

Educational and occupational mobility across generations in India: social and regional dimensions

Ray, Jhilam and Majumder, Rajarshi Department of Economics, University of Burdwan

December 2010

Online at http://mpra.ub.uni-muenchen.de/28539/ MPRA Paper No. 28539, posted 01. February 2011 / 19:51

EDUCATIONAL AND OCCUPATIONAL MOBILITY ACROSS GENERATIONS IN INDIA: SOCIAL AND REGIONAL DIMENSIONS

Jhilam Ray and Rajarshi Majumder**

Abstract

Discrimination against specific ethnic groups transcends the boundary of current generation and perpetuates across future generations as well. This is manifested as low Intergenerational Mobility in terms of both Education and Occupation in the developing countries, in general, and among specific ethnic groups within those countries, in particular. The present paper examines the extent of intergenerational mobility in both educational and occupational attainments for diverse ethnic groups in India to understand the inertia of the prevalent discrimination. The results indicate strong intergenerational stickiness in both educational achievement and occupational distribution among the Scheduled Castes (SCs) and Scheduled Tribes (STs), who have been discriminated against historically. Occupational mobility is lower than educational mobility, indicating that educational progress is not being transformed into occupational improvement and brings up the possibility of discrimination in the labour market. This also brings to the fore the fact that historical discrimination and social exclusion have had a long run effect and that the inertia is quite strong. The regional pattern suggests that mobility levels, in general, are lower in many of the lagging states and that the mobility of the excluded groups is lower than that of the advanced classes in most of the regions. Initiating targeted action to improve the educational situation among the excluded classes and encouraging occupational diversification among them seem to be important policy suggestions.

^{**} Senior Lecturer and Reader respectively, Department of Economics, University of Burdwan, Golapbag, Burdwan, West Bengal. Email: jhilam@rediffmail.com;.meriju@rediffmail.com.

I. INTRODUCTION

It has often been found that specific ethnic groups (in the developing and developed countries) are excluded from the process of capability formation and income-earning opportunities due to various forms of discrimination. This exclusion and backwardness transcends the boundary of the current generation and spills over to successive generations as well. The World Bank (2000) has accepted the overlapping generational impact of social exclusion by commenting:

"Discrimination on the basis of gender, ethnicity, race, religion, or social status can lead to social exclusion and lock people into long-term poverty traps."

This leads to low Intergenerational Mobility in terms of both Education and Occupation in developing countries, in general, and among specific ethnic groups within those countries, in particular. Such processes of exclusion can be linked to deprivation or impoverishment in a multi-dimensional, multi-generational, and interactional fashion, rather than in a linear way. On one hand, 'the poor' are likely to be excluded from wider participation in society because of their relative material disadvantage in terms of income. On the other hand, exclusion from the avenues of capability formation due to poor income also renders them poorly endowed in terms of human capital and hence reduces the income of their next generation. Under such circumstances, the absence of intergenerational educational and occupational mobility among the socially excluded classes in the developing countries in comparison to certain advanced groups is another manifestation of long-standing discrimination in terms of both capability formation (educational attainment) and capability utilisation (participation in the labour market). India serves as an excellent case study because of the presence of diverse social groups and a long history of discrimination between them. In the present paper, we examine the extent of intergenerational mobility in terms of both educational and occupational attainments for diverse ethnic groups in India to understand the inertia of the prevalent discrimination. Our results indicate strong intergenerational stickiness in both educational achievement and occupational distribution among the SCs and STs who have been discriminated against historically. Moreover, this stickiness occurs at the lower levels of education and occupation, indicating that the discrimination has transcended generational boundaries and also has a long run effect.

II. REVIEW OF CURRENT RESEARCH

1. International Experience

Internationally, in economics, there is an extensive literature on the transmission of economic success from generation to generation. The fact that the family plays a crucial role in shaping income inequality has long been recognised by economists. For instance, Knight (1935) identified the family as the principal social institution that fosters income inequality through behaviour that forges intergenerational links between the wealth of parents and children (see also Parsons, 1975). Starting from the contributions of Becker and Tomes (1979; 1986) and Loury (1981), economists have increasingly paid attention to the issue of inequality in income (or earnings) among families over generations. Most of the discussion [Behrman and Taubman (1976; 1990), Behrman and Wolfe (1984), Heckman and Hotz (1986), Solon, *et al.*, (1992)] has focused on getting a precise estimate of the degree of intergenerational mobility [see Mazumder (2001) for a brief review].

Recent studies at the international level include those by Checchi (1997), Checchi and Flabbi (2007), Couch and Dunn (1997), Atkinson (1998), Lovering (1998), Bhalla and Lapeyre (1999), Gang and Zimmermann (1999), Gore and Figueiredo (1999), Mishra (1999), Beall and Clert (2000), Clert (2000), Kabeer (2000), Riphahn (2001), Fertig and Schmidt (2001), Beall (2002), Schnepf (2002), Black, *et al.* (2003), Carr and Chen (2004), Dustmann (2004), Grawe (2004), and Corak (2006). Most of them conclude that there is both a significant direct and indirect effect of parental education/occupation on the educational attainment level and occupational destinations of young people. Some of them also conclude that empirically at least, there has been an erosion of social equity in recent times and interventions are necessary for bringing the disadvantaged groups nearer to the advantaged ones, especially in the developing countries.

There is also a vast sociological literature on the transmission of economic (dis)advantage from generation to generation, and especially on the degree of mobility in education and occupational status [among others, Halsey, *et al.* (1980), Goldthorpe (1980), and Erikson and Goldthorpe (1992)]. Bjorklund and Jantti (2000) offer an interesting review of the existing sociological literature, which measures mobility in class and status, and its links to the economic literature, which measures mobility in earnings and income.

II. INDIAN CONTEXT

One of the earliest works in the Indian context has been that of Driver (1962). Using data obtained by interviews during 1958, with one per cent of the male heads of households in Nagpur district, he concluded that intergenerational mobility is frequent among rural and urban castes but is generally confined to occupations of similar rank. Hence, mobility has a negligible effect upon the traditional association between positions in the caste and occupational hierarchies. This association was attributed by the author to differences among castes in educational attainment. Surprisingly, despite caste being such an important issue in India in determining various socio-economic and political dimensions, there has been hardly any study to compare the intergenerational mobility of various social classes in India in recent times. Bhowmik (1992) discusses the proceedings of a seminar on Caste and Class in India held in 1992 by Indian Council of Historical Research. The author observed that most of the speakers commented on the predominance of the caste system in India and how it overlapped with the class system and tended to mutually perpetuate each other. Kumar, et al. (2002a, 2002b) discussed the role of caste and community in class mobility and the impact of modernisation on such processes by using the National Election Study data of 1971 and 1996 from 80 and 108 parliamentary constituencies, respectively, across India. They conclude that though there has been a net upward movement of occupational classes across generations, substantial class inequalities also persist alongside. They are of the opinion that such inequalities are primarily caused by differences in the financial, educational, and social resources possessed by different classes and should not be ascribed to caste alone. They, however, admit that overall, both with father/son class mobility and caste/class mobility, the dominant picture is one of continuity rather than change.

It is thus evident that though a plethora of work has been done at the international level, especially in the context of the developed countries, the area has not been focused on unfocused in Indian economic research. This is quite unexpected since social exclusion and disparity have been quite substantial in India and none have had as long-lasting an effect as the division along caste lines. The SCs, STs, and Other Backward Classes (OBCs) have been like pariahs in the development process of India for quite a long time. Affirmative actions in the form of reservation in education and employment were taken after Independence to provide them space in the mainstream and trigger the self-sustaining growth of these groups. In recent years, the issue has again come to the centre-stage in view of the debate between the

pro- and anti-reservation lobbies. Whether such actions have been able to create greater mobility among the Excluded Classes (EC hereafter, comprising SCs, STs and OBCs taken together) and bring in higher social fluidity in the nation as a whole, remains an important area to be explored.

The present study will try to fill in this void in the existing literature by bringing out not only the educational attainment level and occupational structure among various classes in India, but also the degree of educational and occupational mobility for them. The study is thus significant from the viewpoint of both assessing the current dispensation and understanding the temporal dynamics. Within this backdrop, the authors try to:

- a) Determine levels of educational attainments and occupational structure separately for the excluded classes and the advanced classes in India;
- b) Determine mobility across generations in terms of educational attainments and occupational structure separately for the two classes;
- c) Explore whether the mobilities are different for the different groups;
- d) Examine whether educational mobility is being adequately transformed into occupational mobility;
- e) Explore the regional pattern of mobility and disparities among social groups.

III. DATA SOURCES AND METHODOLOGY

The methodology to be followed in the study can be outlined as follows. The study has used the National Sample Survey Organisation (NSSO) database on employment and unemployment (unit level records) for the 50th and the 61st Rounds, pertaining to the years 1993 and 2004, respectively. Family records have been superimposed on personal records so as to obtain multi-generational data on education, occupation, earnings and other socio-economic parameters. Thereafter, the data has been processed to provide us with the necessary information on intergenerational mobility in terms of education and occupation separately for different social classes, age groups, gender, and regions. Only persons aged 20 years or above have been included in our study to allow them to complete the full educational cycle.

