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MIGRATION AND URBAN POVERTY IN INDIA
SOME PRELIMINARY OBSERVATIONS

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ABSTRACT

Decision to Migrate is mostly a choice - except in compelling circumstances of conflict and insecurity - and therefore needs to be examined in terms of its economic outcomes. This paper deals with migration decisions to urban areas that are backed by economic rationale and attempts to understand gains accruing to individuals from migration, in terms of poverty outcomes. The analysis is based on the 55th round survey data on Employment - Unemployment Survey 1999-2000 (EUS) provided by the National Sample Survey Organisation. We undertake a broad descriptive socio-economic profiling of the migrant households in urban India and explore the dynamics of poverty among interstate as well as intrastate migrants to urban destinations. Further, we evaluate the impact of migration on the economic status of migrants by analysing the characteristic of 'duration since migration'. Considering migration as a transition, this exercise makes a broad comparison of change in economic status of migrants at the destination as against the origin. The analysis reveals that migrants disadvantaged in terms of caste, education and residence earn poorer returns to migration. While returns to migration have proved to be positive with increased duration at the destination, the characteristic endowment like education and social group identity seem to make a further difference.

Keywords: Migration, Urban Poverty, India

JEL Classification: R2, I32, R23

1. Introduction

In developing countries, migration towards urban centres is perceived as an income generating activity and continues to be an economically rational choice for rural individuals as it helps (households) to diversify income risk and obtain liquidity in the face of factor, credit and insurance market failures. Following the neoclassical approach, decision to migrate can be comprehended by examining the (discounted) net expected gains from migration. This approach compares the benefits of residing at the place of origin with the expected benefits of migrating to a particular destination. It is plausible that despite low expected benefits at the destination an individual could still be better off by migrating since his expected benefits at origin are even lower. However, in the absence of adequate employment opportunities, excess labour supply (in the form of migration) to urban areas would contribute to expansion of informal sector and can intensify socio-economic vulnerabilities. It is against this backdrop that we attempt to make a careful assessment of poverty outcomes among migrants to urban India with respect to their socioeconomic background. Particularly our intent

is to identify the conditions under which migration proves advantageous and improves the economic status of migrants. Given the data and information constraints, we present some preliminary evidence on the migration poverty nexus in urban India and contrast this information with developmental status across regions. The rest of the discussion is organised as follows: Section 2 discusses the data and methods used in the analysis. Section 3 analyses the contribution of intrastate and interstate migration towards urban poverty and discusses the phenomenon in the context of the development status of the states. In addition, the relative disadvantages inherent in the characteristics of the migrants are also discussed. Further, in Section 4, Cox regression has been applied to understand the impact of the duration of migration on urban poverty levels amongst different groups of migrants. Section 5 draws the broad conclusions.

2. Data and Methods

This paper uses unit level records of the National Sample Survey Organisation's (NSSO), 'Employment and Unemployment Survey (EUS)' conducted during 1999-2000 (55^{th} round). This survey provides information on migration along with other household and individual items of information on demographic, consumption and activity status. Information particulars regarding last usual place of residence, usual activity at the time of migration, period of migration, and reasons for migration were also collected for individuals whose last usual place of residence was different from the current one. However, the analysis presented here is restricted to 15 major states of India accounting for interstate and intrastate migration to urban destinations only. To determine the poverty status of an individual we compare the monthly per capita expenditure against the official poverty line provided by the Planning Commission of India for the year 1999-2000. A total of

2,12,987 (weighted) cases that constitute 0.2 percent of the total migrants in the population have been dropped from the analysis due to data inconsistencies. These are cases of either intrastate migrant according to last location status residing in different states or interstate migrants according to the last location and residing in the same states after the migration.

It must be noted that the results presented here are based on the analysis of only those individuals who have migrated to urban areas with an *economic motive*. The definition of economic motive considers those individuals who have migrated due to at least one of the following reasons (as reported in the data):

- In search of employment
- In search of better employment
- To take up employment/better employment
- Transfer of service/contract
- Proximity to place of work
- Migration of parent/earning member of the family

Such selection is made because the present analysis is concerned with migration decision as an economically rational choice and therefore migration due to other reasons (including marriage or education) is excluded to avoid distortion in the analysis.

