCAER), New Delhi (Desai et al. 2015). In addition to the household and individual questionnaires, IHDS 2011-12 includes village, school, and medical facility surveys. Extensive Census data were also merged for contextual analyses at the village, district, and state levels. Within the household survey, several sections also focused on the household's connections to the wider community (Desai et al., 2015).

The survey was carried out in face-to-face interviews in seven modules covering (1) socio-economic condition of the household including income, employment, educational status, consumption expenditure, and social capital; (2) interview with one ever-married woman aged 15-49 years per household was conducted regarding health, education, fertility, family planning, marriage, and gender relations; (3) interview with youth in the households aged 15-18 years was also conducted regarding education, employment, marriage, life skills, future planning, friendship and risky confidential behaviors; (4) further, short reading, writing, and arithmetic knowledge tests for children aged 8-11 and youth aged 15-18 years in the household were administered; (5) moreover, height and weight measurement of children under age 5, aged 8-11, their mothers, and other available household members were conducted; (6) in

addition, facilities assessment of one government and one private primary school as well as a primary health care facility in the community was conducted; (7) furthermore, village questionnaire assessing employment opportunities and infrastructure facilities in the village was administered (Desai et al., 2015).

The survey instruments were translated into 13 Indian languages and were administered by local interviewers. The fieldwork was carried out by 20 collaborating institutions under the supervision of the National Council of Applied Economic Research (NCAER), New Delhi. Fieldwork began in November 2011 and was almost completed by October 2012 (Desai et al., 2015).

The 15-49 years aged ever married women (one from each household) from the 42, 152 households form the sample for analysis in this paper. Information regarding their schooling and schooling of their mother is used for generating the estimates presented in this paper. The total sample size comprises of 39,395 women from every nook and corner of India. The actual sample is smaller than 42,152 because some households did not have any ever married woman in the age group 15-49 years, in addition, those ever married women who were studying at the time of survey are not included in the analysis sample. Appropriate sampling weights are used to derive the estimates at national and regional levels. The details of the sampling weights are given in the survey report (Desai et al., 2015).

The survey captures education of women and their mothers in terms of completed years of schooling. Using the years of schooling and the various mile stones of educational attainment in the Indian schooling system, we have used the following categorization: no formal schooling (1); 1-4 years of schooling [schooling less than primary] (2); 5-7 years of schooling [completed primary but less than middle school] (3); 8-9 years of schooling [completed middle school but less than secondary] (4); 10-11 years of schooling [completed secondary but less than higher secondary] (5); 12-14 years of education [completed higher secondary but not completed graduation] (6); 15 or more years of education [completed graduation and more].

## **3.2. Methodology and measures**

We have used mobility matrices and mobility measures for estimating intergenerational educational mobility among women.

### *3.2.1 Educational mobility matrices*

To demonstrate the percentages of women who belong to the various educational categories corresponding to their mothers' educational category, educational transition or mobility matrices have been used. These percentages give the conditional probabilities, i.e., the probability that a daughter will have certain levels of education given that her mother has certain levels of education. The diagonal values signify no mobility in levels of education between mother and daughter. When all the diagonal values are one, it represents perfect immobility. Conversely, if all the diagonal values are zero, it is a case of perfect mobility.

In addition to showing mobility by matrices, we have also used two mobility measures. We could have used other methods such as, multiple regressions, but it would have suffered from some problems. For example, in regression,

there are problems of potential endogeneity of explanatory variables, inadequate or misleading proxies for relevant variables and omitted variable bias (refer Motiram and Singh 2012, p.62 for a detailed discussion). Also regression would fail to capture the distance between daughters and mothers' levels of education. So, rather than using regressions, we have used mobility measures which have been specifically developed to understand and examine intergenerational mobility and which do not suffer from the shortcomings associated with multiple regression techniques (Formby et al. 2004; Motiram and Singh 2012; Shorrocks 1978; Sommers and Conlisk 1979; Van De Gaer et al. 2000).

### 3.2.2. Mobility measures

We now present the mobility measures which originated in the sociology literature and are commonly used for the study of intergenerational mobility.

First mobility measure:  $M_1$

$M_1$  is the probability that a daughter (or expected proportion of the daughters) will have an educational category different (may be lesser or more) from her mother. It can also be interpreted as the normalized distance between the transition matrix and the identity matrix of order  $m$  (Motiram and Singh 2012, p. 62). The case of identity matrix shows perfect immobility where all the diagonal values are 1, that is, whatever the educational category of the mother be, the daughter falls in the same category (that is, with probability one). Using the notations from Motiram and Singh (2012); let  $p_{ij}$  ( $i, j = 1, \dots, m$ ) be the value in the  $i^{th}$  row and  $j^{th}$  column of the transition matrix (T), that is, the probability that the daughter's educational category is  $j$  given that her mother's educational category is  $i$ ;  $m$  is the number of categories.

The first mobility measure,  $M_1$  is:

$$M_1 = \frac{1}{m} \sum_{i=1}^m \sum_{\substack{j=1 \\ j \neq i}}^m P_{ij} = \left(1 - \frac{1}{m} \sum_{i=1}^m P_{ii}\right) \quad (1)$$

This measure has a limitation in the sense that it only looks at whether the daughter leaves the mother's education category or not without taking into account the "distance" between the education categories of the mother and daughter.

Second mobility measure:  $M_2$

As discussed above,  $M_1$  has a limitation that it only takes into account whether the daughter leaves the mother's education category without taking into account how far the daughter's educational category from the mother's educational category is. This limitation is overcome in the second mobility measure,  $M_2$  which is discussed below.

The total number of transitions possible between education of a mother and a daughter are  $m(m-1)$ . Also, for a given education of the mother ( $i$ ), the expected distance between the levels of education of the mother and daughter is  $\sum_{j=1}^m P_{ij} |i - j|$ .

$$M_2 = \frac{1}{m(m-1)} \sum_{i=1}^m \sum_{j=1}^m P_{ij} |i - j| \quad (2)$$

It is important to note that the mobility measures  $M_1$  and  $M_2$  capture the overall mobility but fall silent when it comes to the estimation of upwards and downwards mobility. Upwards mobility is desirable for any society, as it shows the chances of daughters getting an education higher than their mothers. On the other hand downwards mobility is the probability that the daughters will have lower education than their mothers, which is undesirable. Evidence on upwards (and downwards) mobility is important because there is always a possibility that the mobility measure, for example,  $M_1$  is very high indicating a high level of mobility in a society but the mobility could be predominantly downwards mobility (i.e., daughters are acquiring lower education than that of their mother) which is not desirable (Choudhary and Singh 2016). Further, knowledge of upwards and downwards mobility and their contribution to the overall mobility is also important if seen in the context of comparison of mobility between different social, spatial (rural vs. urban) or regional groups (Northern, Central, Eastern, Western, Southern). For example, western region may have higher overall mobility but it may have higher downward mobility contributing to higher overall mobility. Therefore, higher overall mobility in itself might not always be a good sign, rather higher overall mobility driven by upwards mobility is what is actually desired for any progressive society. Thus to estimate the upwards and downwards component of the overall mobility, we have decomposed the overall mobility (measured by  $M_1$ ) into upward and downward component.

### 3.2.3. Decomposition of the overall mobility

Following Choudhary and Singh (2016), if the education levels are ranked in the increasing order, that is,  $i, j=1,2,..,m$ , where,  $i, j=1$  is the lowest education level and  $i, j=m$  is the highest education level, then from (1):

$$\begin{aligned}
 M_1 &= \frac{1}{m} \sum_{i=1}^m \sum_{\substack{j=1 \\ j \neq i}}^m P_{ij} \\
 &= \frac{1}{m} \sum_{i=1}^m \sum_{\substack{j=1 \\ j \neq i}}^{i-1} P_{ij} + \frac{1}{m} \sum_{i=1}^m \sum_{\substack{j=i+1 \\ j \neq i}}^m P_{ij} \\
 &= M_{1down} + M_{1up}
 \end{aligned} \tag{3}$$

That is, using (3),  $M_1$  can be clearly expressed as an exact sum of downwards and upwards mobility, where  $M_{1down}$  is the probability that the daughter will have lower education than the mother; similarly,  $M_{1up}$  is the probability that the daughter will have more education than the mother (Choudhary and Singh, 2016)

We now present the main results of our paper. First, we document the results for all-India and results for rural and urban areas separately. It is followed by the results for all-India but for various social (caste) groups. Then we present the findings of intergenerational mobility by geographical regions which is followed by results for various social groups by regions. After that we report the results by income quintiles for all-India and various regions, followed finally by the estimates for various caste groups by income quintiles.

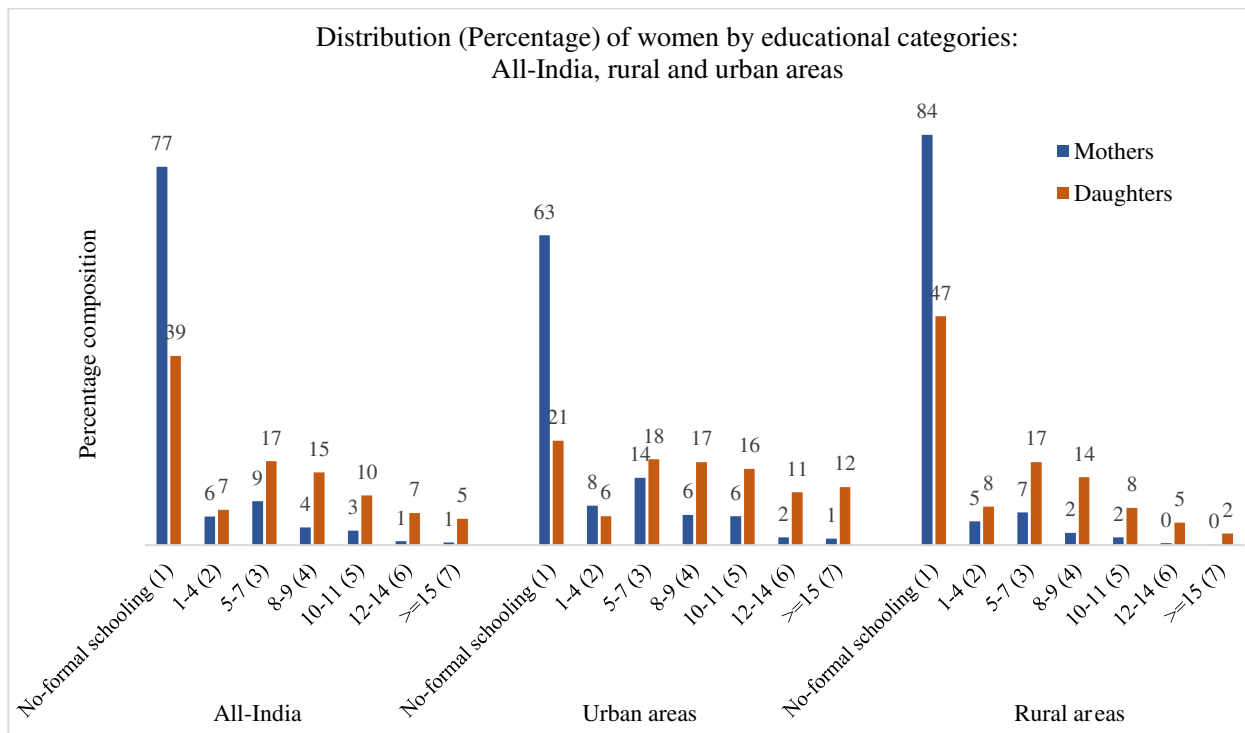


## **4. Results**

We begin by presenting the distribution of daughters as well as mothers by the levels of their schooling. It is followed by a presentation of mobility matrices. Finally, the estimates of mobility measures and the results of decomposition of overall mobility into upwards and downwards components have been documented. Each of the above details are presented separately for: (1) All India and by Urban and Rural areas separately; (2) by caste – Other castes (henceforth “others”), Other Backwards Castes (henceforth OBC), Scheduled Castes (henceforth SC) and Scheduled Tribes (henceforth ST); (3) by geographical regions –North, Central, East, West and South; (4) by caste group for every region; (5) by income quintiles for all India and regions; and finally, by caste for every income quintile.

### **4.1. Intergenerational Educational Mobility—All India, Rural and Urban**

Figure 1 presents the population distribution of mothers as well as daughters by their educational categories for all India and rural and urban areas separately. Some observations from the figure are disheartening as far as the education of women in India is concerned. The percentage of mothers with no formal schooling is quite high at about 77 percent. In rural areas, about 84 percent of mothers have no formal schooling as compared to 63 percent in urban areas. The percentage of daughters with no formal schooling is more than double in rural areas (47%) compared to the urban areas (21%). Another important thing to note here is the percentage of mothers who have completed graduation (15 years of schooling) or more is less than 1 percent for all India. Similarly, percentage of daughters with 15 or more years of schooling is nearly 5 percent for all-India. It is about 12 percent in urban areas whereas for rural areas it is only 2 percent.



Notes: (1) no formal schooling; (2) 1–4 years of schooling; (3) 5–7 years of schooling; (4) 8–9 years of schooling; (5) 10–11 years of schooling; (6) 12–14 years of schooling; (7) 15 or more years of schooling. Sample sizes—All India (39,395), Rural (26,012), Urban (13,383). Source: Authors' computations based on the data IHDS II (2011–2012).

**Fig.1. Distribution (Percentage) of women by educational categories: All-India, rural and urban areas**

Table 1 presents the mobility matrices for all India (a), urban (b) and rural (c) areas. Some of the key observations from the Table 1(a) are that – about 48 percent of daughters born to mothers with no formal schooling end up with no formal schooling. On the other hand, only 5 percent daughters of mothers with no formal schooling complete higher secondary (12 years) or more of schooling. One positive point to note here is that no daughters of mothers with 15 or more years of schooling have ended with below primary education. Also, 80 percent of daughters of such mothers have themselves completed 15 or more years of schooling.