A note on the database seems necessary at this point. NSSO data for 1993 distinguishes between STs, SCs, and Others (whom we call General Caste or GEN), while the 2004 data

provides information for OBCs separately from the GENs. Thus, there are some comparability problems in the data, which are, however, not insurmountable. With this background, we now explore the situation.

IV. EDUCATIONAL ATTAINMENT

The educational attainment levels of the people are substantially lower by international standards. Even in 2004, more than 30 per cent of them were illiterate, and only about 20 per cent had completed secondary schooling. Within such low standards, the situations of the Excluded Castes are still worse. Among these classes, 45 per cent of the OBCs, 60 per cent of the STs, and 55 per cent of the SCs are illiterate, as compared to only 27 per cent for the Advanced Castes (Table 1). Education up to the secondary school level has been acquired by only about 8-11 per cent of the excluded class workers.

If we consider different gender classes, it is observed that women are placed much below the men. While 16 per cent of the males are illiterate, more than 38 per cent of the females are illiterate. At the other end of the scale, only about 20 per cent of the females have passed secondary schools and above as compared to a corresponding figure of 35 per cent among males. There are, however, disparities among different generations and age groups regarding educational levels. Children and young people are seen to have better educational levels than their parents and persons in the older age group. Also, standards have improved over the period 1993-2004. Alarmingly, gender discrimination is pretty strong and the prevalence of illiteracy among daughters is more than twice that among sons. The upward mobility witnessed is more prominent among the advanced castes and marginal among the excluded castes, especially for the women. Whether this is because of intergenerational stickiness will be examined later.

V. OCCUPATIONAL HIERARCHY

One of the major factors affecting income distribution is the hierarchical structure of different occupations and the occupational distribution of the workers. Occupational segregation leads to perpetuation and also the accentuation of income inequality over generations. Therefore, examining the occupational distribution of workers becomes an important issue. We have used the Indian NCO-1968 classification in our study and workers have been divided into ten occupational classes. Arranged in descending order of hierarchy and prestige, these are:

Technical and Scientific Personnel, Professionals, Administrative, Clerical, Sales, Service, Farmers, Production-related, Transport, and Labourers not elsewhere classified. Occupational structure and mobility are discussed in terms of this structure. At the second level, we have clubbed similar occupations to form three broad groups – Grade-I (White Collar jobs—Technical and Scientific Personnel, Professionals, and Administrative); Grade-II (Pink Collar jobs—Clerical, Sales, and Service); and Grade-III (Blue Collar jobs—Farmers, Production-related workers, Transport workers, and Labourers not elsewhere classified). This hierarchical structure has also been used in our study.

It is observed that the workers of the excluded classes are much more concentrated in the Grade-III jobs as compared to the advanced classes, while the proportion of the latter in Grade-I jobs is unduly large (Tables 2 and 3). Some improvements are observed over time and across generations whereby the proportion of excluded class workers in higher occupation classes is increasing. However, the rate of improvement is much more pronounced for the advanced classes. Moreover, the share of workers in Grade III jobs has increased for the parents and the daughters belonging to the SCs. Thus, occupational segregation and occupational stickiness among the excluded classes is very much a reality in India.

If we assess age groups instead of biological generations, a similar picture emerges. Moving from the population aged 40+ that in the age group of 20-40 years, in 2004, there was a marginal upward movement among the OBCs, while for the STs, there was a tendency towards concentration in mid-level occupations. For the SCs, there is a clear downward movement with the proportion of Blue Collar workers increasing in both the age groups.

VI. INTERGENERATIONAL MOBILITY

We are more interested in examining how children's education and occupation are related to parental standards. More specifically, we want to quantify the degree of intergenerational upward mobility in education and occupation. This would be given by the percentage of children moving to a higher educational or occupational class as compared to their parents. The cross-tabulation of children's parameters with parental parameters yields the following results.

1. Educational Mobility

It has been observed that substantial upward mobility is present in terms of educational attainment levels. About 48 per cent of the children in 1993 and about 56 per cent of them in 2004 have higher educational levels as compared to those of their parents (Tables 4 and 5). Mobility is higher for the younger age group as compared to the older, and for boys as compared to girls. Mobility has also improved during the period 1993-2003, especially for the girls. However, social disparity in mobility levels is quite evident. Upward mobility was quite lower for the excluded classes as compared to the advanced classes in 1993. The gap decreased in 2003, especially for the boys, but it was still significant. This indicates that for new male entrants, the probability of reaching a higher educational standard than their that of parents is almost equal than for the advanced and excluded classes. This is a welcome trend, though the gender bias is still a major issue.

2. Occupational Mobility

As compared to educational mobility, occupational attainment is much more sticky across generations, with upward mobility being only about 13-15 per cent in 2004 (Tables 6-9). Mobility improved during the period 1993-2004 for all the sub-groups. At the detailed occupational level, only about one-fifth of the boys and one-seventh of the girls were seen to be moving to the higher level of jobs as compared to their parents. For the advanced classes, however, mobility among girls was higher as compared to boys, indicating a wider acceptability of women's employment in diversified occupational positions and also higher aspirations among the present generation of women in the advanced classes. However, much of this mobility is perceived to be at a comparable hierarchical level and grade level stickiness is observed to be much higher when viewed at the broad occupational levels. Only about one-tenth of the workers in 2004 had better occupational grades as compared to those of their parents.

Mobility among excluded classes was lower than that for advanced classes, indicating greater intergenerational stickiness for them. This gap is higher at the broad occupational levels as compared to the detailed occupational levels. Thus, it emerges that for the advanced classes, the mobility from Blue Collar to Pink Collar and from Pink Collar to White Collar jobs is substantial while for the excluded classes much of the mobility is lateral, that is, from one occupation to other within the broad grades.

Quite surprisingly, mobility is higher among people of the older age group people as compared to the younger age group. This may be due to various reasons. First, this may be a reflection of the lower initial or parental occupational levels of the people currently in the 40+ age group as compared to those in the 20-40 year age group, whose parents have already higher occupational levels. Hence, upward mobility may be higher for the former as compared to the latter. Second, this may also be because of tighter labour market situations in the post-1990 era whereby chances of vertical mobility have become much more sparse and most of the movements are horizontal among similar occupations.

VII. REGIONAL DIMENSIONS OF INTERGENERATIONAL MOBILITY

1. Regional Pattern of Educational Mobility

We have already noted that the all-India average figure shows that in 1993, nearly 49 per cent of all the persons in the 20-40 year age group, the generation of 'children' in our study, have higher educational levels as compared to their parents, which in itself is a substantial achievement. But there is significant inter-state variation in upward educational mobility ranging from 84 per cent in Goa and 78 per cent in Kerala to 34 per cent in Bihar and 36 per cent in Rajasthan (Table 10). A higher mobility has been noticed in 2004 as compared to 1993 for almost all the states but regional disparities remain high nonetheless. Goa, Daman, Kerala, Andaman, Assam, Manipur, Lakshadweep, Tripura, Nagaland, Pondicherry and Chandigarh are the states with higher upward educational mobility both in 1993 and 2004, while Madhya Pradesh (MP), Rajasthan, and Bihar are the states that are lagging behind. While upward educational mobility improved significantly in Arunachal Pradesh, Sikkim, Uttaranchal, Himachal Pradesh, Jharkhand, Chhattisgarh, Karnataka, Tripura, Orissa, Punjab, MP, Andhra Pradesh (AP), Tamil Nadu, and Mizoram between 1993 and 2004, it deteriorated marginally in Chandigarh, Goa, Jammu & Kashmir (J & K), and Daman & Diu.

Now if we look at the educational mobility according to social groups, we find that the disparities are quite high and varied across states. Consistently decent upward educational mobility has been observed among the STs in states like Kerala, Manipur, Meghalaya, Nagaland, Daman and Lakshadweep during both 1993 and 2004. In Tamil Nadu, Punjab, and Assam, the situation for STs improved during this period. The percentage figures of ST children who have higher educational levels as compared to those of their parents fluctuated

very strangely in Haryana (77 per cent in 1993 to 18 per cent in 2004) and a large improvement has been noticed in states like Bihar,

J & K, Sikkim, Dadra, and Himachal Pradesh (HP). The upward educational mobility figure for the STs remains meagre in states like MP, AP, Rajasthan, Chhattisgarh, Orissa and Goa, most of which have a substantial ST population.