The EUS data has been used to obtain disaggregated estimates of incidence of poverty among migrants according to specific characteristics. An Index of Relative Deprivation (RDI) is computed to comprehend deprivation of certain groups of migrants residing in urban India. The RDI is calculated by the following method;

$$RDI = \frac{\left(C_i - S_i\right)}{\left(C_i max - S_i\right)} \quad \ldots (1)$$

where i = 1….n.; C_i max = S_i / AD if S_i < AD and C_i max = 1 if S_i > AD; Where, AD = $\Sigma S_i * DC_i$

Here, DC_i is the i^{th} group specific poverty incidence and C_i is the share of i^{th} group in total poor migrants. S_i is the share of i^{th} group of migrant in total migrant population. $C_i$max is the maximum contribution that i^{th} group can make; AD is the average incidence. RDI finds an easy and interesting interpretation in the sense that *a group is said to be relatively disadvantaged whenever RDI value is positive and is recognized relatively advantaged whenever RDI value is negative*. A ranking of i number of groups in ascending order of the obtained values of RDI will place the least disadvantaged (most advantaged) group at the top of the index and the most disadvantaged (least advantaged) at the bottom of the index. For further elaboration of Relative Deprivation Index (RDI) methodology, see Jayraj & Subramanian (2002) and Venkatanarayana (2005).

Furthermore, we employ a simple technique to comprehend the net gain or loss in the economic status accruing from migration from a specific origin state to a specific destination state in terms of Monthly Per Capita Expenditure (MPCE). The net gain or loss is understood by tracing the variations in the probability of non-migrant and migrant populations to fall in certain MPCE quintiles at the places of origin and the destinations. These probabilities are calculated in terms of the percentage distribution of population in various MPCE quintiles. For example, for a resident in a state A, if the probability of belonging to the upper MPCE quintiles is lower than the probability of belonging to upper MPCE quintiles if migrated to state B, then migration from A to B

is regarded as beneficial. This approach may be used for all the 15 major states to trace the better destination for migrants. However, in this paper we have used this approach to understand migration to the three most favoured states (Maharashtra, Gujarat and Harayana) from two top migrant sending states (Uttar Pradesh and Bihar). For analytical purposes, the population has been grouped into literate/illiterate, SCST/other caste and rural/urban. Finally, the Proportional Hazards Model has been employed to understand the impact of the duration of migration upon the poverty status of migrants.(see, Cox 1972).

3. Distribution of Migrants and Poverty Incidence

As a prelude to the ensuing sub-sections, we outline the state-wise distribution of migrants and the incidence of poverty among them. During 1999-2000, migrants accounted for 26 percent of the total urban poverty (see Table 1). Inter-state migrants to urban destinations account for about 24 percent of the total inter-state migrants. This presents a wide variation with states like Haryana, Punjab and Maharashtra accommodating a disproportionate share of interstate migrants in urban areas. This could be due to greater strength of cities and urban centres having prospect of employment in these states. While in other states interstate migrants are found largely in rural areas. Migrants contribute to intensification of urban poverty, as which is evident from the results presented in Table 1. This scenario is more or less the same across states and varies between 25–35 per cent excepting in Haryana where it is more than 41 per cent. However, poverty among urban migrants when evaluated by the characteristics of inter-state and intra-state migrants, does reveal an advantage for inter-state migrants vis-à-vis the intra-state ones. This is, however, not systematic across all the states, especially for the under-developed state of Orissa where inter-state migrant does not fare better in comparison with the intra-state migrantss.