**Table 1**

Educational transition/mobility matrices: All-India, urban and rural India.

(a) All India		Educational Categories of Daughters (percentage)						
Educational Categories of Mothers	Educational Categories of Daughters (percentage)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
(1)	48.58	8.20	18.15	12.80	7.01	3.49	1.78	
(2)	6.52	7.85	20.78	29.47	19.67	11.06	4.64	
(3)	5.56	3.50	16.02	23.19	24.19	15.69	11.86	
(4)	3.51	2.75	8.93	19.88	19.72	22.37	22.84	
(5)	1.99	0.44	3.97	12.90	19.04	25.80	35.85	
(6)	3.13	0.48	2.79	8.29	11.11	25.01	49.19	
(7)	0.00	0.00	1.26	1.99	5.01	11.21	80.52	

## (b) Urban India

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	32.40	8.08	21.20	15.85	12.33	6.14	4.00
(2)	4.15	5.66	19.49	28.19	22.98	12.51	7.01
(3)	2.98	2.05	13.33	21.63	24.76	18.43	16.82
(4)	0.71	1.18	7.68	14.85	20.83	23.60	31.16
(5)	0.61	0.00	3.19	11.14	16.62	24.92	43.52
(6)	0.00	0.56	2.66	7.58	10.08	21.83	57.29
(7)	0.00	0.00	0.00	1.37	6.35	9.59	82.68

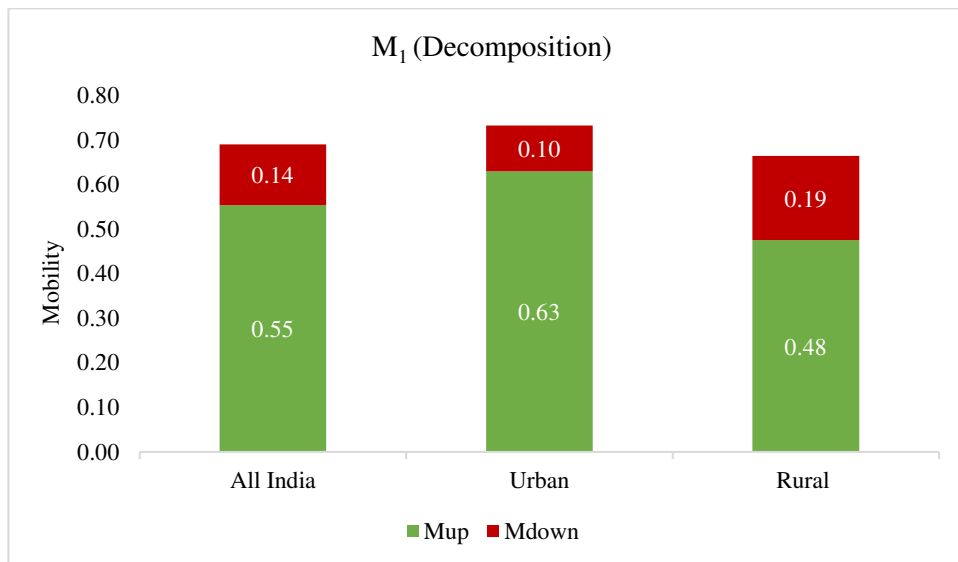
## (c) Rural India

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	54.28	8.25	17.07	11.72	5.13	2.55	0.99
(2)	8.37	9.56	21.78	30.47	17.10	9.93	2.80
(3)	8.02	4.89	18.59	24.67	23.64	13.07	7.13
(4)	6.77	4.58	10.38	25.73	18.43	20.95	13.16
(5)	4.43	1.22	5.34	15.98	23.29	27.35	22.39
(6)	8.99	0.32	3.02	9.63	13.03	30.98	34.03
(7)	0.00	0.00	5.97	4.32	0.00	17.24	72.47

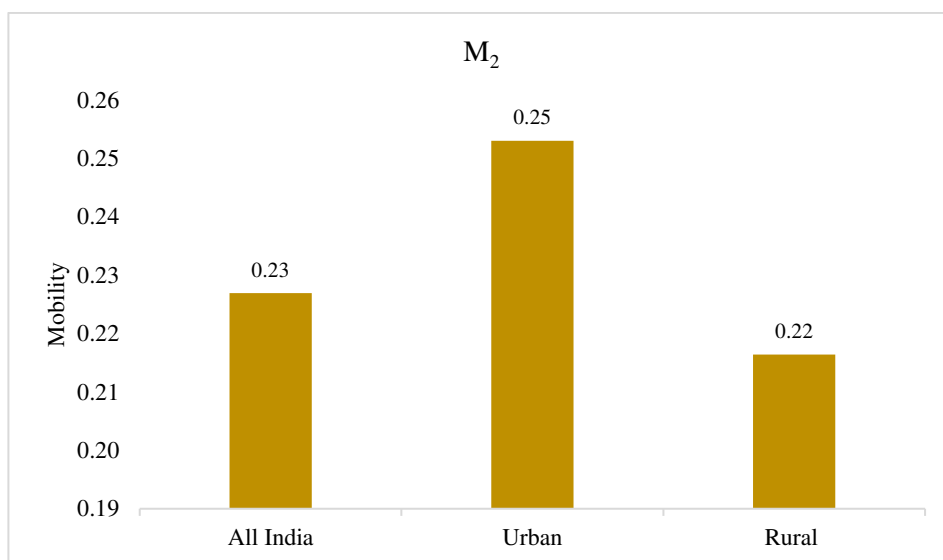
Notes: (1) no formal schooling; (2) 1–4 years of schooling; (3) 5–7 years of schooling; (4) 8–9 years of schooling; (5) 10–11 years of schooling; (6) 12–14 years of schooling; (7) 15 or more years of schooling. Sample sizes—All India (39,395), Rural (26,012), Urban (13,383). Source: Authors' computations based on the data IHDS II (2011–2012).

There are large disparities between urban and rural areas as far as intergenerational mobility in education among women is concerned. It can be seen from the Table 1 (b and c) that about 32 percent of daughters whose mothers didn't have any formal schooling end up having no formal schooling in urban areas whereas in rural areas the percentage of such daughters is as high as 54 percent. Similarly, only 1 percent of daughters whose mothers had no formal schooling completed 15 or more years of schooling in rural areas and for urban areas the figure is slightly higher at 4%. An encouraging finding from this Table is that negligible number of daughters of mothers having 15 or more years of schooling end up with no formal schooling for both urban as well as rural areas. Also, about 72 and 82 percent of daughters whose mothers have completed 15 or more years of schooling end up completing 15 or more years of schooling in rural and urban areas, respectively.

The estimates of the mobility measures for all-India, rural and urban areas have been presented in Figure 2. The mobility measure,  $M_1$  varies between '0' (no mobility at all) and '1' (perfect mobility); the overall mobility at the all-India level is about 0.69. The upwards component of this overall mobility is 0.55 which is about 80 percent of the overall; and the remaining 0.14, that is, about 20 percent (which is a substantial proportion) of the overall mobility is downwards. Also, the downward mobility (0.19 in absolute terms) in rural areas is almost twice of that in urban areas (0.10) which is alarming.



(a)



(b)

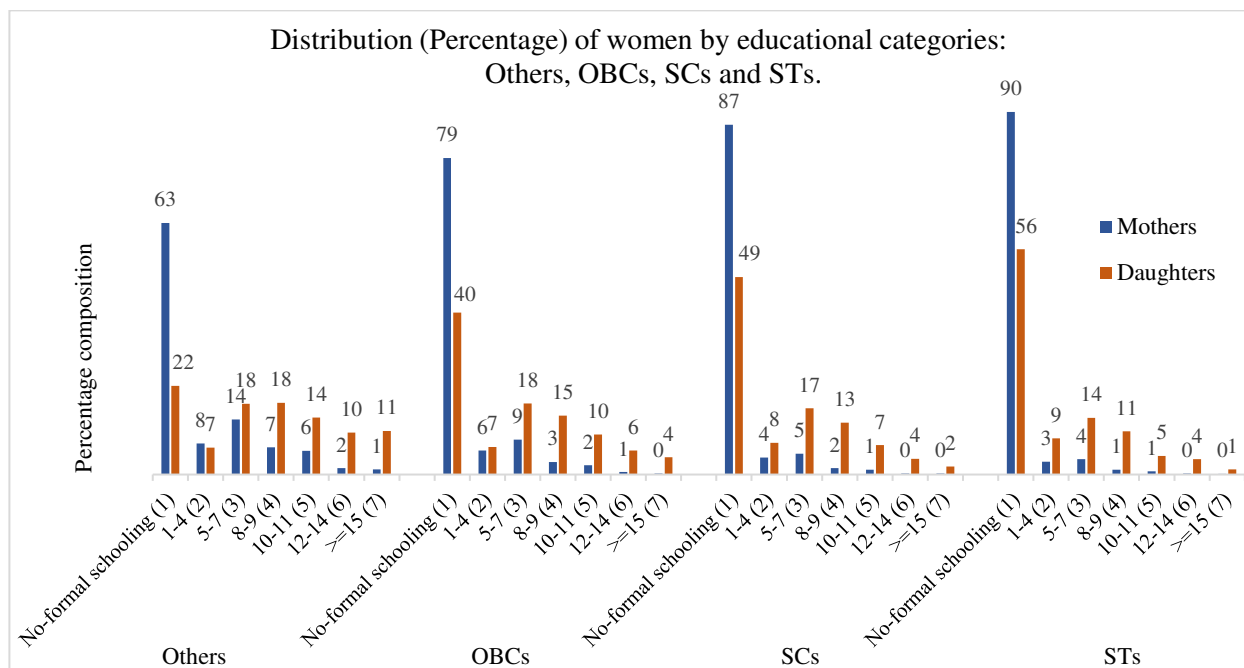
Notes: Upward/downward mobility as a percentage of total mobility ( $M_1$ ) in parenthesis. Sample sizes—All India (39,395), Rural (26,012), Urban (13,383). Source: Authors' computations based on the data IHDS II (2011–2012).

**Fig.2. Educational mobility measures (absolute) —All India and urban/rural**

#### 4.2. Intergenerational Educational Mobility—All India; by Caste Groups

The distribution of daughters and mothers by educational achievement for different caste groups is presented in Figure 3. We have analyzed intergenerational educational mobility by caste groups because caste groups form the social fabric of the Indian society and different caste groups in India are at different levels of economic and demographic achievement. Some key results from Figure 3 are as follows: (1) there are huge inter-caste variations in educational achievement of mothers and daughters; (2) about 90 percent of ST mothers have no formal schooling whereas this proportion for Others caste group is around 63 percent; (3) Similarly, 22 percent daughters from Others

caste group do not have any formal schooling, on the other hand about 56 percent of daughters from ST community do not have any formal schooling; (4) it is discouraging to see that not even 1 percent of mothers from ST caste group have 15 or more years of schooling whereas for Others caste group this proportion is about 1.3 percent; (5) likewise about 1 and 11 percent of daughters have completed 15 or more years of schooling in STs and Others caste group, respectively.



Notes: (1) no formal schooling; (2) 1–4 years of schooling; (3) 5–7 years of schooling; (4) 8–9 years of schooling; (5) 10–11 years of schooling; (6) 12–14 years of schooling; (7) 15 or more years of schooling. Sample sizes—Total (39,395); Others (11,752); OBCs (15,980); SCs (8,402); STs (3,261). Source: Authors’ computations based on the data IHDS II (2011–2012).

**Fig.3. Distribution (Percentage) of women by educational categories: Others, OBCs, SCs and STs**

Observing the mobility matrices from Table 2 for various caste groups reveals that there is a vast disparity between various caste groups as far as intergenerational educational mobility among women is concerned. Some salient results from Table 2 are as follows (1) 33 percent of daughters whose mothers have no formal schooling end up with no formal schooling in Others caste group, whereas this proportion is much higher at about 50, 55 and 61 percent in cases of OBCs, SCs and STs, respectively; (2) in Others caste group, about 3 percent of daughters whose mothers have no formal schooling end up completing 15 or more years of schooling but in OBCs, SCs and STs only 1.7, 1 and 0.6 percent of daughters whose mothers have no formal schooling complete 15 or more years of schooling, respectively; (3) among the STs, about 85 percent of daughters (highest for any caste group) whose mothers have 15 or more years of schooling complete 15 or more years of schooling and among OBCs the same proportion is only 70 percent (lowest for any caste group); (4) another noteworthy point from the table is that negligible number of daughters (among all caste groups) of mothers with 15 or more years of schooling end up with no formal schooling.