Upward educational mobility among the SCs is high in Manipur, Sikkim, Chandigarh, Goa, Kerala, Tripura, and Pondicherry, wherein a substantial percentage of the SC children have better educational levels than their parents, both in 1993 and 2004. The situation of SC children improved in Arunachal Pradesh, Meghalaya, Mizoram, J & K, HP, Haryana, Maharashtra, Punjab, and Tamil Nadu, whereas in states like Bihar, MP, Rajasthan, Uttar Pradesh (UP), and Orissa their condition worsened.

The upward educational mobility for the OBCs can be calculated only for 2004 onwards as earlier studies do not enumerate them separately. Figures show that upward educational mobility among OBCs is significantly higher in Dadra, Mizoram, Goa, Kerala, Sikkim, Meghalaya, Tripura, Assam, Pondicherry, Tamil Nadu, HP, Punjab, and Maharashtra. On the contrary, upward mobility is very poor in states like Arunachal Pradesh, Andaman and Nicobar, Chhattisgarh, Bihar and UP.

2. Regional Pattern of Occupational Mobility

As compared to the educational mobility, occupational attainment is much more sticky across generations. As noted earlier, we have considered both One-digit detailed Occupational Classes and Broad Occupational Grades. The national average upward occupational mobility in terms of One-digit Occupational Classes was about 13 per cent in 1993, increasing marginally to 15 per cent in 2004, indicating that only about one in every seven persons had better occupational level compared to their parents. Goa, Andaman, Chandigarh, Daman, Kerala, and Pondicherry are the states wherein during both the periods, substantially large numbers of children had higher occupation levels than those of their parents (Table 11). In HP, West Bengal, J & K, Nagaland, Tripura, Punjab, Jharkhand, Tamil Nadu, Delhi, Manipur, Uttaranchal, Orissa, UP, Haryana and Maharashtra, we observe only moderate upward mobility. On the other hand, the occupational mobility of children is very poor in states like Mizoram, Meghalaya, MP, Sikkim, Arunachal Pradesh, Assam, Bihar, Rajasthan, AP, and Karnataka.

The occupational mobility scenario among the socially excluded classes is even lower than the average. For the STs, upward occupational mobility during 1993 was quite depressing in almost all the states except in a few like Lakshadweep, Punjab, Karnataka, West Bengal and HP, wherein it was above the national average. In states like Sikkim, MP, Tamil Nadu, AP, Bihar, Gujarat, Kerala, Orissa and Mizoram, the occupational mobility remained less than 10 per cent, which is very low indeed. In the remaining states, the mobility was 10-13 per cent. In 2004, however, only Kerala, HP, and Gujarat exhibited a mobility of above 15 per cent, while AP, Chhattisgarh, MP, Tamil Nadu, Maharashtra, Karnataka, Orissa and West Bengal had mobility figures below 10 per cent. In the other states, occupational mobility varied between 10 to 15 per cent in 2004.

The occupational mobility of the SCs was again sluggish across most of the states during both the periods. J &K, Kerala, Haryana, and Punjab are the states wherein a relatively larger number of children had higher occupation classes as compared to those of their parents whereas in Bihar, MP, Rajasthan and Gujarat, the upward occupational mobility is very poor. When we look at the occupational mobility of children as compared to that of their parents in terms of the broad occupational grades (White-Pink-Blue), it is found that the mobility is much more lower and occupational grades are very sticky in most of the states (Table 12). While at the national level, only 11.4 per cent of the children had higher occupational grades than those of their parents in 2004, at the state level only Kerala, J & K, West Bengal, Tamil Nadu, Punjab, and Orissa had mobility figures above the national average. The poor performing states in this regard are Sikkim, Arunachal Pradesh, Gujarat, Chhattisgarh, Meghalaya, Mizoram, MP, Delhi, and Karnataka, where the upward mobility is less than 10 per cent.

Among the STs, the upward mobility at broad occupational grades was consistently poor in all the states both during 1993 and 2004-05. During 1993, mobility figures were lower than 10 per cent everywhere except in a few states like Andaman and Nicobar, Karnataka, Assam, UP, and Lakshadweep. In 2004 too, upward occupational mobility in excess of 10 per cent was observed only in Kerala, HP, Nagaland, Punjab, Uttaranchal, Haryana, Bihar, Lakshadweep, Assam, and Arunachal Pradesh. For the SCs, occupational mobility at the

broad grade level was relatively better than for the STs. At the regional level, the figures were higher than national average in the states of Sikkim, Kerala, West Bengal, Assam, Tripura, Karnataka, Orissa, and Mizoram both for 1993 and 2004. For the OBCs, the better performing states were Tripura, West Bengal, Kerala, HP, Punjab, Manipur, Delhi, Orissa, Jharkhand and J & K, whereas in states like Arunachal Pradesh, Assam, MP, Delhi, Gujarat, Rajasthan and Karnataka, upward mobility was lower as compared to the national average.

3. Regional Pattern of Disparity among Social Groups

Hitherto, we have considered the regional pattern of upward mobility, in general, and that of the excluded social groups, in particular, across the 1993-2004 period. However, we are more bothered about the disparity between the excluded groups and the included groups in terms of upward educational and occupational mobility. It has already been noted that mobility is higher among the advanced classes as compared to the excluded classes at the national level. We now discuss the trends exhibited by the difference between mobility figures for advanced class and that of the excluded classes in a regional setting.

It is observed that the national pattern is not universal and that the situation is not the same across all the states. The upward mobility of the advanced class was much higher than that of the STs in states like Goa, Sikkim, Lakshadweep, J & K, HP, Orissa, Daman, MP, and AP Andhra Pradesh in 1993. A moderate difference was observed for Maharashtra, Gujarat, West Bengal, Tamil Nadu, Rajasthan, Bihar, Assam, Tripura, Karnataka, and Manipur. However, the reverse trend was also witnessed in states like UP, Dadra, Andaman, Nagaland, Kerala, Punjab, Arunachal Pradesh, Haryana, Meghalaya and Mizoram, wherein the mobility of STs was higher than that of the advanced classes. The magnitude of the difference in mobility between the two groups decreased over the 1993-2004 period in most of the states, most notably in Sikkim, J & K, Tamil Nadu, Lakshadweep, Bihar, HP, Goa, Mizoram, Delhi, Daman & Diu, Assam, MP, Gujarat, and West Bengal. However, in a few states like Haryana, Punjab, Meghalaya, Nagaland, Kerala, AP, Chhattisgarh, Andaman and Nicobar, Arunachal Pradesh, and Karnataka, the disparity between the mobility of the advanced classes and the STs either increased or turned positive from negative.

Similar trends were witnessed for the SCs though in almost all the cases, the magnitude of disparity between the mobility of the advanced classes and that of the SCs was less as

compared to that between the advanced class and the STs. The states wherein the upward educational mobility of the SCs was substantially lower as compared to the advanced classes were Nagaland, Punjab, Orissa, Bihar, Uttar Pradesh, Rajasthan, and Karnataka. The magnitudes of disparities diminished in most of the states from 1993 to 2004, especially in Nagaland, Lakshadweep, Arunachal Pradesh, Pondicherry, Mizoram, Tamil Nadu, Goa, J & K, Chhattisgarh, Rajasthan, Punjab and Orissa. On the other hand, the disparity increased in Dadra, Daman and Diu, Sikkim, Gujarat, Manipur, Tripura, Assam, Jharkhand, Andaman and Nicobar, Delhi and West Bengal.

For the OBCs, the magnitude of disparity relative to the advanced classes is generally very low compared to that for the SCs and STs in most of the states. In fact, in most of the states, upward mobility among the OBCs was higher as compared to that for the advanced classes. However, moderate disparity does exist in Daman, Arunachal Pradesh, Nagaland, AP, J & K, and Manipur, while marginal disparity exists in Kerala, Bihar, Jharkhand, Karnataka, Gujarat, UP, and Uttaranchal. Differences in upward occupational mobility between the advanced classes and the STs is higher than the national average in states like Delhi, Daman and Tamil Nadu during both 1993 and 2004. The reverse trend was also observed in HP, Arunachal Pradesh, Kerala and Mizoram, wherein the occupational mobility of STs was higher than that of the advanced classes. Nagaland, Chandigarh, J & K, Haryana, Manipur, Sikkim, and Kerala were the states that had been able to reduce this gap substantially during 1993 to 2004. Unfortunately, in all the other major states the difference increased in 2004 from the earlier level.