Table 1: Poverty status (below poverty line (BPL) headcount ratio) of migrants at destination by Indian states, Urban Areas

Destination States	Interstate/ Total Migration	BPL Migrant / BPL Urban	Interstate HCR	Intrastate HCR
(i)	(ii)	(iii)	(iv)	(v)
Andhra Pradesh	8	28	24	23
Assam	12	11	4	9
Bihar	6	17	1	14
Gujarat	28	23	12	4
Harayana	58	41	19	18
Karnataka	23	23	18	18
Kerala	15	26	7	15
Madhya Pradesh	26	24	27	32
Maharashtra	38	31	18	24
Orissa	12	25	25	21
Punjab	60	33	16	5
Rajasthan	17	26	14	21
Tamil Nadu	10	26	17	25
Uttar Pradesh	16	24	9	19
West Bengal	27	29	8	17
All India*	24	26	16	20

Source: Estimated by authors using unit level NSSO (EUS 1999-00)

Note: Col. (ii) reports the percentage of interstate migrants out of total migrants to urban areas. Col. (iii) gives the contribution of migrants in total urban poverty in the states. Col. (iv). Col. (v) provide HCR of poverty among inter and intra state migrants.

* All India refers to the selected major states only.

3.1. Inter-state Migration

Based on the understanding that inter-state migrant have an advantage over intra-state migrants, this sub-section focuses upon the distribution of inter-state migrants in the sending and the receiving states. With regard to inter-state migrants, the state of Bihar and Uttar Pradesh send out about forty six per cent of the inter-state migrants and the state of Maharashtra receives more than one third of such migrants (see Table 2). The prominent sender and recipient states are in keeping with their development status; under developed states are senders and the developed ones are recipients. An examination of these inter-state migrants by some fundamental characteristics, reveals a distinct pattern between sender and recipient states. The under-developed states send more migrants of rural origin and receive less from rural origin. On the contrary the developed states send migrants of urban origin and receive from rural origin. Such regional patterns among sender states are no surprise since rural areas of these regions are marked with higher incidence of poverty, illiteracy and poor employment opportunities (Deaton and Dreze, 2002). These states are also known for feeble agricultural performance during the decades of 1980s and the 1990s (see Appendix I). In addition, higher rates of population growth in these regions have exerted severe pressures on land. Moreover public programmes for poverty eradication and employment generation in these regions have failed to address these problems. Collectively, these issues have as push factors for people as they hardly leave any other choice but to migrate and search for better employment opportunities elsewhere.

Besides residence characteristics, an evaluation of literacy attribute between the migrants sent and received across states reflect that the underdeveloped states send illiterate migrants and receive less of them. For some of the states like Haryana, Kerala, Maharashtra and Uttar pradesh, literacy divide does not exist between migrants received and

those who are sent out. But other states feature a pattern that is in keeping with their state of development, with the developed ones receiving more of illiterates compared to the developing ones. However, it is interesting to note that the observed literacy profile of migrants is better than that of the general literacy levels in the respective states. Another interesting aspect to be noticed is the fact that almost half the number of these interstate migrants is sent by Uttar Pradesh (28 percent) and Bihar (18 percent). This large number is expected; partly due to their large population size and partly because of growing network effects of the residents of these states in the richer destination states. Table 2 also provides information regarding destination choices of interstate migrants where it can be noted that these migrants prefer developed states as their destinations. Maharashtra receives around 35 percent of the interstate migrants. Other high income states like Punjab, Haryana and Gujarat (each receiving 8 percent migrants) are the other favoured destinations, preferred largely by migrants originating from rural areas. It appears that the development status of these states by itself acts as a pull factor for these migrants.Percentage of Scheduled Caste and Scheduled Tribes (SC-ST) among sent migrants across states shows a wide variation as it depends on the SC-ST composition of the population in respective states.