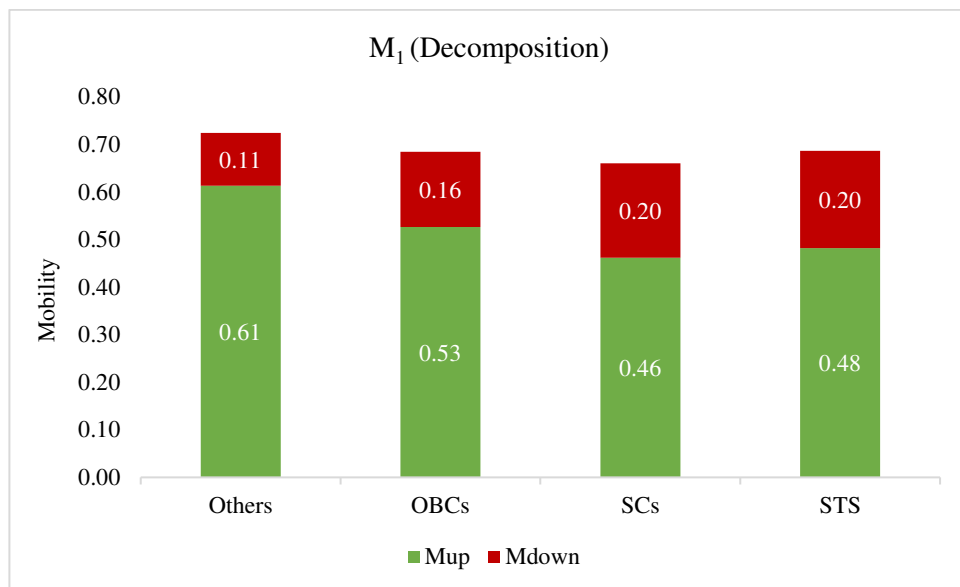
**Table 2**

Educational transition/mobility matrices: Others, OBCs, SCs and STs (All India)

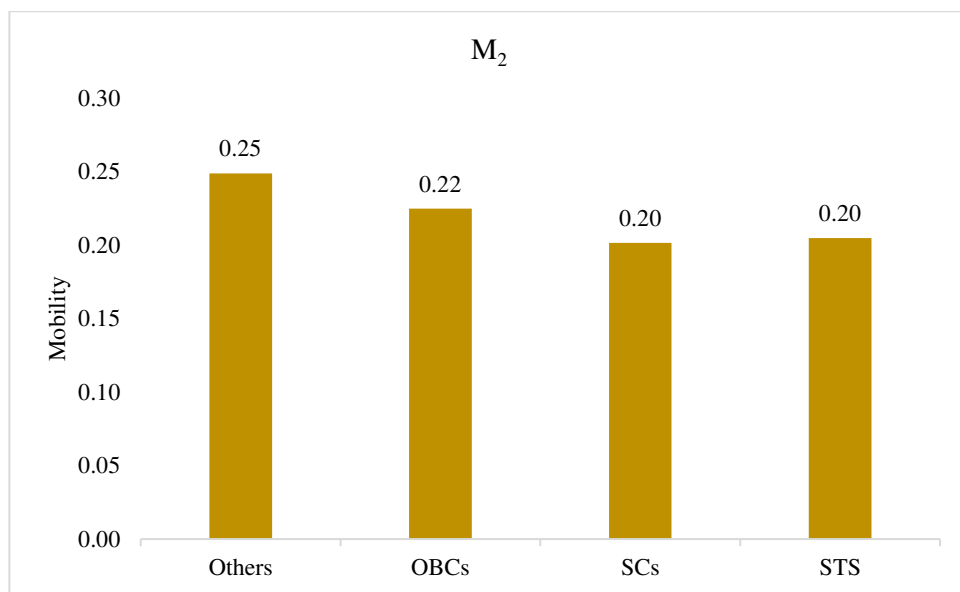
Others							
Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	33.38	9.00	21.57	16.50	10.05	6.07	3.44
(2)	3.86	6.96	20.54	29.54	22.31	10.68	6.10
(3)	4.34	2.86	13.42	22.89	25.55	16.22	14.73
(4)	1.99	2.31	6.14	18.13	19.72	24.57	27.13
(5)	1.78	0.00	3.21	11.13	18.48	25.07	40.33
(6)	4.04	0.20	1.49	9.31	8.59	19.31	57.05
(7)	0.00	0.00	1.81	0.90	4.28	9.81	83.20
OBCs							
Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	49.77	7.61	18.31	12.44	7.23	2.99	1.65
(2)	6.60	6.89	21.21	29.61	18.72	12.43	4.54
(3)	6.22	3.66	17.53	22.41	22.89	15.76	11.54
(4)	4.27	2.73	10.69	22.83	19.11	20.26	20.11
(5)	2.62	1.01	4.12	15.63	20.45	25.59	30.59
(6)	2.38	1.08	3.08	7.27	9.21	33.48	43.50
(7)	0.00	0.00	0.00	7.46	4.74	18.13	69.67
SCs							
Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	55.45	8.15	16.37	11.38	5.26	2.44	0.95
(2)	9.43	12.33	21.49	28.49	19.25	6.78	2.23
(3)	6.53	4.03	18.52	25.99	25.17	14.16	5.61
(4)	6.10	3.87	17.42	19.52	19.86	19.55	13.68
(5)	1.05	1.13	6.91	13.34	17.54	27.62	32.42
(6)	0.81	0.00	8.29	5.90	34.69	33.94	16.38
(7)	0.00	0.00	0.00	0.00	8.40	10.92	80.68
STs							
Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	60.99	9.23	13.98	9.39	3.39	2.44	0.58
(2)	17.34	8.48	15.82	31.09	8.72	16.29	2.27
(3)	8.94	7.51	20.42	25.72	19.43	14.01	3.97
(4)	13.53	7.64	7.76	13.87	28.04	19.16	10.01
(5)	1.80	0.00	8.58	13.37	17.73	40.11	18.41
(6)	0.00	0.00	10.82	6.60	24.26	12.77	45.56
(7)	0.00	0.00	0.00	0.00	14.74	0.00	85.26

Notes: (1) no formal schooling; (2) 1–4 years of schooling; (3) 5–7 years of schooling; (4) 8–9 years of schooling; (5) 10–11 years of schooling; (6) 12–14 years of schooling; (7) 15 or more years of schooling. Sample sizes: Total (39,395); Others (11,752); OBCs (15,980); SCs (8,402); STs (3,261). Source: Authors' computations based on the data IHDS II (2011–2012).

The estimates of the mobility measures for the various caste groups have been presented in Figure 4. The overall mobility for Others, OBCs, SCs, and STs is about 0.72, 0.68, 0.66 and 0.69 respectively. SCs have the lowest mobility. The upward component of overall mobility is 0.61 (about 84% of overall) for Others, which is highest and 0.46 (69% of overall) in SCs which is lowest. Also, the downward component of the overall mobility is 0.11 in Others which is lowest among all and 0.20 for both SCs and STs which is highest and alarming.



(a) M<sub>1</sub>



(b) M<sub>2</sub>

Notes: Upward/downward mobility as a percentage of total mobility (M<sub>1</sub>) in parenthesis. Sample sizes—Total (39,395); Others (11,752); OBCs (15,980); SCs (8,402); STs (3,261). Source: Authors' computations based on the data IHDS II (2011–2012).

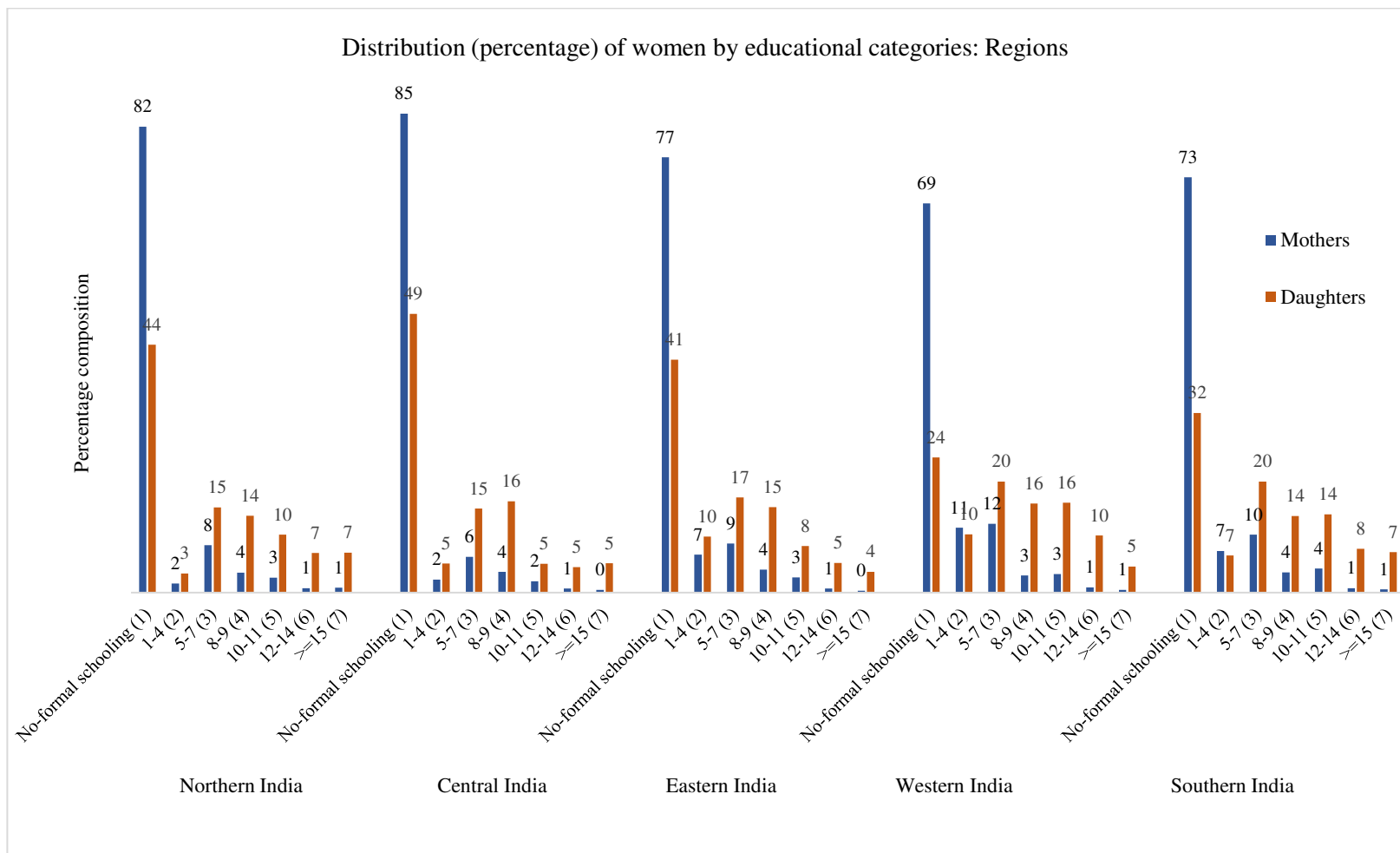
**Fig.4. Educational mobility measures (absolute): Others, OBCs, SCs and STs (All India)**

### **4.3. Intergenerational Educational Mobility— Regions**

The five specified geographical regions are: North, Central, East, West and South. The Northern region comprises the states of Jammu and Kashmir, Himachal Pradesh, Delhi, Punjab, Haryana and Rajasthan (and the Union Territory of Chandigarh). The states of Uttar Pradesh, Uttaranchal, Madhya Pradesh and Chhattisgarh come under the Central region. The Eastern region comprises the states of Bihar, Jharkhand, West Bengal, Orissa, Sikkim, Assam, Arunachal Pradesh, Meghalaya, Manipur, Mizoram, Tripura and Nagaland. The Western region includes the states of Maharashtra, Goa and Gujarat (and the two Union Territories of Daman and Diu and Dadra and Nagar Haveli). Finally, the Southern region comprises the states of Andhra Pradesh, Karnataka, Kerala and Tamil Nadu. Uttarakhand is a new state, which was carved out of the state of Uttar Pradesh and is considered in the Northern region. But since in 1993–1994 it was part of Uttar Pradesh, which is counted in the Central region, we have included it in the Central region for analysis. The categorization of states into regions is similar to Singh (2012b).

Figure 5 presents the distribution of daughters as well as mothers by their years of schooling for different geographic regions of the country.





*Notes:* (1) no formal schooling; (2) 1–4 years of schooling; (3) 5–7 years of schooling; (4) 8–9 years of schooling; (5) 10–11 years of schooling; (6) 12–14 years of schooling; (7) 15 or more years of schooling. Sample sizes—Total (39,395); Northern India (8,873); Central India (8,158); Eastern India (8,287); Western India (5,342); Southern India (8,735). *Source:* Authors’ computations based on the data IHDS II (2011–2012)

**Fig.5. Distribution (percentage) of women by educational categories: Regions**

From the figure, it is clear that schooling among women has not evolved evenly across the country. About 84 percent of mothers and 49 percent of daughters in central India have no formal schooling. Situation is slightly better in western India where proportion of mothers and daughters with no formal schooling is about 67 and 24 percent, respectively. Surprisingly, for all the regions percentage of mothers with 15 or more years of schooling is less than 1 percent. Also, the percentage of daughters with 15 or more years of schooling is in the range of 4 to 7 percent with eastern India having lowest percentage and southern India having the highest percentage.

The mobility matrices for the different geographic regions are documented in Table 3. The key findings from Table 3 are as follows: (1) about 33 percent of daughters of mothers who didn't have any formal schooling also end up with no formal schooling in western India, whereas in other regions such as central, northern and eastern regions, this proportion is as high as 56, 52 and 52 percent, respectively; (2) in eastern India not even 1 percent of daughters of mothers with no formal schooling complete 15 or more years of schooling; (3) hardly any daughter of mothers with 15 or more years of schooling end up with no formal schooling; (4) in northern India, about 89 percent of daughters of mothers with 15 or more years of schooling themselves complete 15 or more years of schooling; (5) for other regions such as central, eastern, western and southern, the percentage of daughters whose mothers have completed 15 or more years of schooling and who themselves complete 15 or more years of schooling is 78, 76, 72 and 82 percent, respectively.