Similar features have been observed for the SCs as well. In states like Daman and Diu, Manipur and Delhi, the occupational mobility of the advanced classes was much higher than that of the SCs, which, however, reduced over time. A moderate gap was observed in West Bengal, Tripura Bihar, UP and AP. In Dadra, Mizoram, Sikkim, Haryana, Tripura, Punjab, Karnataka, Chhattisgarh, MP, J & K, and Assam, the SCs have higher mobility rates as compared to those of the advanced classes. Over time, however, the gap between the mobility of the advanced classes and that of the SCs increased in all the major states except Bihar, MP, West Bengal, Delhi, Punjab, Chhattisgarh, Haryana and Karnataka. The difference of mobility in the occupational levels between the advanced classes and OBCs was higher only in Daman, Goa, Meghalaya, Pondicherry, Dadra, Chandigarh, Kerala, Rajasthan and Tamil Nadu, while in most of the other states OBCs had higher mobility than the advanced classes. At the broad occupational grade level too, a similar picture has been observed across the states. The difference in mobility between the advanced classes and the STs is much higher in states like Daman, West Bengal and Tamil Nadu. In contrast, mobility is higher for STs in Meghalaya, Arunachal Pradesh and Mizoram. A sharp increase in such gaps has been noticed in Lakshadweep, Nagaland, Daman, Karnataka, UP, Rajasthan, Tamil Nadu, Chhattisgarh, Jharkhand, Delhi and Orissa over the period 1993-2004, while in Kerala, Goa, J & K, and Punjab, the disparity decreased significantly.

The difference in mobility between the advanced classes and the SCs is much higher than the national average in Manipur and Pondicherry during both the periods whereas this gap increased sharply in Kerala, UP, Rajasthan, Gujarat and Maharashtra during the period 1993-2004. The gap also reduced to a great extent in Chandigarh, Mizoram, and Haryana during the same period, resulting in a reversal of the earlier trend, that is, the mobility of SCs was now higher than that of the advanced classes in these states. Sikkim and Assam are the states where such a reverse trend was observed during both the periods. For the OBCs, the grade level occupational mobility was higher than that of the advanced classes in most of the states except Sikkim, Tripura, Delhi, Manipur, West Bengal, HP, Punjab, Haryana, Jharkhand, Orissa, and AP.

4. Summary

What transpires from the maze of regional trends is that there are vast regional disparities in terms of intergenerational educational and occupational mobility in India. Such disparities are evident at the aggregate levels of mobility, differential mobilities for the excluded and advanced classes, and their time trends. If we concentrate on the most recent available data, that is, the 2004-05 survey, we find that among the major states, upward educational mobility and upward occupational mobility are both higher than the national average in Kerala, HP, Punjab, Karnataka, Orissa, Uttaranchal and Tripura (Table 13). On the other hand, both these measures are lower than the national average in the states of Bihar, Rajasthan, MP, UP, Chhattisgarh and AP. While Jharkhand, West Bengal and J & K have achieved higher occupational mobility but lower educational mobility, states like Sikkim, Assam, Maharashtra, Gujarat, Haryana and Karnataka have higher educational mobility but lower occupational mobility. Recent unrest in some of the latter group of states with the locals

demanding more jobs may be the direct fallout of such a mismatch between enhanced educational achievements and lack of improved occupational opportunities.

If we summarise the disparity between the mobility of advanced groups and of the excluded group, we find that the disparities are high in AP, Orissa, Maharashtra, MP, West Bengal, and Jharkhand, for educational and occupational mobility, indicating that the trans-generational improvements in the education and occupation of the excluded groups are substantially lower than those of the advanced groups in these regions (Table 14). In Tamil Nadu and Delhi, the disparity in terms of educational mobility is low but that in terms of occupational mobility is high. On the other hand, in Haryana and Sikkim, the disparity is higher in terms of educational mobility but lower in terms of occupational mobility. Surprisingly, in none of the major states is the gap between the advanced and excluded groups low for both education and occupation, indicating that in almost all the regions, the excluded groups are lagging behind the others in terms of either education or occupation, or perhaps both.

VIII. CONCLUSION

It is thus evident that upward mobility across generations in India is moderate for the educational level and significantly low for the occupational level. Within that, the condition of the excluded classes is further lower. Although the educational levels of the second generation are higher than those of their parents in 2004, this is not adequately reflected in occupational mobility matrix. People are stuck in their parental occupational classes, and any movement perceived was mostly among the advanced classes. Regional patterns suggest that mobilities, in general, are lower in many of the lagging states. The relatively lower mobility of the excluded groups is also evident in most of the regions. This lack of upward mobility, especially among the socially excluded classes, is a matter of grave concern. The fact that educational mobility is not being transformed into occupational mobility brings up the possibility of discrimination in the labour market. This also brings to the fore the fact that historical discrimination and social exclusion have had a long run effect and it is very difficult to come out of this inertia. The possible policies to break this sluggishness may include targeted programmes to improve the educational situation among the excluded groups. Encouraging occupational diversification among these groups, most of which continue their traditional family/parental jobs, may be another effective mechanism. Steps must also be taken to check if these groups are facing any discrimination in the labour market

and if so, appropriate preventive measures should be adopted. Only then can we have holistic development and true progress of the society in the country.

[This study is part of a Major Research Project on Intergenerational Mobility funded by University Grants Commission, India. Authors are thankful for the financial support.]

References

- Atkinson, A.B. (1998), "Social Exclusion, Poverty and Unemployment" in A.B. Atkinson and J. Hills (eds.) *Exclusion, Employment and Opportunity*, CASE Paper 4, Centre for Analysis of Social Exclusion, London School of Economics, London.
- Beall, J. (2002), "Globalisation and Social Exclusion in Cities: Framing the Debate with Lessons from Africa and Asia", Working Paper No. 02-27, Development Studies Institute, London School of Economics and Political Science, London.
- Beall, J. and Clert, C. (2000), "Globalisation and Social Exclusion: Implications for Urban Social Policy", Paper prepared for "African Families II: Macroeconomics", World Bank, Washington DC. Becker, G.S. and Tomes, N. (1979), "An Equilibrium Theory of the Distribution of Income and Intergenerational Mobility", Journal of Political Economy, Vol. 87, No. 6, pp. 1153-89.
- —— (1986), "Human Capital and the Rise and Fall of Families", Journal of Labour Economics, Vol. 4, No. 3, pp. S1-S39. Behrman, J.R. and Taubman, P. (1976), "Intergenerational Transmission of Income and Wealth Intergenerational Transmission of Income and Wealth", The American Economic Review, Vol. 66, No. 2, pp. 436-40.
- ——— (1990), "A Comparison and Latent Variable Test of Two Fertile Ideas", Journal of Population Economics, Vol. 3, No. 1, pp. 19-30.
- Behrman, J.R. and Wolfe, B.L. (1984), "The Socio-economic Impact of Schooling in a Developing Country", *The Review of Economics and Statistics*, Vol. 66, No. 2, pp. 296-303.
- Bhalla, A.S. and Lapeyre, F. (1999), "Global Integration and Social Exclusion with Special Reference to Poland and Hungary", *European Journal of Development Research*, Vol. 11, No. 1, pp. 101-24.

- Bhowmik, S. (1992), "Caste and Class in India Caste and Class in India", *Economic and Political Weekly*, Vol. 27, No. 24/25, June 13-20, pp. 1246-1248.
- Bjorklund, A. and Jantti, M. (2000), "Intergenerational Mobility of Socio-economic Status in Comparative Perspective." *Nordic Journal of Political Economy*, Vol. 26, No. 1, pp. 3-33.
- Black, Sandra E.; Devereux, Paul J. and Salvanes, Kjell G. (2003), "Why the Apple Doesn't Fall Far: Understanding Intergenerational Transmission of Human Capital", *IZA Discussion Paper No. 926*, November, IZA, Bonn. (AQ: please mention the place of publication of the paper.) AR: Done now
- Carr, M. and Chen, M.A. (2004), "Globalisation, Social Exclusion and Work: With Special Reference to Informal Employment and Gender", *Working Paper No. 20*, Policy Integration Department, ILO, Geneva.
- Checchi, D. (1997), "Education and Intergenerational Mobility in Occupations", *American Journal of Economics and Sociology*, Vol. 56, No. 3, pp. 331-52.
- Checchi, D. and Flabbi, Luca (2007), "Intergenerational Mobility and Schooling Decisions in Germany and Italy: The Impact of Secondary School Tracks", *IZA Discussion Paper No. 2876*, June, IZA, Bonn. Clert, C. (2000), "Policy Implications of a Social Exclusion Perspective in Chile: Priorities, Discourse and Methods in Question", Unpublished PhD Thesis, Social Policy Department, London School of Economics and Political Science, London.
- Corak, M. (2006), "Do Poor Children Become Poor Adults? Lessons from a Cross Country Comparison of Generational Earnings Mobility", IZA Discussion Paper No. 1993, March, IZA, Bonn.
- Couch, K.A. and Dunn, T.A. (1997), "Intergenerational Correlations in Labour Market Status: A Comparison of the United States and Germany", *The Journal of Human Resources*, Vol. 32, No. 1, Winter, pp. 210-32.
- Driver, Edwin D. (1962), "Caste and Occupational Structure in Central India", *Social Forces*, Vol. 41, No. 1, October, pp. 26-31.
- Dustmann, C. (2004), "Parental Background, Secondary School Track Choice, and Wages", *Oxford Economic Papers*, Vol. 56, No. 2, pp. 209-30.
- Erikson, R. and Goldthorpe, J.H. (1992), *The Constant Flux: A Study of Class Mobility in Industrial Societies*, Clarendon Press, Oxford.