**Table 3**  
Educational transition/mobility matrices: Regions

Northern India

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	52.10	3.88	16.29	13.04	7.86	4.25	2.58
(2)	7.21	3.64	19.79	22.76	28.39	14.17	4.05
(3)	6.07	0.74	12.59	21.58	25.18	18.33	15.51
(4)	3.78	1.26	5.52	13.97	21.51	26.76	27.21
(5)	5.84	0.89	3.08	5.60	11.74	26.44	46.41
(6)	0.44	0.84	2.46	6.30	8.98	7.33	73.65
(7)	0.00	0.00	0.00	0.00	5.40	5.52	89.08

Central India

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	56.53	5.52	15.09	14.81	3.39	2.58	2.08
(2)	14.07	6.54	20.74	25.94	12.52	10.95	9.24
(3)	11.63	3.62	15.90	24.47	17.01	10.94	16.43
(4)	6.00	2.50	12.16	23.93	10.69	21.34	23.38
(5)	4.21	0.92	4.39	22.08	17.67	22.86	27.87
(6)	7.51	0.00	2.76	16.72	10.86	12.44	49.71
(7)	0.00	0.00	5.27	0.00	4.29	12.01	78.42

Eastern India							
Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	51.84	10.99	17.37	11.56	4.98	2.35	0.92
(2)	7.72	12.64	22.42	34.16	12.38	7.02	3.67
(3)	6.07	5.04	18.03	28.77	21.21	13.34	7.55
(4)	3.46	4.19	6.64	24.78	23.16	19.23	18.54
(5)	2.23	0.00	4.21	13.54	25.28	25.65	29.08
(6)	5.09	0.00	0.61	4.88	8.59	41.08	39.75
(7)	0.00	0.00	0.00	8.53	4.98	10.07	76.43

Western India							
Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	33.53	12.72	21.88	13.56	11.37	5.70	1.24
(2)	3.74	6.46	20.80	26.86	24.65	14.29	3.20
(3)	2.97	5.35	15.14	18.15	29.55	18.60	10.24
(4)	0.00	3.84	7.45	13.87	26.40	33.65	14.79
(5)	0.40	0.98	2.45	17.99	18.35	27.73	32.10
(6)	0.78	2.09	4.65	9.77	22.73	27.85	32.14
(7)	0.00	0.00	0.00	4.35	5.42	18.04	72.19

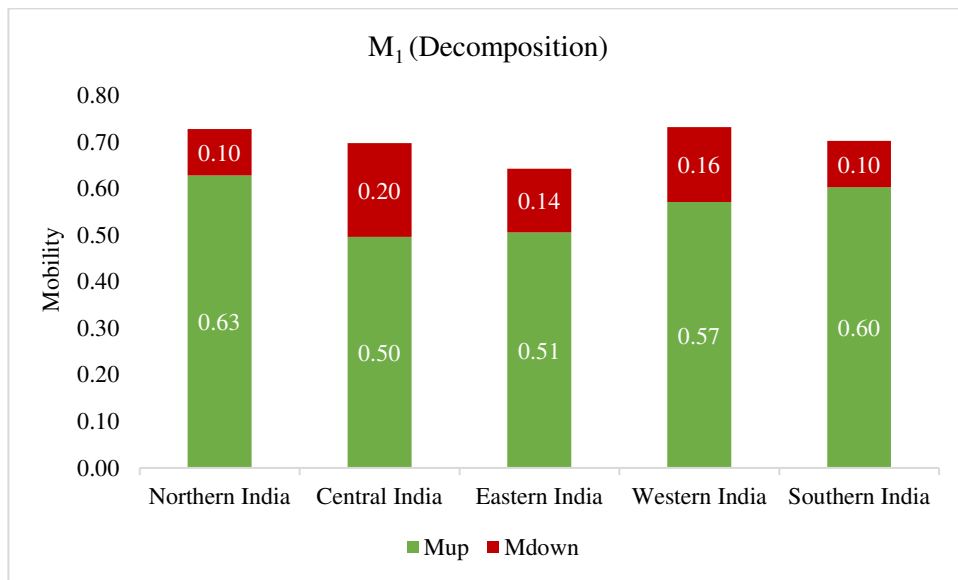
Southern India							
Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	42.13	8.11	21.66	11.21	10.56	4.09	2.24
(2)	5.55	5.25	19.18	29.28	23.43	11.61	5.69
(3)	2.93	1.78	16.43	21.64	27.05	17.52	12.66
(4)	2.73	1.39	11.16	15.91	20.18	18.80	29.83
(5)	0.18	0.09	4.67	7.89	18.17	26.17	42.83
(6)	0.00	0.00	3.93	3.57	6.17	28.16	58.17
(7)	0.00	0.00	0.31	0.00	5.09	12.23	82.37

Notes: (1) no formal schooling; (2) 1–4 years of schooling; (3) 5–7 years of schooling; (4) 8–9 years of schooling; (5) 10–11 years of schooling; (6) 12–14 years of schooling; (7) 15 or more years of schooling.

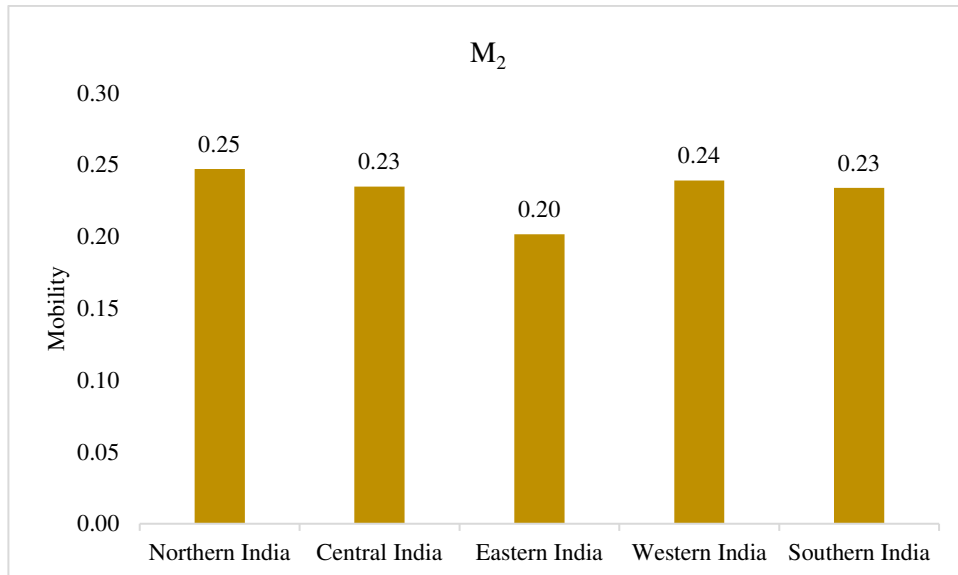
Sample sizes—Total (39,395); Northern India (8,873); Central India (8,158); Eastern India (8,287); Western India (5,342); Southern India (8,735)

Source: Authors' computations based on the data IHDS II (2011–2012).

Figure 6 shows the overall mobility and its decomposition for the various geographical regions. Some key points worth mentioning from the above Figure are: (1) western and northern regions have highest overall mobility, i.e., 0.73, however, a considerable part, about 22% of the overall mobility in the western region is because of the downward mobility; (2) central region has an overall mobility of 0.70 but nearly 28% of the overall mobility is due to downward mobility; (3) northern (86% of overall) and southern (86% of overall) regions have higher upward mobility as compared to other regions; whereas (4) Central and western India have higher downward mobility as compared to other regions.



(a) M<sub>1</sub>



(b) M<sub>2</sub> Notes: Upwards/downwards mobility as a percentage of total mobility M<sub>1</sub>) in parenthesis. Sample sizes—Total (39,395); Northern India (8,873); Central India (8,158); Eastern India (8,287); Western India (5,342); Southern India (8,735). Source: Authors' computations based on the data IHDS II (2011–2012).

**Fig.6. Educational mobility measures (absolute) —Regions**

#### 4.4. Intergenerational Educational Mobility—Caste groups by Regions

As can be seen from the description of results so far, intergenerational educational mobility varies by caste as well as by region. Some of the regions have higher upward mobility as compared to others. Similarly, socially and economically advanced caste groups have higher upward mobility compared to the socially disadvantaged ones. Therefore, it is important to look into an interaction of caste and region, that is, it is interesting to see whether there is caste based variation in intergenerational educational mobility in different regions.

Table 4, panel A, reports the overall mobility as well as its decomposition for each caste group for every geographical region, whereas the sample sizes used to arrive at these values have been reported in panel B. It can be observed from the Table that no matter which is the region, Others caste group has highest overall as well as upward mobility. A point of caution here is that, the results for ST caste group should be seen in the light of the fact that the sample sizes for this group are small for all the regions except the eastern region. Some other findings from the Table are as follows: (1) in northern region overall mobility is 0.76 for the Others compared to 0.67 and 0.54 for OBCs and SCs, also the upward component of overall mobility is visibly higher in Others than OBCs and SCs; (2) in central region, the overall mobility (0.17) is significantly lower in case of STs and that too has a substantial contribution (about 38 percent) from downward mobility; (3) in the eastern region, the STs, SCs and OBCs have 0.52, 0.53 and 0.54 overall mobility, respectively which is substantially lower than that of Others; (4) in western region also Others have substantially higher overall mobility (0.76) compared to the SCs, STs and OBCs, notably, STs have an overall mobility of only 0.34; (6) in the southern region, except the STs, the overall mobility for all the caste groups is comparatively higher related to other regions and about 80-90 percent of it is contributed by upward mobility. The detailed mobility matrices have been presented in appendix A.

**Table 4**

Educational mobility measures and sample sizes: Castes by Regions

(A) Educational mobility measures

Regions	Castes	M <sub>1</sub>	M <sub>1</sub> up (in percentage)	M <sub>1</sub> down (in percentage)	M <sub>2</sub>
Northern Region	Others	0.76	90.74	9.26	0.27
	OBCs	0.67	83.32	16.68	0.23
	SCs	0.54	84.21	15.79	0.18
	STs <sup>a</sup>	-----	-----	-----	-----
Central Region	Others	0.72	78.04	21.96	0.26
	OBCs	0.69	69.96	30.04	0.23
	SCs	0.41	63.73	36.27	0.14
	STs	0.17	72.17	27.83	0.05
Eastern Region	Others	0.69	83.77	16.23	0.22
	OBCs	0.54	81.50	18.50	0.18
	SCs	0.53	76.07	23.93	0.16
	STs	0.52	83.44	16.56	0.16
Western Region	Others	0.76	83.20	16.80	0.26
	OBCs	0.58	81.63	18.37	0.19
	SCs	0.58	87.98	12.02	0.18
	STs	0.34	93.32	6.68	0.13
Southern Region	Others	0.74	91.19	8.81	0.26
	OBCs	0.70	83.70	16.30	0.23
	SCs	0.68	84.16	15.84	0.22
	STs	0.33	70.18	29.82	0.10

## (B) Sample Sizes

	Others	OBCs	SCs	STs
Northern Region	3460	2611	2466	279
Central Region	1763	3904	1531	878
Eastern Region	2845	2476	1890	1038
Western Region	2081	1949	708	530
Southern Region	1465	4849	1757	506

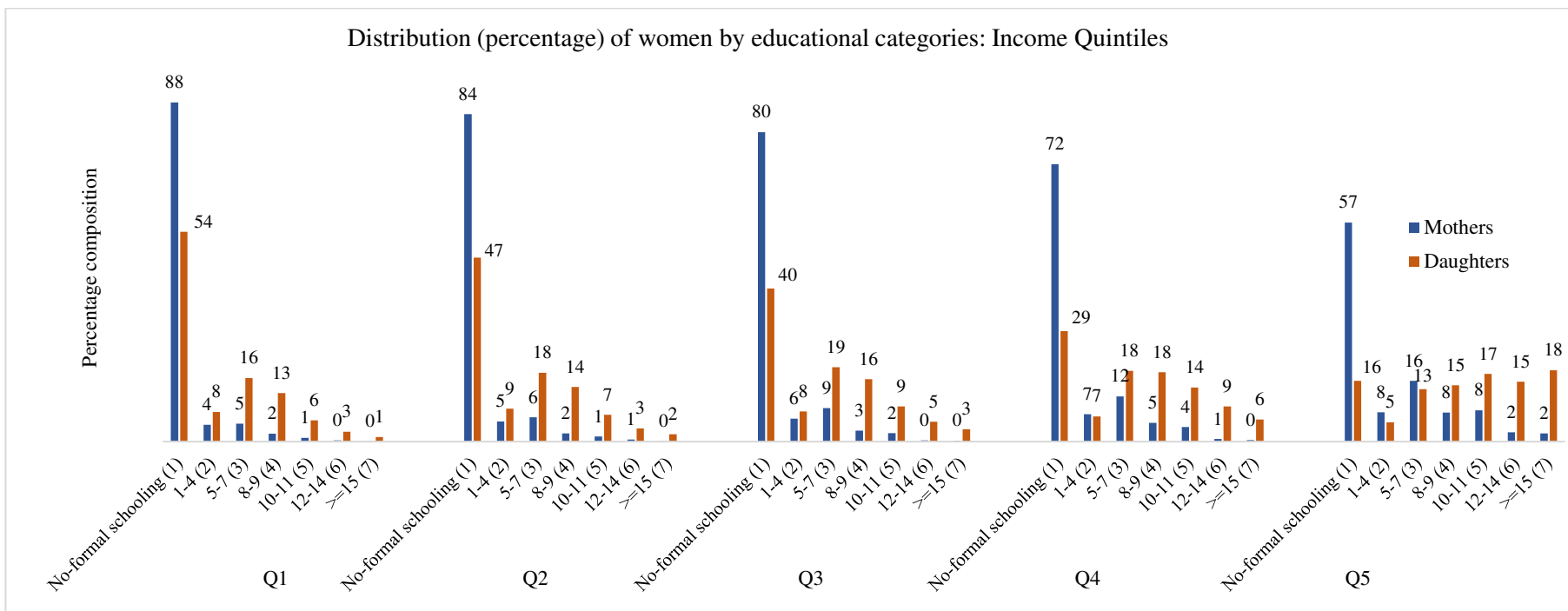
*Notes:* Upward/downward mobility as a percentage of total mobility. <sup>a</sup>Sample size not large enough for estimation.

*Source:* Authors' computations based on the data IHDS II (2011–2012).

### 4.5. Intergenerational Educational Mobility— by income quintiles for All-India and Regions

The discussion about trends in intergenerational educational mobility will not be complete if trends in the same are not seen by income status. The general belief is that, intergenerational educational mobility will be relatively higher in economically better off compared to the economically worse off. To check this, we have divided the sample into quintiles using per capita income. Figure 7 gives the distribution of schooling of mothers and daughters by income quintiles at the all-India level as well as for the geographic regions. The five income quintiles are denoted by Q1 to Q5, where Q1 is the poorest income quintile and Q5 is richest income quintile.

Figure 7 shows that as we move up to higher income quintiles, the proportion of daughters as well as mothers with higher levels of education increases substantially. In lower income quintiles mothers as well as daughter with no formal schooling are in higher proportion than daughters or mothers of higher income quintiles. Figure 8 presents the mobility measures for the various income quintiles. It can be seen that overall mobility as well as its upwards component increases substantially as we move from the poorest income quintile to the richest one. It is another thing that even in the richest income quintile about 9 percent of overall mobility is contributed by downward mobility. The detailed mobility matrices for income quintiles for all India have been given in Table 5.



Notes: (1) no formal schooling; (2) 1–4 years of schooling; (3) 5–7 years of schooling; (4) 8–9 years of schooling; (5) 10–11 years of schooling; (6) 12–14 years of schooling; (7) 15 or more years of schooling. Sample sizes—Total (38,986); Quintile 1 (7,798); Quintile 2 (7,839); Quintile 3 (7,755); Quintile 4 (7,797); Quintile 5 (7,797).  
Source: Authors' computations based on the data IHDS II (2011–2012).

**Fig.7. Distribution (percentage) of women by educational categories: Income Quintiles**

**Table 5**  
Educational transition/mobility matrices: Income Quintiles for All-India

Quintile 1							
Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	60.31	7.64	15.82	10.57	3.95	1.25	0.47
(2)	9.18	13.37	27.03	26.52	10.96	9.54	3.4
(3)	13.23	5.68	22.29	26.21	19.93	8.43	4.22
(4)	10.08	5.8	11.03	32.53	18.76	12.72	9.08
(5)	8.46	0	5.83	19.68	23.97	24.91	17.14
(6)	23.81	0	5.02	23.55	3.08	34.78	9.75
(7)	0	0	22.99	0	7.56	28.21	41.24

Quintile 2							
Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	54.73	8.95	17.45	11.33	4.55	2.11	0.88
(2)	9.98	8	20.29	37.46	18.2	4.69	1.38
(3)	6.96	8.04	20.57	24.86	21.91	9.75	7.91
(4)	10.38	0.5	17.25	30.31	18	8.67	14.9
(5)	1.6	2.62	17.78	22.98	18.98	27.95	8.09
(6)	4.12	0	8.23	9.12	14.82	35.04	28.68
(7)	0	0	0	0	0	0	0

Quintile 3							
Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	47.8	8.58	19.55	13.46	6.49	3	1.12
(2)	8.77	7.17	24.96	30.48	18.69	7.98	1.96
(3)	6.84	4.1	20.37	25.51	20.94	11.94	10.3
(4)	4.28	5.87	7.67	27.01	17.03	21.49	16.65
(5)	4.49	0.21	5.02	23.37	21.65	22.55	22.71
(6)	0	4.4	6.67	8	8.11	25.68	47.13
(7)	0	0	0	17.06	3.81	18.32	60.81

Quintile 4							
Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	38.83	7.88	20.19	15.55	10.22	5.08	2.25
(2)	3.31	6.64	20.29	27.92	22.69	13.67	5.49
(3)	4.06	2.06	14.39	26.89	24.15	18.41	10.04
(4)	0.17	3.06	11.9	19.31	23.02	24.33	18.21
(5)	1.32	0.43	2.11	16.04	25.94	26	28.16
(6)	0	0.7	3.21	16.63	11.81	23.06	44.59
(7)	0	0	0	3.33	5.18	10.72	80.77



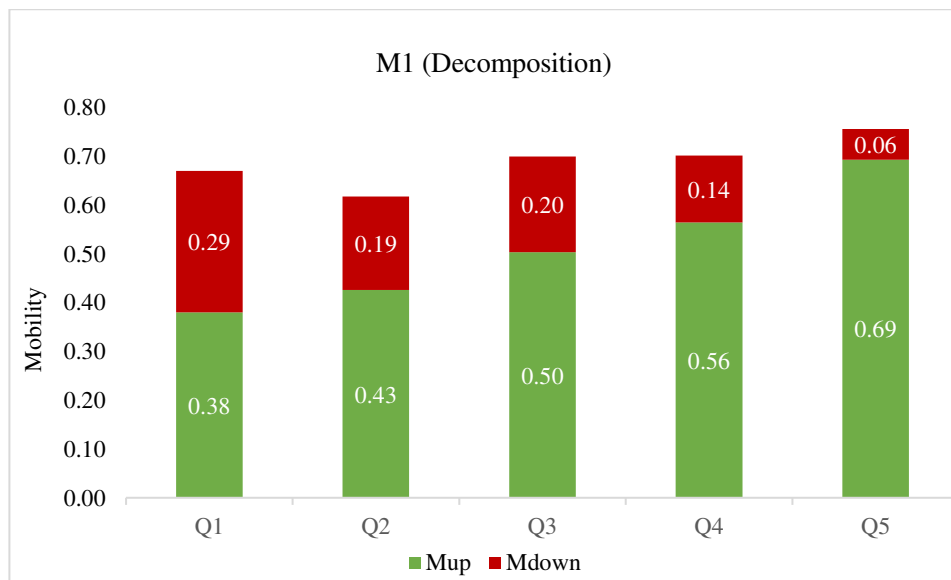
### Quintile 5

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	26.65	7.73	18.86	15.7	14.33	9.75	6.99
(2)	2.51	5.01	13.03	25	25.95	18.18	10.31
(3)	2.1	0.98	9.25	16.88	28.49	22.36	19.95
(4)	0.61	0.52	3.49	8.76	19.18	30.02	37.41
(5)	0.59	0	1.4	4.66	13.4	26.53	53.43
(6)	0.27	0	0	2.54	11.96	20.07	65.16
(7)	0	0	0	0	3.33	8.94	87.73

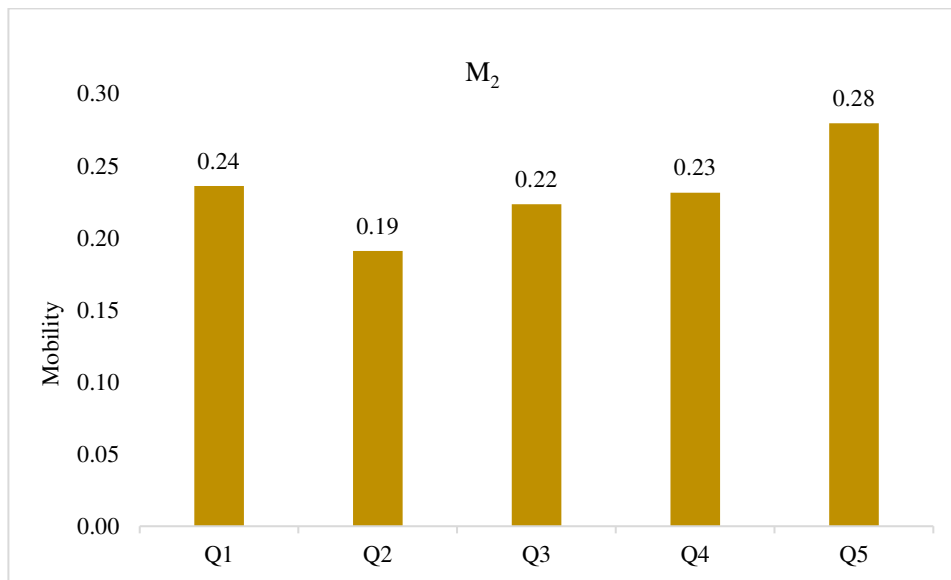
Notes: (1) no formal schooling; (2) 1–4 years of schooling; (3) 5–7 years of schooling; (4) 8–9 years of schooling; (5) 10–11 years of schooling; (6) 12–14 years of schooling; (7) 15 or more years of schooling.

Sample sizes—Total (38,986); Quintile 1 (7,798); Quintile 2 (7,839); Quintile 3 (7,755); Quintile 4 (7,797); Quintile 5 (7,797).

Source: Authors' computations based on the data IHDS II (2011–2012).



(a) M<sub>1</sub>



(b) M<sub>2</sub>

*Notes:* Upward/downward mobility as a percentage of total mobility M<sub>1</sub> in parenthesis.

Sample sizes—Total (38,986); Quintile 1 (7,798); Quintile 2 (7,839); Quintile 3 (7,755); Quintile 4 (7,797); Quintile 5 (7,797).

*Source:* Authors' computations based on the data IHDS II (2011–2012).

**Fig.8. Educational mobility measures (absolute) —Income Quintiles**

It would also be interesting to find out how different income quintile in different regions behave as far as intergenerational educational mobility among women is concerned. Table 6 gives the sample sizes for the analysis as well as the mobility estimates for each income quintile for every region. Key results from the Table are: (1) it can be seen that for every region as the income increases overall mobility also more or less increases barring one or two exceptions; (2) another striking thing to note here is that the lowest income quintiles in eastern and southern region have higher overall mobility in the range of 0.5-0.55 compared to other regions, but about 35 percent of it is contributed by downwards mobility in eastern region and 20 percent in southern region; (3) also, the richest income quintile in western region shows the highest overall mobility, i.e., 0.79 but about 13 percent of this comes from downwards mobility. The detailed mobility matrices for income quintiles by regions have been presented in Appendix B.

**Table 6**

Education mobility measures and sample sizes: Income quintiles by Regions

## (A) Educational mobility measures

Regions	Income Groups	M <sub>1</sub>	M <sub>1</sub> up (in percentage)	M <sub>1</sub> down (in percentage)	M <sub>2</sub>
Northern Region	Q1	0.31	85.56	14.44	0.10
	Q2	0.54	68.92	31.08	0.19
	Q3	0.51	81.86	18.14	0.19
	Q4	0.67	79.62	20.38	0.24
	Q5	0.78	92.58	7.42	0.30
Central Region	Q1	0.35	66.15	33.85	0.13
	Q2	0.53	59.95	40.05	0.16
	Q3	0.68	61.92	38.08	0.21
	Q4	0.53	74.97	25.03	0.18
	Q5	0.75	90.10	9.90	0.27
Eastern Region	Q1	0.50	65.04	34.96	0.16
	Q2	0.48	78.65	21.35	0.13
	Q3	0.51	75.24	24.76	0.16
	Q4	0.55	86.03	13.97	0.18
	Q5	0.71	89.87	10.13	0.25
Western Region	Q1	0.43	83.99	16.01	0.14
	Q2	0.55	75.18	24.82	0.16
	Q3	0.57	89.56	10.44	0.19
	Q4	0.58	88.07	11.93	0.21
	Q5	0.79	87.35	12.65	0.29
Southern Region	Q1	0.55	79.53	20.47	0.18
	Q2	0.52	84.64	15.36	0.18
	Q3	0.57	85.15	14.85	0.20
	Q4	0.68	87.89	12.11	0.23
	Q5	0.74	94.12	5.88	0.27

## (B) Sample Sizes

Income Quintiles Region	Q1 Lowest Income	Q2	Q3	Q4	Q5 Highest Income
Northern Region	904	1466	1833	2134	2479
Central Region	2848	2004	1391	1014	819
Eastern Region	2163	1984	1577	1215	1310
Western Region	808	1,011	1,055	1,154	1,240
Southern Region	1075	1374	1899	2280	1949

Notes: Upwards/downwards mobility as a percentage of total mobility. Q1 to Q5 are per capita income quintiles in ascending order of their mean per capita income. e.g., Q1 is lowest income group and q5 is highest income group. Sample sizes—Total (39,395). Source: Authors' computations based on the data IHDS II (2011–2012).

#### 4.6. Intergenerational Educational Mobility— caste groups by income quintiles

One pertinent question which is always asked in the Indian context is whether income has the ability to neutralize the effect of caste as far as intergenerational educational mobility is concerned. That is, whether the intergenerational educational mobility among the, say, SCs or STs in the richest quintile is more than the intergenerational educational mobility among the Others in the poorest quintile. To answer such questions, we have looked into the intergenerational educational mobility for the different caste groups in each income quintile. The results of this exercise are reported in Table 7. Some key findings from this table are: the overall mobility among Others in the poorest quintile is more than the overall mobility among SCs or STs in the richest quintile; also, in every quintile, the overall mobility among the Others is more than the overall mobility among the SCs, STs or OBCs; further, the upward component of overall mobility generally increases for each caste group as we move from the poorest to the richest quintile. The detailed mobility matrices for the analysis of mobility by caste groups for every income quintile are presented in Appendix C.

**Table 7**

Educational mobility measures and sample sizes: castes by income quintiles

(A) Educational mobility measures

Income Groups	Castes	M <sub>1</sub>	M <sub>1</sub> up (in percentage)	M <sub>1</sub> down (in percentage)	M <sub>2</sub>
Q1	Others	0.67	65.07	34.93	0.24
	OBCs	0.48	74.81	25.19	0.16
	SCs	0.36	64.87	35.13	0.11
	STs	0.29	83.60	16.40	0.09
Q2	Others	0.64	79.38	20.62	0.19
	OBCs	0.66	60.42	39.58	0.22
	SCs	0.42	63.25	36.75	0.13
	STs	0.29	83.93	16.07	0.09
Q3	Others	0.66	81.53	18.47	0.21
	OBCs	0.52	83.32	16.68	0.18
	SCs	0.51	78.93	21.07	0.16
	STs	0.31	59.64	40.36	0.09
Q4	Others	0.72	85.51	14.49	0.25
	OBCs	0.67	79.71	20.29	0.22
	SCs	0.55	86.70	13.30	0.18
	STs	0.33	95.57	4.43	0.14
Q5	Others	0.78	93.81	6.19	0.30
	OBCs	0.73	91.27	8.73	0.27
	SCs	0.61	93.39	6.61	0.23
	STs	0.58	96.18	3.82	0.23

## (B) Sample Sizes

Castes Income Quintiles	Others	OBCs	SCs	STs
Q1 Lowest Income	1540	3459	1664	1135
Q2	1716	3315	2048	760
Q3	2148	3189	1872	546
Q4	2587	3154	1670	386
Q5 Highest Income	3623	2672	1098	404

Notes: Upward/downward mobility as a percentage of total mobility. Sample sizes—Total (39,395). Q1 to Q5 are per capita income quintiles in ascending order of their mean per capita income. e.g. Q1 is lowest income group and q5 is highest income group. *Source:* Authors' computations based on the data IHDS II (2011–2012).