- Fertig, Michael and Schmidt, Christoph M. (2001), "First- and Second-Generation Migrants in Germany—What Do We Know and What Do People Think", CEPR Discussion Papers 2803, C.E.P.R., London.
- Gang, Ira N. and Zimmermann, Klaus F. (1999), "Is Child Like Parent? Educational Attainment and Ethnic Origin", *IZA Discussion Papers No. 57*, IZA, Bonn.
- Goldthorpe, J.H. (1980), Social Mobility and Class Structure in Modern Britain, Oxford University Press, Oxford.
- Gore, C. and Figueiredo, J. (eds.) (1999), Social Exclusion and Anti-poverty Policy: A Debate, IILS/UNDP, Geneva.
- Grawe, N. (2004), "Intergenerational Mobility for Whom? The Experience of High and Low Earnings Sons in International Perspective" in M. Corak (ed.), Generational Income Mobility in North America and Europe, Cambridge University Press, Cambridge.
- Halsey, A.H.; Heath, A.F. and Ridge, J.M. (1980), Origins and Destinations: Family, Class and Education in Modern Britain, Clarendon Press, Oxford.
- Heckman, J.J. and Hotz, V.J. (1986), "An Investigation of the Labour Market Earnings of Panamanian Males Evaluating the Sources of Inequality: An Investigation of the Labour Market Earnings of Panamanian Males Evaluating the Sources of Inequality", *The Journal of Human Resources*, Vol. 21, No. 4, Autumn, pp. 507-42.
- Kabeer, N. (2000), "Social Exclusion, Poverty and Discrimination: Towards an Analytical Framework", *IDS Bulletin*, Vol. 31, No. 4, pp. 83-97.
- Knight, F.H. (1935), "Professor Hayek and the Theory of Investment", *The Economic Journal*, Vol. 45, No. 177, March, pp. 77-94.
- Kumar, S.; Heath, A. and Heath, O. (2002a), "Determinants of Social Mobility in India", *Economic and Political Weekly*, Vol. 37, No. 29, pp. 2983-2987.
- (2002b), "Changing Patterns of Social Mobility: Some Trends over Time", *Economic and Political Weekly*, Vol. 37, No. 40, pp. 4091-96.
- Loury, G.C. (1981), "Intergenerational Transfers and the Distribution of Earnings." *Econometrica*, Vol. 49, No. 4, pp. 843-67.

- Lovering, J. (1998), "Globalisation, Unemployment and 'Social Exclusion' in Europe: Three Perspectives on the Current Policy Debate", *International Planning Studies*, Vol. 3, No. 1, pp. 35-56.
- Mazumder, B. (2001), "Earnings Mobility in the US: A New Look at Intergenerational Inequality", Working Paper No. 34, Centre for Labour Research, University of California, Berkeley, March.
- Mishra, R. (1999), "Beyond the Nation State: Social Policy in an Age of Globalisation" in C. Jones-Finer (ed.), *Transnational Social Policy*, Blackwell, Oxford.
- Parsons, D.O. (1975), "Intergenerational Wealth Transfers and the Educational Decisions of Male Youth", *Quarterly Journal of Economics*, Vol. 89, No. 4, pp. 603-17.
- Riphahn, Regina T. (2001), "Cohort Effects in the Educational Attainment of Second Generation Immigrants in Germany: An Analysis of Census Data", IZA Discussion Papers No. 291, IZA, Bonn.
- Schnepf, S.V. (2002). "A Sorting Hat that Fails? The Transition from Primary to Secondary School in Germany", *Innocenti Working Paper No. 92*, UNICEF Innocenti Research Centre, Florence.
- Solon, G.R. (1992), "Intergenerational Income Mobility in the United States", American Economic Review, Vol. 82, No. 3, pp. 393-408.
- World Bank (2000), World Development Report 2000-2001: Attacking Poverty, World Bank, Washington DC.

Generation	Educational Attribu	lites of D		93	s in ma	la—1995	,	70) 04	
Group	Educational Group	ST	SC	OBC	GEN	ST	<u></u> SC	OBC	CEN
-	Illiterate	50.1	41.0	NA	20.9	60.5	<u>55.2</u>	44.8	<i>GEN</i> 26.8
	Literate below Pr.	8.2	41.0 8.4	NA	6.6	11.2	10.2	44.8 10.5	20.8 9.5
		8.6	8.9	NA	8.4	11.2	10.2	10.5	9.5 12.6
All	Primary Passed Middle Passed	8.0 15.9	8.9 19.6	NA	22.1	9.2	11.3	12.7	12.0
All		8.0	19.0	NA	17.6				
	Secondary Passed			NA		3.7	5.3	7.7	12.5
	Hr. Sec. Passed	6.4 2.9	7.6 3.4	NA	12.2 12.2	2.6	3.3	4.6	8.3
	Grad. and above					2.6	3.4	5.6	14.9
	Illiterate	66.3	71.3	NA	40.2 18.9	60.7	56.0	43.6	25.1
	Literate below Pr.	15.6	13.7	NA		15.5	14.1	16.1	13.4
Demonto	Primary Passed	8.7	8.2	NA	14.1	11.8	11.3	14.6	15.3
Parents	Middle Passed	5.3	3.3	NA	10.6	6.0	8.1	11.2	14.2
	Secondary Passed	2.6	2.0	NA	8.7	2.9	5.5	7.3	14.4
	Hr. Sec. Passed	0.9	0.8	NA	3.0	1.0	2.2	3.1	6.2
	Grad. and above	0.6	0.7	NA	4.5	2.2	2.8	4.1	11.5
	Illiterate	33.7	43.5	NA	17.9	26.3	20.1	14.9	7.8
	Literate below Pr.	12.3	12.7	NA	9.6	13.8	10.5	8.8	6.5
	Primary Passed	14.5	13.9	NA	12.8	17.6	16.2	14.5	10.8
Sons	Middle Passed	17.2	14.0	NA	19.6	20.3	23.4	24.5	19.2
	Secondary Passed	10.6	7.7	NA	16.5	9.6	11.7	14.3	17.4
	Hr. Sec. Passed	8.2	6.0	NA	12.3	6.7	9.5	10.7	15.6
	Grad and above	3.6	2.2	NA	11.3	5.8	8.7	12.3	22.8
	Illiterate	67.3	73.0	NA	42.0	49.9	45.7	37.5	15.8
	Literate below Pr.	8.8	6.9	NA	9.4	11.2	9.4	9.1	7.0
	Primary Passed	8.3	7.8	NA	10.8	10.6	11.8	12.5	11.8
Daughters	Middle Passed	7.9	6.0	NA	12.9	14.3	14.2	17.2	18.5
	Secondary Passed	4.4	2.9	NA	10.0	5.4	7.2	9.5	13.8
	Hr. Sec. Passed	2.3	2.1	NA	6.9	4.2	5.6	6.6	12.2
	Grad and above	1.0	1.3	NA	7.9	4.4	6.0	7.6	20.9
	Illiterate	59.4	50.6	NA	29.6	53.0	45.6	35.8	19.9
	Literate below Pr	9.7	10.7	NA	9.7	12.1	10.9	10.2	8.4
	Primary Passed	10.4	11.5	NA	12.4	11.6	13.2	13.8	12.8
20-40 years	Middle Passed	9.8	12.7	NA	16.7	11.9	14.7	17.6	17.4
-	Secondary Passed	4.9	7.4	NA	13.2	4.7	6.8	9.4	13.9
	Hr. Sec. Passed	4.0	5.0	NA	9.3	3.5	4.6	6.1	10.7
	Grad & and above	1.8	2.2	NA	9.2	3.2	4.4	7.1	17.0
	Illiterate	73.9	76.7	NA	46.2	70.8	67.1	54.6	32.9
	Literate below Pr.	12.6	8.0	NA	10.0	10.4	10.0	11.2	10.5
	Primary Passed	6.9	5.6	NA	11.8	8.0	9.2	11.8	12.5
40+ years	Middle Passed	2.5	6.5	NA	11.0	5.1	6.8	10.1	13.7
. <u>j</u> 2	Secondary Passed	3.2	1.8	NA	9.7	2.3	3.4	5.8	11.0
	Hr. Sec. Passed	0.0	0.6	NA	4.0	1.3	1.5	2.6	5.7
	Grad and above	0.0	0.9	NA	7.2	1.9	2.1	3.7	13.8
~		0.7	0.7	1 1/ 1	1.2	1.7	2.1	5.7	13.0

 Table 1

 Educational Attributes of Different Groups in India—1993-2004 (%)