## 5. Discussion and Conclusions

We perhaps for the first time comprehensively and systematically study intergenerational educational mobility among women (vis-à-vis their mothers) in India with special focus on socioeconomic differentials. We use the nationally representative Indian Human Development Survey 2011-12 for the examination. The survey used covers all the states and union territories of India except Andaman & Nicobar and Lakshadweep Islands. We not only estimate the overall mobility but also decompose the overall mobility into upwards and downwards components. Analysis of decomposition of overall mobility into upwards and downwards component is important because there is always a possibility that the overall mobility may be high due to a higher contribution of downwards mobility rather than upwards mobility.

We find that the overall mobility at the all-India level is about 0.69 (1 being the upper limit). That is, 69% of the daughters in the age group 15-49 years in India end up with total years of schooling different from their mothers. It is encouraging to find that nearly 80% of the overall mobility is contributed by the upwards component. Also, the overall mobility and its upwards component is higher for urban areas compared to the rural ones. Among the various caste groups, the overall mobility is highest among the Others (or upper) caste group and lowest for the SCs. Not only the overall mobility is lower for the socially and economically disadvantaged caste groups, but the upwards component is also substantially lower for these groups compared to the Others.

We also find large inter regional variations, with situation being worst in the central and eastern regions which comprise of the most deprived states (in terms of economic and demographic characteristics) of India. Moreover, the overall mobility and the upwards component increase consistently as one moves from the lower parts of the income distribution to the upper parts of income distribution. Surprisingly, income is not able to neutralize the disadvantage of socially and economically weaker caste groups and results indicate that the overall mobility among the Others of the poorest income quintile is more than the overall mobility among Scheduled Castes/Tribes of the richest income quintile.

It might be important to discuss our results in the light of some of the existing studies even though the sample sizes and approaches of the existing studies is different from the present study. Our results are in line with Majumder (2010) which found lower intergenerational educational mobility among the scheduled groups compared to the Others caste group. As Majumder (2010) has not decomposed the overall mobility into upwards and downwards component, our results of mobility decomposition cannot be compared to it. Hnatkovska et al. (2012) have also looked into intergenerational educational mobility by caste groups and have found that the overall mobility is higher for Scheduled groups (SC/STs) compared to the Others but first, their sample is restricted to males and second, they have compared educational attainment of sons to that of their fathers'. Choudhary and Singh (2016) which is close to the present study in terms of approach and analysis has findings similar to the present study. They find that the overall mobility is not very different across the different caste groups (a deviation from our findings) but the upwards mobility is substantially higher among the Others caste group compared to the historically disadvantaged Scheduled groups. The aforesaid deviation might be due to the fact that, Choudhary and Singh (2012) has studied intergenerational educational mobility among young women (15-24 years) and their sample is limited to only six Indian states.

Though the present study adds substantially to the scholarship on intergenerational educational mobility among women in India, it also suffers from a few limitations, such as, first, given the cross-sectional nature of data, we could not examine changes in mobility over time; and second we could not find detailed reasons for the various trends and patterns in the mobility which we are getting in the present study. Perhaps more studies on primary data are needed to explain the findings in greater detail. This can be a scope for future research.

## References

- Agrahari, K., & Singh, A. (2009). Do community factors have differential impact on the nutrition of boys and girls in rural India? *Demography India*, 38(1), 117–134.
- Behrman, J. R., Foster, A., Rosenzweig, M. R., & Vahsishtha, P. (1999). Women's schooling, home teaching, and economic growth. *Journal of Political Economy*, 107(4), 682–715
- Bhan, G. (2001). India gender profile. Institute of Development Studies: University of Sussex, *BRIDGE* Report. 62.
- Bloomfield, M. (Ed.). (1897). *Hymns of the Atharva-Veda: together with extracts from the ritual books and the commentaries* (Vol. 1). Clarendon Press.
- Borooh, V. (2004). Gender bias among children in India in their diet and immunization against disease. *Social Science and Medicine*, 58(9), 1719–1731.
- Chiefs of Ontario (2012). Our Children, Our Future, Our Vision report, *New Agenda Working Group*. Chiefs of Ontario; Ontario.
- Choudhary, A., & Singh, A. (2016). Are Daughters Like Mothers: Evidence on Intergenerational Educational Mobility Among Young Females in India. *Social Indicators Research*, 1-21.

- Chudgar, A. (2009). Does adult literacy have a role to play in addressing the universal elementary education challenge in India? *Comparative Education Review*, 53(3), 403–433.
- Chudgar, A. (2011). Female headship and schooling outcomes in rural India. *World Development*, 39(4), 550–560.
- Comi, S. (2004). Intergenerational mobility in Europe: Evidence from ECHP. *CESifo conference on Schooling and Human Capital Formation in the Global Economy*, Munich.
- CREATE (2008a). Access to Elementary Education in India Country Analytical Review. Consortium for Research on Educational Access, Transitions and Equity, National University of Educational Planning and Administration, New Delhi, India.
- CREATE (2008b). Gender Equity in Education: A Review of Trends and Factors. Consortium for Research on Educational Access, Transitions and Equity, National University of Educational Planning and Administration, New Delhi, India.
- CREATE (2009). Educational access in India: country policy brief. Consortium for Research on Educational Access, Transitions and Equity, Sussex, United Kingdom.
- Desai, S., Dubey, A. & Vanneman, R. (2015). India Human Development Survey-II (IHDS-II), 2011-12. ICPSR36151-v2. *Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor]*, 07-31.
- Dreze, J., & Kingdon, G. (2001). School Participation in Rural India. *Review of Development Economics*, 5(1), 1-24.
- Drèze, J., & Sen, A. (2013). *An uncertain glory: India and its contradictions*. Princeton University Press.
- Formby, J., Smith, J. & Zheng, B. (2004). Mobility measurement, transition matrices and statistical inference. *Journal of Econometrics*, 120 (1), 181-205.
- Glick, P., & Sahn, D. E. (2000). Schooling of girls and boys in a West African country: the effects of parental education, income and household structure. *Economics of Education Review*, 19(1), 63–87.
- Grant, M. (2015). The Demographic Promise of Expanded Female Education: Trends in the Age at First Birth in Malawi. *Population and Development Review*, 41(3), 409-438.
- Handa, S. (1996). Expenditure behavior and children's welfare: an analysis of female headed households in Jamaica. *Journal of Development Economics*, 50(1), 165–187.
- Hnatkovska, V, Lahiri, A. & Paul, S.B. (2012). Breaking the caste barrier: intergenerational mobility in India. *Journal of Human Resources*, 48(2), 435-473.
- Jalan, J. & Murgai, R. (2008). Intergenerational Mobility in Education in India. Paper presented in the 5th annual conference of the Indian Statistical Institute, Delhi, India.
- Johnson, F. C., & Rogers, B. L. (1993). Children's nutritional status in female headed households in the Dominican Republic. *Social Science and Medicine*, 37(11), 1293–1301.
- Kambhampati, U.S. & Pal, S. (2001). Role of parental literacy in explaining gender difference: evidence from child schooling in India. *The European Journal of Development Research*, 13(2), 97-119.
- Kaur, G (2013). Measures to Promote Women Education Before and After Independence, *Educationia Confab*, ISSN: 2320-009X.

- Lam, D., & Duryea, S. (1999). Effects of schooling on fertility, labor supply and investments in children with evidence from Brazil. *Journal of Human Resources*, 34(1), 160–192.
- Lillard, L. A., & Willis, R. J. (1994). Intergenerational educational mobility: Effects of family and state in Malaysia. *Journal of Human Resources*, 29(4), 1126–1166.
- Llyod, C. B., & Blanc, A. K. (1996). Children's schooling in Sub-Saharan Africa: the role of fathers, mothers and others. *Population and Development Review*, 22(2), 265–298.
- Majumder, R. (2010). Intergenerational mobility in educational and occupational attainment: a comparative study of social classes in India. *Margin-The Journal of Applied Economic Research*, 4 (4), 463-94.
- Miller, B.D. (1981). *The endangered sex: neglect of female children in rural north India*. Ithaca, NY: Cornell University Press.
- Mishra, V., Roy, T. K., & Retherford, R. (2004). Sex differentials in childhood feeding, health care and nutritional status in India. *Population and Development Review*, 30(2), 269–295.
- Motiram, S. and Singh, A. (2012). How close does the apple fall to the tree? Some evidence from India on intergenerational occupational mobility. *Economic and Political weekly*, XLVII (40), 56-65.
- NCWE (1959). Report of the National Committee on Women's Education, May 1958 to January 1959. Ministry of Education, Government of India.
- Pande, R.P. and Astone N.M. (2007). Explaining son preference in rural India: the independent role of structural versus individual factors. *Population Research and Policy Review*, 26, 1-29.
- Peter, G., & Sahn, D. E. (1999). Schooling of girls and boys in a West African country: the effects of parental education, income, and household structure. *Economics of Education Review*, 19(1), 63–87.
- Quisumbing, A., & Maluccio, J. (2000). Intra-household allocation and gender relations: new empirical evidence from four developing countries. *International Food Policy Research Institute Discussion Paper* 84.
- Reilly, B., & Datta, P.V. (2005). The gender pay gap and trade liberalization: evidence for India. *University of Sussex (PRUS) working paper* 32.
- Roemer, J. E. (1998). *Equality of Opportunity*, Harvard University Press: Cambridge MA.
- Roemer, J. E. (2006). Economic Development as Opportunity Equalization, *Cowles Foundation Discussion Paper*, No 1583, Yale University.
- Schultz, T. P. (2002). Why governments should invest more to educate girls. *World Development*, 30(2), 207–225.
- Seebens, H. (2009). Child welfare and old age security in female headed households in Tanzania. *IZA discussion paper* no. 3929. Bonn: Institute for the Study of Labor.
- Shorrocks, A. .F (1978). Income Inequality and Income Mobility. *Journal of Economic Theory*, 19(2), 376-93.
- Sierra's Blog (2013) retrieved from <http://sites.msis.edu/sierratan/category/education-in-india/>.
- Singh, A. (2012a). Reducing Gender Based Inequalities in Employment and Wages: Is India on the Right Track? UNICEF and UNWOMEN, Addressing Inequalities – post 2015 Development Agenda Background Paper, 2012. UNICEF and UNWOMEN, UN.



- Singh, A. (2012b). Gender Based Within-Household Inequality in Childhood Immunization in India: Changes over Time and across Regions. *PLoS One*, (4), e35045, 2012.
- Singh A., Gaurav, S. and Das, U. (2013): Household Headship and Academic Skills of Indian Children: A Special Focus on Gender Disparities. *European Journal of Population*, 29(4): 445-466.
- Singh, A., Singh, A., Pallikadavath, S. & Ram, F. (2014). Gender Differentials in Inequality of Educational Opportunities in India: New Evidence from an Indian Youth Study. *European Journal of Development Research*, 26(4), 707-724.
- Sommers, P. & Conlisk, J. (1979). Eigen value immobility measures for Markov chains. *Journal of Mathematical Sociology*, 6(2), 253-76.
- Tansel, A. (1997). Schooling attainment, parental education, and gender in Coˆte d'Ivoire and Ghana. *Economic Development and Cultural Change*, 45(4), 825–856.
- Tansel, A. (2002). Determinants of school attainment of boys and girls in Turkey: Individual, household and community factors. *Economics of Education Review*, 21(5), 455–457.
- Thomas, D. (1990). Intra-household resource allocation: an inferential approach. *Journal of Human Resources*, 25(4), 635–664.
- Thomas, D. (1993). The distribution of income and expenditure within the household. *Annals of Economics and Statistics*, 29 (Jan–Mar), 109–136.
- Unicef (2015). Education: the most powerful investment in our future. The United Nations Children's Fund. Retrieved from <https://blogs.unicef.org/blog/education-the-most-powerful-investment-in-our-future>.
- Van De Gaer, D., Schokkaert, E. & Martinez, M. (2000). Three meanings of intergenerational mobility. *Economica*, 68 (272), 591-537.