Generation		aigit NOC) of Different Groups 1993				2004				
Group	Occupational Group	ST	SC	OBC	GEN	ST	SC 20	OBC	GEN	
	Technical	4.3	5.4	NA	4.8	1.1	1.5	1.6	2.6	
	Professionals	1.7	1.8	NA	4.8	1.6	1.7	2.3	6.1	
	Administrative	2.1	1.0	NA	3.8	1.2	1.6	3.0	6.8	
	Clerical	1.4	2.9	NA	5.4	1.3	2.1	2.4	5.0	
	Sales	3.5	6.0	NA	13.1	2.8	4.8	7.9	12.8	
All	Service	1.4	5.0	NA	3.5	1.8	5.7	4.4	3.7	
	Farmers	65.2	48.6	NA	38.8	76.0	57.3	57.2	44.1	
	Production, etc.	11.3	21.0	NA	20.0	7.9	18.0	16.8	14.0	
	Transport	0.9	2.7	NA	3.0	1.2	3.1	2.6	3.3	
	Labourers, nec	8.1	5.7	NA	2.7	5.0	4.1	2.0	1.8	
	Technical	2.2	1.4	NA	1.8	0.5	0.9	0.6	1.5	
	Professionals	0.7	0.5	NA	2.2	0.6	1.1	1.1	3.7	
	Administrative	1.0	0.3	NA	3.0	0.5	2.2	3.3	6.7	
	Clerical	2.0	1.4	NA	2.5	1.1	2.1	1.7	3.3	
Parents	Sales	3.8	2.2	NA	8.4	1.7	4.8	7.6	12.8	
Parents	Service	3.1	0.8	NA	2.7	0.7	4.5	3.7	2.3	
	Farmers	71.6	86.1	NA	67.7	86.3	63.4	67.3	58.4	
	Production, etc.	11.8	4.3	NA	9.5	6.1	15.0	12.1	8.5	
	Transport	1.3	0.4	NA	1.1	0.7	2.6	1.7	1.6	
	Labourers, nec	2.5	2.7	NA	1.1	1.7	3.4	0.8	1.0	
	Technical	3.0	2.2	NA	3.0	1.1	1.8	1.8	2.2	
	Professionals	1.2	0.9	NA	2.5	1.5	2.3	2.4	4.1	
	Administrative	0.8	0.4	NA	2.8	1.4	1.8	3.2	6.4	
	Clerical	1.7	0.8	NA	2.9	1.1	1.7	1.9	3.2	
Sons	Sales	5.2	2.1	NA	11.5	3.1	7.0	11.1	17.3	
Sons	Service	2.4	0.8	NA	2.3	1.8	4.0	3.5	1.9	
	Farmers	64.3	77.3	NA	56.3	70.5	49.7	52.3	44.2	
	Production etc.	14.8	8.5	NA	14.0	10.4	22.0	18.0	14.4	
	Transport	2.0	0.9	NA	2.5	1.9	4.3	3.7	4.0	
	Labourers nec	4.6	6.2	NA	2.2	7.2	5.4	2.2	2.3	
	Technical	5.7	3.3	NA	4.5	1.7	1.5	2.5	2.1	
	Professionals	1.4	0.9	NA	4.2	1.6	2.9	4.3	13.0	
	Administrative	0.2	1.8	NA	1.2	0.2	1.5	1.4	3.6	
	Clerical	0.2	0.2	NA	1.9	0.5	0.5	1.4	3.2	
Daughters	Sales	0.6	1.5	NA	1.5	0.6	2.1	2.3	2.5	
0 ~	Service	3.4	0.9	NA	1.9	1.0	4.0	2.0	1.9	
	Farmers	78.8	85.6	NA	74.0	85.8	74.0	74.3	62.0	
	Production, etc.	7.9	3.7	NA	9.8	4.8	12.1	11.3	10.9	
	Transport	0.1	0.0	NA	0.0	0.0	0.2	0.1	0.3	
	Labourers, nec	1.7	2.2	NA	1.0	3.9	1.0	0.5	0.5	

 Table 2a

 Occupational Attributes (1-digit NOC) of Different Groups in India—1993-2004 (%)

Generation		1993					04		
Group	Occupational Group	ST	SC	OBC	GEN	ST	SC	OBC	GEN
	Technical	4.3	5.4	NA	4.8	1.1	1.5	1.6	2.6
	Professionals	1.7	1.8	NA	4.8	1.6	1.7	2.3	6.1
	Administrative	2.1	1.0	NA	3.8	1.2	1.6	3.0	6.8
	Clerical	1.4	2.9	NA	5.4	1.3	2.1	2.4	5.0
All	Sales	3.5	6.0	NA	13.1	2.8	4.8	7.9	12.8
АП	Service	1.4	5.0	NA	3.5	1.8	5.7	4.4	3.7
	Farmers	65.2	48.6	NA	38.8	76.0	57.3	57.2	44.1
	Production, etc.	11.3	21.0	NA	20.0	7.9	18.0	16.8	14.0
	Transport		2.7	NA	3.0	1.2	3.1	2.6	3.3
	Labourers, nec	8.1	5.7	NA	2.7	5.0	4.1	2.0	1.8
	Technical	2.7	3.4	NA	3.4	1.1	1.5	1.8	2.5
	Professionals	1.0	1.2	NA	3.3	1.8	2.0	2.6	6.0
	Administrative Clerical	1.3	0.7	NA	2.7	1.2	1.5	3.0	6.5
		0.8	2.0	NA	3.8	1.1	1.8	2.0	4.5
20-40 years	Sales	2.1	4.0	NA	9.5	2.9	5.2	8.4	13.8
20 40 years	Service	0.9	3.3	NA	2.5	2.0	5.6	4.2	3.8
	Farmers	78.9	65.3	NA	55.6	73.9	54.0	53.4	40.2
	Production, etc.	6.8	14.3	NA	14.8	8.6	20.1	19.1	16.7
	Transport	0.6	1.9	NA	2.3	1.3	3.6	3.1	3.9
	Labourers, nec	5.0	3.9	NA	2.0	6.0	4.6	2.4	2.2
	Technical	1.8	4.9	NA	3.4	1.1	1.4	1.3	2.9
	Professionals	1.6	0.9	NA	4.1	1.5	1.5	1.9	6.6
	Administrative	0.9	0.3	NA	2.3	1.2	1.7	3.0	7.6
	Clerical	1.3	0.9	NA	3.6	2.0	3.1	3.4	6.5
40+ years	Sales	3.1	4.0	NA	5.7	2.7	4.2	7.1	11.3
tor years	Service	0.2	2.3	NA	1.8	1.5	6.2	4.6	4.0
	Farmers	70.6	47.2	NA	43.4	79.2	61.2	62.0	46.8
	Production, etc.	6.8	7.5	NA	6.0	6.7	15.0	13.4	10.3
	Transport	12.2	30.8	NA	29.1	0.9	2.3	1.9	2.6
C	Labourers, nec	1.4	1.1	NA	0.6	3.2	3.5	1.3	1.3

 Table 2b

 Occupational Attributes (1-digit NOC) of Different Groups in India—1993-2004 (%)

Generation	Occupational Crown		19	93		2003				
Group	Occupational Group	ST	SC	OBC	GEN	ST	SC	OBC	GEN	
	White	9.1	9.6	NA	15.5	4.0	4.8	6.9	15.5	
All	Pink	7.0	16.3	NA	25.2	6.0	12.7	14.6	21.5	
	Blue	83.9	74.1	NA	59.3	90.0	82.5	78.5	63.1	
	White	3.9	2.1	NA	7.0	1.7	4.1	5.1	12.0	
Parents	Pink	8.9	4.3	NA	13.6	3.5	11.4	13.0	18.4	
	Blue	87.2	93.6	NA	79.4	94.8	84.5	81.9	69.6	
	White	5.1	3.5	NA	8.2	4.0	5.9	7.4	12.6	
Sons	Pink	9.2	3.7	NA	16.8	6.1	12.7	16.4	22.4	
	Blue	85.7	92.9	NA	75.0	89.9	81.4	76.2	65.0	
	White	7.4	6.0	NA	9.9	3.5	6.0	8.2	18.7	
Daughters	Pink	4.2	2.6	NA	5.3	2.1	6.7	5.6	7.6	
	Blue	88.5	91.4	NA	84.8	94.5	87.3	86.2	73.7	
	White	4.9	5.3	NA	9.5	4.1	5.0	7.3	14.9	
20-40 years	Pink	3.8	9.3	NA	15.8	6.1	12.6	14.6	22.1	
	Blue	91.3	85.4	NA	74.7	89.8	82.4	78.1	63.0	
	White	4.9	8.8	NA	13.7	3.8	4.5	6.3	17.1	
40+ years	Pink	5.2	10.5	NA	15.5	6.2	13.4	15.1	21.9	
	Blue	89.8	80.7	NA	70.8	90.0	82.0	78.6	61.0	

 Table 3

 Occupational Attributes (Occupational Grade) of Different Groups in India—1993-2004 (%)