**Appendix A (Educational transition/mobility matrices: Castes by Regions)**

Table A1: Northern Region

**Others**

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	36.84	3.43	17.91	17.33	12.07	7.51	4.91
(2)	5.39	3.41	20.68	30.27	23.66	8.77	7.81
(3)	4.84	0.52	9.39	22.56	22.34	19.41	20.94
(4)	3.43	0.93	4.12	8.21	20.24	28.5	34.57
(5)	4.57	0	2.41	4.82	10.54	25.09	52.57
(6)	0	1.09	3.16	3	4.32	6.48	81.95
(7)	0	0	0	0	2.01	4.63	93.36

**OBCs**

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	57.8	4.34	15.92	10.9	6.26	2.9	1.88
(2)	8.4	1.18	12.13	19.92	39.62	18.75	0
(3)	9.37	1.44	15.71	15.57	29.21	18.05	10.66
(4)	1.07	0	2.88	25.74	30.81	24.52	14.99
(5)	13.11	0	3.72	7.62	15.31	30.15	30.09
(6)	0	0	0	22.5	8.49	13.01	56
(7)	0	0	0	0	0	0	0

**SCs**

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	57.71	3.52	16.16	12.65	6.04	2.61	1.32
(2)	9.79	8.21	29.68	11.28	22.76	16.2	2.08
(3)	4.74	0.14	17.69	28.48	28.09	14.83	6.03
(4)	8.67	4.18	14.80	21.57	16.28	22.85	11.64
(5)	0	9.76	0	7.94	14.77	32.81	34.71
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

**STs**

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	70.9	5.43	8.58	4.16	5.03	4.74	1.16
(2)	0	0	0	0	0	0	0
(3)	0	0	0	0	0	0	0
(4)	0	0	0	0	0	0	0
(5)	0	0	0	0	0	0	0
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Table A2: Central Region

## Others

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	37.83	4.43	17.61	21.69	7.02	6.5	4.92
(2)	5.63	4.27	22.62	22	15.4	15.91	14.17
(3)	6.88	0.44	13.48	28.45	17.27	11.33	22.15
(4)	4.79	2.32	11.71	24.3	8.44	25.52	22.92
(5)	2.23	0	2.39	19.16	23.5	23.17	29.54
(6)	9.68	0	0	16.48	8.94	14.73	50.17
(7)	0	0	7	0	3.01	9.44	80.55

## OBCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	57.58	5.82	14.65	14.56	3.44	2.1	1.85
(2)	16.33	8.67	18.92	27.55	12.19	9.35	6.99
(3)	13.05	5.05	18.85	21.93	17.57	10.77	12.78
(4)	4.79	3.4	9.86	22.49	15.11	17.83	26.52
(5)	9.74	3.92	5.12	31.01	1.62	19.21	29.38
(6)	2.08	0	10.05	14.78	16.22	6.84	50.03
(7)	0	0	0	0	0	0	0

## SCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	62.39	4.69	15.15	13.58	1.64	1.32	1.24
(2)	33.76	4.84	12.57	33.33	8.14	0	7.36
(3)	21.79	10.69	14.75	14.35	14.29	13.39	10.73
(4)	12.48	0	25.8	29.85	8.41	8.57	14.89
(5)	0	0	0	0	0	0	0
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

## STs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	69.15	7.73	12.93	7.25	0.99	1.47	0.48
(2)	0	0	0	0	0	0	0
(3)	26.33	6.06	14.47	35.11	14.58	0	3.45
(4)	0	0	0	0	0	0	0
(5)	0	0	0	0	0	0	0
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Table A3: Eastern Region

## Others

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	36.26	14.12	23.15	15.26	6.09	3.32	1.8
(2)	3.46	11.8	25.71	33.51	15.31	5.85	4.36
(3)	6.35	3.88	15.41	29.96	23.49	11.48	9.43
(4)	0.27	3.82	3.57	23.45	24.11	19.42	25.36
(5)	2.15	0	5.38	13.87	21.88	26.61	30.11
(6)	6.26	0	0	10.76	4.85	22.57	55.56
(7)	0	0	0	0	4.56	9.11	86.33

## OBCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	58.19	7.79	15.18	10.21	5.69	2.22	0.72
(2)	11.1	7.01	27.16	32.17	8.01	10.45	4.1
(3)	6.6	5.74	19.16	28.73	16.92	16.28	6.56
(4)	9.44	3.34	11.39	34.6	15.45	18.76	7.02
(5)	2.83	0	1.07	7.67	38.98	18.35	31.09
(6)	6.06	0	0	0	5.19	61.42	27.33
(7)	0	0	0	0	0	0	0

## SCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	56.65	12.52	15.59	9.05	4.24	1.43	0.52
(2)	12.48	21.02	12.32	37.34	10.94	4.47	1.42
(3)	4.42	4.53	18.53	27.29	26.7	13.32	5.2
(4)	6.74	4.5	14.89	16.93	26.17	16.53	14.24
(5)	3.18	0	6.61	31.47	15.67	28.08	14.99
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

## STs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	57.66	9.19	14.83	12.59	2.67	2.62	0.45
(2)	4.97	14.05	13.58	36.41	17.14	8.87	4.99
(3)	5.41	10.47	29.03	24.36	12.95	13.73	4.05
(4)	7.48	9.98	7.01	14.41	36.46	22.86	1.79
(5)	0	0	0	14.71	22.33	40.22	22.74
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Table A4: Western Region

## Others

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	21.54	10.92	23.83	15.76	16.94	8.72	2.29
(2)	3.05	4.12	16.65	27.25	29.25	15.24	4.44
(3)	2.02	4.61	10.45	12.73	35.95	19.76	14.48
(4)	0	1.88	3.52	13.68	31.84	29.69	19.4
(5)	0.28	0	1.26	10.93	20.73	23.27	43.54
(6)	0	0	4.41	6.62	18.55	32.36	38.05
(7)	0	0	0	4.96	6.18	20.57	68.29

## OBCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	35.49	12.42	23.53	13.6	10.31	3.77	0.88
(2)	4.24	6.92	22.61	29.74	18.91	14.78	2.8
(3)	4.25	6.3	19.77	20.18	23.72	18.4	7.38
(4)	0	5.54	10.54	16.24	19.85	39.84	8
(5)	0	3.37	4.59	35.78	15.4	24.82	16.05
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

## SCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	35.46	16.39	20.17	12.74	8.02	6.37	0.85
(2)	1.71	11.86	31.01	14.56	34.83	4.31	1.71
(3)	2.55	6.35	22.61	33.02	19.13	12.94	3.39
(4)	0	9.11	19.14	8.02	27.32	36.42	0
(5)	0	0	3.89	6.47	12.63	55.2	21.8
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

## STs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	54.36	13.24	14.46	9.17	5.29	3.22	0.25
(2)	11.6	7.61	12.11	33.68	4.36	30.64	0
(3)	4.31	0	0	25.46	42.8	26.77	0.67
(4)	0	0	0	0	0	0	0
(5)	0	0	0	0	0	0	0
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Table A5: Southern Region

## Others

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	32.33	8.64	25.43	11.76	11.03	6.08	4.71
(2)	4.88	4.88	16.45	29.44	26.4	9.76	8.17
(3)	0.64	3.45	18.37	19.07	26.29	22.16	10.01
(4)	0.76		6.84	5.83	18.23	26.9	41.44
(5)	0	0	3.24	3.21	11.86	26.44	55.24
(6)	0	0	0	4.07	3.46	21.97	70.5
(7)	0	0	0.65	0	7.2	7.39	84.76

## OBCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	37.66	8.88	23.44	11.75	11.7	4.25	2.32
(2)	3.27	6.70	18.62	29.49	24.15	12.19	5.58
(3)	3.32	1.31	15.53	22.2	26.25	15.98	15.41
(4)	3.49	1.68	12.1	19.36	20.88	15.76	26.73
(5)	0.33	0.17	4.7	10.26	21.2	28.64	34.7
(6)	0	0	3.28	3.88	8.02	32.47	52.35
(7)	0	0	0	0	4.77	19.51	75.71

## SCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	53.07	6.26	17.28	10.64	8.59	3.2	0.96
(2)	4.89	0	28.96	29.43	20.16	13.81	2.76
(3)	4.77	0.49	18.04	23.81	32.17	16.11	4.61
(4)	0	3.17	14.3	18.12	21.21	20.72	22.49
(5)	0	0	5.56	9.85	21.77	15.34	47.48
(6)	0	0	21.5	0	0	21.5	57
(7)	0	0	0	0	0	11.29	88.71

## STs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	58.77	8.22	15.67	6.83	7.37	1.62	1.53
(2)	56.28	1.25	10.97	23.49	1.27	5.37	1.36
(3)	8.55	3.55	10.7	22.82	32.09	16.92	5.37
(4)	0	0	0	0	0	0	0
(5)	0	0	0	0	0	0	0
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Note: (1) no formal schooling; (2) 1–4 years of schooling; (3) 5–7 years of schooling; (4) 8–9 years of schooling; (5) 10–11 years of schooling; (6) 12–14 years of schooling; (7) 15 or more years of schooling. Sample sizes—Total (39,395); Given in Table 4 (a) Source Authors' computations based on the data IHDS II (2011–2012).

## Appendix B (Educational transition/mobility matrices: Income quintiles by Regions)

Table B1: Northern Region

### Quintile 1

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	71.64	3.39	11.64	7.78	3.38	1.81	0.36
(2)	0	0	0	0	0	0	0
(3)	12.38	0	11.72	30.24	30.61	9.37	5.67
(4)	3.04	10.13	5.72	0	31.03	28.52	21.55
(5)	0	0	0	0	0	0	0
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

### Quintile 2

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	64.14	3.96	15.54	9.25	5.3	1.35	0.47
(2)	27.13	6.81	23.51	16.47	17.54	8.54	0
(3)	6.91	0.18	17.76	16.35	38.16	9.48	11.15
(4)	27.37	0	4.24	20.61	34.22	2.08	11.48
(5)	30.81	0	0	20.71	13.08	21.89	13.51
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

### Quintile 3

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	55.59	4.91	15.6	12.79	6.58	3.22	1.32
(2)	5.03	0	20.14	32.42	16.24	26.18	0
(3)	9.32	1.74	19.14	23.02	24.82	12.62	9.34
(4)	6.85	3.84	9.66	41.66	13.98	13.77	10.24
(5)	12.73	0	5.28	10.77	24.19	29.52	17.51
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

### Quintile 4

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	46.76	3.47	18.78	16.05	9.43	3.95	1.56
(2)	2.51	5.31	21.57	15.54	42.09	10.44	2.54
(3)	6.44	1.11	9	31.26	22.77	19.83	9.58
(4)	0	0	8.93	11.75	26	36.04	17.28
(5)	4.17	6.09	9.56	3.76	9.39	35.08	31.95
(6)	0	0	0	0	0	0	0
(7)	0	5.38	0	17.4	9.51	26.59	41.12

Quintile 5

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	30.58	3.4	18.1	16.48	12.8	9.96	8.67
(2)	5.21	2.91	9.7	24.75	28.33	17.72	11.38
(3)	2.99	0.31	10.21	15.41	21.78	24.27	25.02
(4)	0.59	0	2.15	5.93	17.76	30.33	43.24
(5)	2.67	0	1.37	3.93	7.81	24.16	60.07
(6)	0	0	0	2.44	10.26	3.64	83.66
(7)	0	0	0	0	4.67	4.04	91.3

Table B2: Central Region

Quintile 1

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	64.13	4.9	15.15	12.15	1.76	1.17	0.74
(2)	26.77	15.68	7.18	7.57	16.15	16.83	9.83
(3)	27.04	6.51	20.46	24.2	11.38	8.33	2.08
(4)	7.7	4.95	9.34	56.57	3.02	13.01	5.4
(5)	0	0	0	0	0	0	0
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Quintile 2

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	62.11	6.66	13.75	14.23	1.94	1	0.31
(2)	25.68	12.18	18.67	16.91	21.91	2.87	1.78
(3)	13.16	3.64	15.62	47.73	13.39	3.4	3.08
(4)	12.8	0.87	15.46	37.51	18.48	7.79	7.09
(5)	22.57	0	0	53.36	4.18	13.15	6.73
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Quintile 3

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	60.81	5.07	12.68	15.32	2.45	2.36	1.32
(2)	11.24	4.93	29.95	42.88	4	2.07	4.93
(3)	13.99	5.81	11.03	23.2	19.85	6.9	19.23
(4)	10.91	2	18.33	22.97	2.96	17.21	25.61
(5)	0	8.91	32.08	28.02	0	23.82	7.17
(6)	0	0	0	15.3	35.12	23.05	26.54
(7)	0	0	0	0	0	0	0



Quintile 4

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	54	4.78	16.16	15.95	3.75	2.65	2.71
(2)	13.2	8.56	26.8	30.33	5.69	6.33	9.08
(3)	9.58	3.46	27.45	18.81	19.55	7.8	13.35
(4)	7.91	6.26	8.71	23.1	11.54	19.65	22.82
(5)	5.12	0	0.95	38.36	13.11	23.6	18.85
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Quintile 5

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	35.36	6.21	17.53	17.8	8.95	7.15	6.99
(2)	5.47	0.7	16.33	22.67	17.31	21.92	15.6
(3)	6.53	1.81	9.12	20.78	17.3	18.23	26.23
(4)	0	0	11.96	8.52	12.8	31.67	35.05
(5)	0.97	0	1.2	8.1	27.32	20.02	42.41
(6)	0	0	0	3.35	0	8.67	87.98
(7)	0	0	0	0	2.69	9.64	87.68

Table B3: Eastern Region

Quintile 1

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	64.71	8.82	14.11	8.27	3.34	0.55	0.19
(2)	7.97	17.69	33.88	26.13	4.29	6.49	3.55
(3)	14.24	7.91	26.27	21.88	16.22	9.33	4.14
(4)	12.26	15.27	4.07	24.62	19.03	12.77	11.97
(5)	10.27		18.26	31.54	18.31	8.03	13.59
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Quintile 2

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	56.68	12.79	18.2	7.11	3.93	1.03	0.25
(2)	11.96	13.89	19.82	41.49	7.94	3.37	1.53
(3)	12.42	13.91	27.25	24.44	10.46	8.1	3.42
(4)	1.17		21.55	43.72	21.06	5.53	6.97
(5)	0	0	4.69	5.65	24.26	60.5	4.9
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Quintile 3

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	52.09	10.35	17.72	12.54	3.92	2.62	0.78
(2)	10.01	6.52	24.96	38.52	16.24	3.24	0.5
(3)	4.87	6.12	23.83	32.8	19.78	5.59	7.01
(4)	13.33	3.93	14.66	31.12	22.98	9.77	4.21
(5)	9.13	0	4.87	21.03	31.18	16.74	17.05
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Quintile 4

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	37.36	11.65	20.44	17.9	6.21	4.68	1.76
(2)	4.93	11.65	20.93	35.69	13.89	10.4	2.5
(3)	5.4	3.75	13.79	33.99	23.19	14.58	5.3
(4)	0	6.57	3.38	29.41	23.27	25.92	11.46
(5)	0	0	3.34	25.97	25.96	23.42	21.31
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Quintile 5