Upward Educa	Upward Educational Mobility of Different Generations in India— 1993 (%)									
Social Group	All Age Group			20-4	0 Age Gr	oup	40+ Age Group			
Social Group	Boys	Girls	All	Boys	Girls	All	Boys	Girls	All	
Scheduled Caste	47.5	18.1	35.2	47.9	18.4	35.5	34.2	3.8	24.3	
Scheduled Tribe	54.6	23.3	42.3	54.9	23.6	42.7	40.3	16.1	30.0	
Other Backward Classes										
General/Advanced Class	62.0	35.9	51.3	61.9	36.5	51.5	66.7	17.0	47.6	
Aggregate	59.8	32.7	48.8	59.8	33.3	49.0	62.3	16.2	44.5	

 Table 4

 Upward Educational Mobility of Different Generations in India— 1993 (%)

Table 5

Upward Educ	cational Mobility of Dif	ferent Generations in Ind	dia - 2004 (%)
	All Age Cheung	20.40 A go C mour	40 L A go Chour

Social Group	All Age Groups			20-40 Age Group			40+ Age Group		
	Boys	Girls	All	Boys	Girls	All	Boys	Girls	All
Scheduled Caste	60.6	36.4	51.1	61.4	36.6	51.5	42.3	25.7	39.0
Scheduled Tribe	64.2	37.7	54.0	64.5	38.2	54.2	57.2	13.6	47.7
Other Backward Classes	66.4	41.6	56.3	66.3	42.0	56.2	68.4	31.7	59.2
General/Advanced Class	63.1	50.4	58.0	62.8	50.6	57.8	69.2	45.9	63.1
Aggregate	64.4	43.7	56.1	64.4	44.0	56.1	65.7	35.5	58.2

Source: Author's calculations based on data sources mentioned in the text.

Table 6

Upward Occupational Mobility (NOC1) of Different Generations in India—1993 (%)

Social Group	All Age Group			20-4	0 Age Gr	oup	40+ Age Group		
Social Group	Boys	Girls	All	Boys	Girls	All	Boys	Girls	All
Scheduled Caste	7.0	9.0	7.6	7.0	9.1	7.7	2.5	0.0	1.8
Scheduled Tribe	12.6	16.8	13.5	12.6	16.9	13.4	18.7	18.0	18.5
Other Backward Classes									
General/Advanced Class	13.7	13.2	13.6	13.6	13.2	13.5	19.1	14.8	18.3
Aggregate	12.9	13.1	13.0	12.9	13.1	12.9	18.0	13.8	17.1

Source: Author's calculations based on data sources mentioned in the text.

Table 7

Unward Occupational Mobility	(NOC1) of Different Generations in India-	-2004 (%)
Opwaru Occupational Mobility	(10C1) of Different Generations in India-	-2004 (70)

opward Occupational Mobility (1001) of Different Generations in India 2001 (77)									
Social Group	All Age Group			20-4	0 Age Gr	oup	40+ Age Group		
Social Group	Boys	Girls	All	Boys	Girls	All	Boys	Girls	All
Scheduled Caste	16.6	8.7	9.7	10.1	8.8	9.7	14.3	2.3	11.2
Scheduled Tribe	20.8	18.0	15.7	14.9	18.1	15.5	29.1	12.9	25.9
Other Backward Classes	18.1	12.6	14.7	15.2	12.8	14.7	18.1	3.4	15.3
General/Advanced Class	20.9	20.4	17.4	16.7	20.6	17.4	20.0	11.3	18.7
Aggregate	19.3	15.1	15.3	15.2	15.3	15.2	19.9	7.1	17.6

Upward Occupatio	nal Mol	oility (O	<u>cc Gr) (</u>	of Differ	ent Gene	erations	<u>in India</u>	<u>- 1993 (</u>	%)
Social Group	All Age Group			20-4	0 Age Gr	oup	40+ Age Group		
Social Group	Boys	Girls	All	Boys	Girls	All	Boys	Girls	All
Scheduled Caste	5.0	6.4	5.4	5.1	6.5	5.5	2.5	0.0	1.8
Scheduled Tribe	8.0	8.7	8.1	7.9	8.7	8.1	17.1	7.5	14.4
Other Backward Classes									
General/Advanced Class	10.7	9.2	10.5	10.6	9.2	10.3	18.0	12.3	16.9
Aggregate	9.8	8.7	9.6	9.7	8.7	9.5	16.9	10.3	15.6

 Table 8

 Upward Occupational Mobility (Occ Gr) of Different Generations in India - 1993 (%)

Table	9
-------	---

Upward Occupational Mobility (Occ Gr) of Different Generations in India - 2004 (%)									
Social Group	All Age Group			20-40 Age Group			40+ Age Group		
	Boys	Girls	All	Boys	Girls	All	Boys	Girls	All
Scheduled Caste	7.7	4.5	6.8	7.6	4.6	6.8	14.0	2.3	11.0
Scheduled Tribe	10.2	7.2	9.7	10.0	7.1	9.4	27.7	11.7	24.5
Other Backward Classes	12.1	8.3	11.3	12.0	8.5	11.3	15.7	3.4	13.4
General/Advanced Class	13.5	15.6	13.9	13.4	15.9	13.8	16.7	5.8	15.0

11.7

9.7

11.3

17.3

5.1

15.1

Source: Author's calculations based on data sources mentioned in the text.

11.4

9.6

11.9

Aggregate

	1993				utionur	, in the second s	2004			
States	ST	SC	OBC	GEN	All	ST	SC	OBC	GEN	All
Andhra Pradesh	25.4	41.8		46.2	44.3	25.7	58.4	52.8	59.0	54.5
Bihar	26.9	24.5		37.1	34.3	68.1	34.9	42.9	43.2	41.5
Gujarat	40.1	60.2		56.2	54.2	59.1	54.6	58.6	62.6	59.8
Haryana	77.9	52.8		52.6	52.8	18.0	62.1	61.2	58.3	59.9
Himachal Pradesh	30.7	59.4		60.7	59.2	74.3	79.3	76.6	73.7	75.7
Karnataka	43.3	36.2		47.6	45.8	54.9	57.4	58.6	61.7	59.3
Kerala	89.1	74.7		77.8	77.7	80.0	83.7	81.2	81.4	81.5
Madhya Pradesh	23.2	35.9		44.7	38.9	40.3	45.4	56.4	46.1	49.5
Maharashtra	43.7	54.5		60.1	58.3	50.5	65.4	66.4	65.9	65.0
Punjab	73.2	40.8		57.0	53.3	55.9	62.4	68.8	65.8	65.4
Rajasthan	28.4	26.8		38.7	35.9	39.5	46.7	46.2	45.5	45.2
Tamil Nadu	49.2	53.1		60.6	59.1	82.5	67.9	70.2	57.6	69.3
Uttar Pradesh	43.7	31.7		43.6	41.4	57.4	43.4	45.4	49.5	46.2
West Bengal	34.7	48.3		49.0	48.2	50.3	53.2	57.2	54.7	54.4
Delhi	-	-		-	0.0	66.5	47.3	51.7	48.3	48.6
Orissa	27.2	39.9		55.8	48.1	42.6	58.6	65.8	63.7	60.6
Chhattisgarh	-	-		-	-	48.4	59.7	56.8	53.7	54.4
Jharkhand	-	-		-	-	51.0	47.3	49.7	50.9	49.9
Uttaranchal	-	-		-	-	65.1	65.0	54.6	59.2	59.7
Arunachal	55.0	50.0		37.1	41.7	65.5	100.0	1.6	51.3	61.6
Assam	59.6	65.8		66.7	65.8	77.0	63.1	73.8	68.3	70.7
Goa	0.0	78.4		85.4	84.6	20.0	86.9	86.8	76.4	75.6
Jammu & Kashmir	26.8	54.5		60.1	58.6	66.2	63.5	45.8	51.9	52.1
Manipur	67.6	100.0		70.5	69.7	69.9	89.7	62.3	67.8	66.1
Meghalaya	63.0	58.1		36.5	59.2	65.1	79.3	77.8	55.0	64.9
Mizoram	61.3	50.0		16.4	58.7	68.9	60.7	87.1	0.0	68.8
Nagaland	61.4	0.0		50.4	60.4	67.8	-	57.9	72.5	67.8
Sikkim	10.4	100.0		59.1	59.1	79.8	74.6	78.6	76.3	78.8
Tripura	57.7	63.0		62.7	62.1	76.8	70.6	77.0	74.8	74.7
Andaman & Nicobar	78.9	77.2		74.4	75.7	0.0	0.0	0.0	0.0	75.6
Chandigarh	-	82.5		68.3	71.0	-	55.6	42.0	38.2	43.5
Dadra & NH	36.4	82.3		33.9	41.9	80.6	1.9	89.3	73.1	75.9
Daman & Diu	60.6	-		84.4	82.7	92.1	11.1	46.3	-	76.6
Lakshadweep	63.9	50.0		100.0	62.8	62.7	-	-	-	62.7
Pondicherry	-	71.4		65.9	66.3	-	78.2	72.8	42.1	71.4