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	23.19	12.11	17.53	20.88	14.74	7.28	4.27
(2)	3.67	11.9	13.34	29.91	18.95	12.12	10.11
(3)	1.71	0.57	11.06	25.9	26.96	21	12.81
(4)	1.18	1.29	1.76	13.84	23.02	25.27	33.63
(5)	0.37		2.54	5.34	23.05	24.67	44.02
(6)	0	0	0	8.76	11.95	34.25	45.03
(7)	0	0	0	0	3.62	7.25	89.13

Table B4: Western Region

Quintile 1

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	44.2	13.57	20.22	12.7	6.54	2.19	0.59
(2)	3.72	9.09	22	37.51	13.69	13.01	0.99
(3)	7.7	7.33	23.62	23.6	25.41	8.75	3.59
(4)	0	0	0	0	0	0	0
(5)	2.13	0	13.47	13.59	23.76	23.43	23.63
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Quintile 2

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	40.52	12.27	23.46	13.43	6.54	3.41	0.38
(2)	8.67	9.26	23.22	25.91	24.93	7.38	0.63
(3)	0.3	11.68	26.55	26.67	20.6	12.11	2.07
(4)	0	5.33	31.84	13.93	34.16	12.15	2.6
(5)	0	5.41	5.8	27.08	22.49	28.59	10.62
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Quintile 3

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	36.62	13.1	23.05	11.85	10.84	4.08	0.47
(2)	3.27	7.01	24.85	24.13	26.77	10.18	3.79
(3)	5.31	7.58	12.84	24.96	23.19	16.87	9.26
(4)	0	4.82	10.41	23.02	11.43	37.84	12.48
(5)	0	0	0	10	24.14	39.21	26.65
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Quintile 4

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	23.91	11.52	24.96	17.27	15.29	5.49	1.55
(2)	2.13	4.54	23.6	22.4	26.67	16.93	3.73
(3)	3.83	3.13	13.27	16.74	34.62	17.26	11.15
(4)	0	0	6.23	18.75	37.08	25.55	12.39
(5)	0.58	0	0	32.92	30.41	17.71	18.39
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Quintile 5

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	16.74	12.7	16.94	13.42	20.66	15.69	3.86
(2)	1.83	3.17	12.07	21.54	32.29	22.5	6.59
(3)	0.23	0.76	8.95	8.2	35.52	29.2	17.13
(4)	0	3.79	0	4.05	24.65	43.66	23.85
(5)	0	0	0.83	7.95	2.26	31.88	57.08
(6)	1.48	0	0	0	36.6	27.05	34.88
(7)	0	0	0	0	0	16.68	83.32

Table B5: Southern Region

## Quintile 1

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	45.7	8.06	21.75	10.68	9.65	2.99	1.18
(2)	7.4	5.66	24.81	21.34	27	9.7	4.09
(3)	1.73	3.51	19.45	19.82	28.62	19.1	7.76
(4)	14.04	0	16.47	19.93	39.8	3.38	6.38
(5)	0	0	15.65	19.99	24.35	16.98	23.04
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

## Quintile 2

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	47.03	8.38	23.32	9.73	8.26	2.17	1.1
(2)	4.33	5.23	17.46	42.27	20.51	8.39	1.81
(3)	6.52	4.34	22.28	22.45	21.61	10.58	12.22
(4)	8.79	0	5.75	30.23	15.26	13.29	26.69
(5)	0	0	15.44	10.34	33.87	12.73	27.61
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

## Quintile 3

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	43.14	9.05	20.27	11.81	10.09	4.53	1.11
(2)	12.63	1.52	24.04	24.93	22.32	11.55	3.02
(3)	3.05	0.71	22.54	25.37	25.8	15.47	7.06
(4)	1.23	8.22	6.13	18.61	25.52	8.78	31.51
(5)	1.46	0.75	9.48	15.65	14.8	28.88	28.98
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

## Quintile 4

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	37.74	7.89	21.89	12.86	12.47	4.78	2.36
(2)	3.32	6.84	17.62	26.84	25.46	14.36	5.56
(3)	1.75	0.79	11.16	25.14	23.83	23.06	14.28
(4)	0.7	0.58	21.9	13.98	14.92	22.22	25.7
(5)	0	0	1.53	10.04	18.53	40.75	29.15
(6)	0	0	0	1.86	15.36	34.17	48.61
(7)	0	0	0	0	0	0	0

Quintile 5

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	32.13	7.19	21.55	11.7	11.61	7.98	7.84
(2)	0.54	6.97	11.66	33.18	22.35	12.64	12.67
(3)	2.75	1.58	10.47	19.27	29.07	17.56	19.3
(4)	0	0	5.4	11.03	19.57	24.34	39.66
(5)	0	0	1.16	2.15	14.74	22.61	59.34
(6)	0	0	0	3.56	2.9	16.08	77.46
(7)	0	0	0	0	3.74	6.72	89.54

Note: (1) no formal schooling; (2) 1–4 years of schooling; (3) 5–7 years of schooling; (4) 8–9 years of schooling; (5) 10–11 years of schooling; (6) 12–14 years of schooling; (7) 15 or more years of schooling. Sample sizes—Total (39,395).

Source Authors' computations based on the data IHDS II (2011–2012).

## Appendix C (Educational transition/mobility matrices: Castes by Income quintiles)

Table C1: Quintile 1

### Others

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	46.11	9.15	18.97	16.64	6.31	2.14	0.69
(2)	6.16	13.97	31.5	26.8	13.33	4.17	4.06
(3)	14.34	4.59	21.73	26.77	23.48	3.73	5.34
(4)	5.6	8.05	6.12	34.36	15.45	19.25	11.17
(5)	4.68	0	9.97	24.65	12.13	25.67	22.91
(6)	38.53	0	3.46	33.02	4.13	4.18	16.68
(7)	0	0	0	0	0	0	0

### OBCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	60.78	6.78	15.87	10.4	4.27	1.2	0.7
(2)	10.72	9.38	25.59	25.05	10.29	15.69	3.28
(3)	10.24	2.87	25.56	26.21	18.53	11.99	4.59
(4)	12.72	0	20.79	29.93	21.39	5.63	9.55
(5)	11.53	0	0	14.99	41.37	18.54	13.56
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

### SCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	65.86	7.19	14.34	8.18	3.12	1.15	0.15
(2)	10.36	23.85	24.19	29.08	10.25	1.5	0.77
(3)	25.42	18.52	10.83	19.1	18.7	7.44	0
(4)	9.71	12.45	11.82	48.19	17.31	0.51	0
(5)	0	0	0	0	0	0	0
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

## STs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	65.68	9.4	14.56	8.21	1.64	0.51	0
(2)	11	14.35	20.1	30.13	4.16	12.38	7.88
(3)	6.44	15.48	19.26	38.13	5.61	15.08	0
(4)	0	0	0	0	0	0	0
(5)	0	0	0	0	0	0	0
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Table C2: Quintile 2

## Others

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	40.37	10.33	23.99	13.14	5.81	4.74	1.62
(2)	6.41	4.14	22.43	38.58	21.42	3.33	3.69
(3)	5.25	5.79	18.22	25.72	27.92	8.11	8.98
(4)	4.54	0	16.86	29.08	26.83	10.85	11.84
(5)	2.1	0	9.21	17.84	23.34	34.51	13
(6)	0	0	0	6.64	18.06	35.38	39.92
(7)	0	0	0	0	0	0	0

## OBCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	56.05	7.72	15.46	13.02	5.1	1.67	0.98
(2)	8.37	5.05	21.62	37.22	19.37	7.82	0.56
(3)	8.22	9.34	23.47	20.72	19.12	10.94	8.19
(4)	12.26	1.04	12.18	33.56	12.1	7.82	21.05
(5)	1.1	8.56	23.92	39.81	8.99	16.82	0.79
(6)	11.09	0	9.41	18.29	20.07	8.9	32.23
(7)	0	0	0	0	0	0	0

## SCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	58.17	10.1	17.81	9.15	3.13	1.19	0.46
(2)	18.99	17.29	15.68	33.96	13.45	0.63	0
(3)	5.82	8.52	18.97	33.83	16.01	12.06	4.78
(4)	29.53		46.25	8.67	13.7	1.86	0

(5)	0	0	0	0	0	0	0
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

STs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	66	8.56	13.09	6.63	3.75	1.76	0.22
(2)	8.18	19.78	14.41	48.04	7.07	2.51	0
(3)	11.88	12.23	13.24	37.42	17.16	3.72	4.35
(4)	0	0	0	0	0	0	0
(5)	0	0	0	0	0	0	0
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Table C3: Quintile 3

Others

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	36.14	10.13	23.45	16.21	8.58	3.26	2.22
(2)	7.53	8.48	27.59	29.44	16.32	6.69	3.96
(3)	3.87	4.82	17.22	27.69	21.24	12.02	13.13
(4)	3.86	4.2	4.17	20.91	20.02	23.74	23.09
(5)	6.83	0	5.48	28.74	20.23	18.66	20.08
(6)	0	0	2.49	5.2	8.3	34.21	49.81
(7)	0	0	0	0	0	0	0

OBCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	47.51	8.76	20.37	12.66	6.93	2.73	1.03
(2)	5.76	6.28	24.14	33.15	19.18	10.21	1.27
(3)	8.54	2.89	21.14	24.81	20.82	12.71	9.09
(4)	3.45	7.91	9.01	31.96	15.41	22.02	10.24
(5)	2.61	0.6	3.68	16.84	25.68	21.05	29.54
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

SCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	53.9	7.51	16.41	13.48	4.96	3.15	0.6



(2)	5.07	9.74	22.97	34.37	27.06	0.4	0.39
(3)	5.55	3.42	25.99	22.61	22.34	11.73	8.35
(4)	7.42	6.6	19.01	36.1	9.8	10.58	10.5
(5)	0	0	7.33	20.74	17.74	38.12	16.07
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

STs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	62.2	6.79	14.53	9.75	3.27	3.22	0.23
(2)	45.86	0	21.69	7.49	6.94	18.02	0
(3)	28.5	12.81	21.79	21.72	12.08	3.1	0
(4)	0	0	0	0	0	0	0
(5)	0	0	0	0	0	0	0
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Table C4: Quintile 4

Others

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	25.25	9.29	21.97	19.34	13.21	7.43	3.5
(2)	1.57	4.8	18.26	31.47	25.48	11.96	6.44
(3)	3.56	1.13	11.19	27.28	25.71	19.41	11.72
(4)	0.36	1.27	8.82	18.5	21.62	25.3	24.13
(5)	1.33	0	1.43	10.11	34.4	26.17	26.56
(6)	0	1.07	4.91	16.64	4.23	19.27	53.88
(7)	0	0	0	0	10.02	6.43	83.56

OBCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	39.54	7.48	22.03	14.31	9.88	4.51	2.25
(2)	4.9	7.49	18.91	28.64	20	14.12	5.95
(3)	4.35	3.25	15.56	26.26	22.28	16.13	12.17
(4)	0	2.85	14.69	21.13	23.94	23.53	13.86
(5)	1.81	0	2.97	21.06	15.83	29.41	28.91
(6)	0	0	0	17.67	21.47	32.15	28.72
(7)	0	0	0	0	0	0	0

SCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	48.91	6.25	16.5	14.47	8.91	3.6	1.35
(2)	2.36	9.33	30.76	16.6	25.36	12.9	2.69
(3)	4.75	0.72	17.78	29.2	26.36	19.36	1.84
(4)	0	4.82	16.06	15.3	24.66	27.11	12.04
(5)	0	3.33		19.17	23.57	18.64	35.3
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

#### STs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	51.73	11.49	14.2	12.33	4.78	5.05	0.41
(2)	4.71	0	9.22	34.19	15.67	36.21	0
(3)	2.43	3.02	18.99	19.46	21.3	34.42	0.38
(4)	0	0	0	0	0	0	0
(5)	0	0	0	0	0	0	0
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

#### Quintile 5

##### Others

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	19.47	6.19	18.94	17.43	15.51	13.01	9.45
(2)	0.63	4.63	11.07	24.38	28.93	20.43	9.91
(3)	1.74	0.98	7.06	16.04	27.28	24.05	22.85
(4)	0.17	0	2.37	7.89	18.81	29.61	41.16
(5)	0.1	0	1.12	3.36	11.03	24.13	60.26
(6)	0	0	0	3.02	8.95	16.12	71.91
(7)	0	0	0	0	1.95	9.35	88.7

#### OBCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	29.02	7.64	20.51	13.12	15.34	8.49	5.87
(2)	3.14	6.62	15.56	22	25.33	15.08	12.26
(3)	3.06	1.32	9.18	16.51	28.55	22.65	18.72

(4)	1.66	1.68	3.34	11	19.61	28.18	34.53
(5)	1.45	0	1.79	6.64	17.98	28.89	43.24
(6)	0.8	0	0	2.55	4.52	30.68	61.44
(7)	0	0	0	0	4.62	7.78	87.61

#### SCs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	35.03	10.53	16.89	16.3	10.75	5.82	4.69
(2)	8.25	1.09	14.28	28.44	19.85	19.86	8.23
(3)	1	0	15.04	23.13	35.3	14.73	10.81
(4)	0	0	9.39	7.09	24.93	32.27	26.32
(5)	1.25	0	2.6	5.91	12.07	29.77	48.39
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

#### STs

Educational Categories of Mothers	Educational Categories of Daughters (percentage)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)	27.64	8.9	12.68	21.38	11.4	11.18	6.83
(2)	0	8.18	8.71	50.91	15.09	13.54	3.57
(3)	0	0	31.35	14.94	26.09	13.56	14.06
(4)	0	0	8.12	6.99	0	54.06	30.83
(5)	0	0	0	7.47	17.96	43.28	31.29
(6)	0	0	0	0	0	0	0
(7)	0	0	0	0	0	0	0

Notes: (1) no formal schooling; (2) 1–4 years of schooling; (3) 5–7 years of schooling; (4) 8–9 years of schooling; (5) 10–11 years of schooling; (6) 12–14 years of schooling; (7) 15 or more years of schooling. Sample sizes—Total (39,395).

Source Authors' computations based on the data IHDS II (2011–2012).