Table 10Regional Patterns of Upward Educational Mobility

	1993				2004					
States	ST	SC	OBC	GEN	All	ST	SC	OBC	GEN	All
Andhra Pradesh	7.6	14.7		11.6	11.6	6.7	12.7	13.5	14.3	13.2
Bihar	7.9	10.8		12.3	11.6	12.1	11.7	13.5	13.0	13.1
Gujarat	8.3	17.8		9.0	9.7	14.6	8.4	10.0	12.9	11.5
Haryana	-	16.5		12.4	13.0	13.1	21.0	19.0	10.6	15.2
Himachal Pradesh	15.9	25.2		12.5	15.1	29.3	19.3	26.3	21.7	22.0
Karnataka	18.7	5.7		12.2	11.6	7.5	19.8	12.1	15.5	14.3
Kerala	8.9	18.7		24.8	24.3	54.1	25.2	24.9	37.9	29.2
Madhya Pradesh	3.2	9.5		8.1	7.0	5.1	13.3	11.3	11.2	10.2
Maharashtra	5.5	21.7		14.5	14.1	9.2	16.6	12.6	17.4	15.0
Punjab	22.4	16.5		14.7	15.2	14.4	20.9	23.7	15.5	18.7
Rajasthan	7.0	11.1		11.2	10.5	11.0	10.1	11.4	23.8	13.2
Tamil Nadu	5.6	10.3		18.2	16.6	1.5	17.8	17.7	28.0	18.0
Uttar Pradesh	11.0	13.7		12.4	12.6	12.4	15.1	14.9	17.3	15.5
West Bengal	17.4	14.2		19.5	17.9	7.0	18.5	27.6	21.0	20.3
Delhi	-	4.4		19.3	18.1	0.0	6.7	39.9	18.1	17.1
Orissa	9.2	15.6		13.5	12.7	7.3	17.0	17.9	18.5	15.9
Chhattisgarh	-	-		-	-	6.5	16.4	12.1	12.1	10.8
Jharkhand	-	-		-	-	12.6	14.8	21.3	22.5	18.5
Uttaranchal	-	-		-	-	13.9	11.6	15.6	19.2	17.1
Arunachal	6.6	0.0		0.6	2.6	14.2	0.0	0.0	5.1	12.2
Assam	13.9	24.0		21.2	20.6	12.0	15.7	8.0	14.5	12.8
Goa	0.0	2.6		27.7	24.3	-	-	0.0	41.3	40.3
Jammu & Kashmir	0.0	30.7		20.0	22.2	16.7	21.6	19.2	20.3	20.2
Manipur	12.6	0.0		28.7	22.7	9.7	0.0	26.2	13.0	17.1
Meghalaya	11.1	26.5		5.0	10.6	11.3	0.0	0.4	29.0	11.6
Mizoram	10.3	0.0		0.0	9.6	8.7	25.8	0.0	0.0	8.7
Nagaland	18.0	-		48.0	18.8	19.0	-	16.8	25.3	19.1
Sikkim	0.0	100.0		13.5	15.1	8.4	17.9	13.7	0.0	10.7
Tripura	13.6	13.3		18.2	16.6	13.4	21.2	25.0	14.4	18.7
Andaman & Nicobar	28.0	50.0		36.0	33.3	0.0	0.0	0.0	0.0	37.8
Chandigarh	-	1.0		29.1	22.4	-	79.9	13.7	28.0	37.1
Dadra & NH	4.0	13.3		18.1	4.7	28.4	48.1	0.0	16.1	27.1
Daman & Diu	0.0	-		31.9	29.0	0.0	33.3	3.6	47.7	30.2
Lakshadweep	61.6	-		0.0	60.7	14.6	-	-	-	14.6
Pondicherry	-	0.0		21.9	21.4	-	12.3	23.5	46.2	23.3

Table 11Regional Patterns of Upward Occupational Mobility (1-digit NOC)

Kegional	1993				2004					
States	ST	SC	0BC	GEN	All	ST	SC	2004 OBC	GEN	All
Andhra Pradesh	5.5	7.4	OBC		7.8	5.7	6.7			
Bihar	5.5 5.2	7.4 7.8		8.1 10.5	7.8 9.5	12.1	0.7 9.3	11.5 10.9	11.0 12.6	10.2 10.8
Gujarat	6.3	7.8 11.9		10.5 6.9	9.3 7.2	8.2	9.3 3.5	10.9 7.9	12.0	8.3
Gujarat Haryana	0.5	5.5		0.9 11.2	10.4	8.2 13.1	5.5 13.3	11.0	9.2	8.5 10.6
Haryana Himachal Pradesh	- 4.7	5.5 10.4		7.8	8.2	15.1	5.3	11.0 19.0	9.2 12.4	10.6 11.6
Karnataka Karala	17.0	4.2		9.3	9.0	7.1	13.5	9.0	11.1	10.4
Kerala	8.9	14.1		20.5	20.0	54.1	17.0	21.6	33.9	25.3
Madhya Pradesh	2.6	4.8		5.3	4.5	3.0	8.4	7.4	9.7	7.0
Maharashtra	4.1	12.4		10.5	10.0	6.8	10.1	9.4	12.6	10.7
Punjab	5.2	8.8		11.6	10.8	14.4	10.6	19.0	12.3	13.2
Rajasthan	4.9	3.9		6.7	6.1	8.8	5.6	9.0	19.4	10.1
Tamil Nadu	5.6	8.0		13.7	12.6	1.5	12.9	13.3	17.0	13.3
Uttar Pradesh	11.0	6.5		9.8	9.2	5.4	6.4	11.1	15.9	11.2
West Bengal	5.3	10.9		16.2	14.1	4.7	16.1	22.6	16.0	16.1
Delhi	-	4.4		15.2	14.3	0.0	3.1	18.0	6.4	6.5
Orissa	6.4	12.0		10.6	9.7	4.7	13.5	15.6	14.9	13.0
Chhattisgarh	-	-		-	-	3.7	9.0	9.8	10.8	7.8
Jharkhand	-	-		-	-	6.8	8.4	15.3	13.8	12.1
Uttaranchal	-	-		-	-	13.9	4.3	11.8	16.2	13.3
Arunachal	6.6	0.0		0.6	2.6	11.0	0.0	0.0	2.7	9.3
Assam	12.2	21.3		19.5	18.9	11.6	15.7	7.3	12.5	11.6
Goa	0.0	0.0		16.5	14.2	-	-	0.0	37.0	36.1
Jammu & Kashmir	0.0	21.4		16.3	17.3	16.7	12.0	14.1	17.9	16.6
Manipur	11.4	0.0		26.5	20.9	8.0	0.0	18.4	11.1	12.6
Meghalaya	7.8	26.5		3.3	7.4	7.7	0.0	0.4	5.0	7.3
Mizoram	7.3	0.0		0.0	6.7	7.1	25.8	0.0	0.0	7.1
Nagaland	15.7	-		0.0	15.3	14.7	-	0.0	21.7	14.5
Sikkim	0.0	44.7		10.8	11.3	7.6	17.9	12.4	0.0	9.8
Tripura	9.8	10.6		16.2	14.3	9.7	14.3	23.7	11.7	14.9
Andaman & Nicobar	25.7	50.0		27.2	27.3	0.0	0.0	0.0	0.0	18.5
Chandigarh	-	1.0		6.8	5.4	-	52.1	2.2	19.8	23.8
Dadra & NH	3.9	13.3		18.1	4.6	28.4	0.0	0.0	13.9	25.0
Daman & Diu	0.0	-		31.9	29.0	0.0	33.3	3.6	47.7	30.2
Lakshadweep	42.1	-		0.0	41.4	11.9	-	-	-	11.9
Pondicherry	-	0.0		13.0	12.7	-	12.3	20.6	46.2	20.9

Table 12 **Regional Patterns of Upward Occupational Mobility (Occupational Grades)**

Regio	Regional Patterns of Upward Mobility—2004							
Educational Mobility	Occupational Mobility							
	High Low							
High	Kerala, Himachal Pradesh, Punjab, Karnataka, Orissa, Uttaranchal, Tripura	Sikkim, Assam, Maharashtra, Gujarat, Haryana, Karnataka						
Low	Jharkhand, West Bengal, Jammu & Kashmir	Bihar, Rajasthan, Madhya Pradesh, Uttar Pradesh, Chhattisgarh, Andhra Pradesh						

Table 13

Gap between Educational Mobility of	Gap between Occupational Mobility of Advanced and Excluded Groups						
Advanced and Excluded Groups	High	Low					
High	Andhra Pradesh, Orissa, Maharashtra, Madhya Pradesh, West Bengal, Jharkhand	Haryana, Sikkim					
Low	Tamil Nadu, Delhi						

 Table 14

 Disparity between Upward Mobility of Advanced and Excluded Classes—2004