3.2. Poverty among Inter-state Migrants

Altogether, around 25 percent of the interstate migrants to less developed states end up in poverty; yet, these states continue to receive migrants mainly due to social networking and proximity to the place of origin of the migrants. For instance, in the state of Orissa a significant proportion of migrants come from the neighbouring state of Andhra Pradesh. The condition of migrants arriving at higher income states is marginally better though, around 15-20 percent of them too end up in poverty. Another interesting point is to note that the incidence of poverty among migrants from rural areas is higher in comparison to the migrants

Table 2: Interstate Migrants to Urban Areas According to Residence Literacy and Caste Categories, (in Percent)

States	Share in Total Migration		Percentage Rural		Percentage Illiterate		Percentage SC-ST	
(i)	(ii) Sending	(iii) Receiving	(iv) Sending	(v) Receiving	(vi) Sending	(vii) Receiving	(viii) Sending	(ix) Receiving
Andhra Pradesh	5	4	55	49	27	31	17	9
Assam	1	0	38	63	40	25	5	23
Bihar	18	1	87	39	34	25	21	5
Gujarat	4	8	41	65	11	26	5	10
Harayana	2	8	54	58	29	27	24	20
Karnataka	6	6	55	46	28	21	9	14
Kerala	5	2	41	35	5	5	2	4
Madhya Pradesh	4	6	51	47	18	20	19	21
Maharashtra	5	35	29	73	21	20	17	8
Orissa	2	1	63	75	23	23	19	32
Punjab	2	8	32	76	28	33	5	33
Rajasthan	9	3	63	43	19	23	17	14
Tamil Nadu	6	4	55	34	21	11	15	3
Uttar Pradesh	28	8	83	49	25	27	12	18
West Bengal	3	7	34	71	16	25	6	18
Total	100	100	65	62	24	23	14	14

Source: Estimated by authors using unit level NSSO (EUS 1999-00)

Note: Col. (ii) & Col. (iii) report the share of respective states in sending and receiving total interstate migrants to urban areas. Col. (iv) & Col. (v) give the percentages of interstate migrants from rural areas to the respective states as senders and receivers. Col. (vi) & Col. (vii) depict the percentages of interstate illiterate migrants for the respective states as senders and receivers. Similarly Col. (viii) & Col. (ix) depict the proportions of SC-ST migrants sent and received by the respective states.

from urban areas. This might be because of rural population disadvantages in terms of their educational status and to some extent could be due to poor social networking and information asymmetry regarding the choice of destination and employment opportunities. The poverty among rural origin migrants is higher in the states of Madhya Pradesh (44 percent), Andhra Pradesh (35 percent), Orissa (33 percent) and Haryana (27 percent) (see Table 3). These labourers mainly migrate from rural areas without adequate skills and it is likely that they get employed in low paid informal sector jobs. In the states of Bihar, Assam and Kerala the instances of migrants from rural origin falling below poverty line was the lowest. The destinations of Bihar and Assam are not preferred for migration due to lack of economic opportunities and those who migrate to these states are perhaps less vulnerable to poverty as they could be the skilled workforce in demand for the rural labour market in these states. Further states of Bihar and Assam receive near zero share of migrants form rural origin (See Table 2). In Kerala, poverty among rural origin migrants is low because of the prevalence of higher wages for unskilled labourers in Kerala vis-à-vis other states and should be viewed as a favourable state for such migration.

In case of migrants of urban origin, the proportions of poor were relatively lower as these migrants are expected to have better education and skills. Nonetheless, a higher poverty among migrants with urban origin was found in Madhya Pradesh (12 percent) and three major south Indian states of Karnataka (18 percent), Andhra Pradesh (13 percent) and Tamil Nadu (13 percent). One of the possible reasons for higher prevalence of poverty among these states could be attributed to very low levels of secondary sector employment-generation in these regions during the post-economic reforms period (See Appendix II). Also, poverty among illiterate migrants was significantly higher in proportion than that among literate migrants. The SC-ST migrants were at a greater risk of falling into poverty in most states. For example, in Andhra Pradesh, Madhya Pradesh, Haryana and Karnataka, the incidence of poverty among SC-ST migrants was over 40 percent. In comparison, migrants belonging to other social groups

Table 3: Poverty (below poverty line headcount ratio) among Interstate Migrants at Destination according to residence, literacy and caste characteristics

Destination States	BPL among migrants		BPL among migrants		BPL among migrants	
	Rural origin	Urban origin	Illiterate	Literate	SC-ST	Others
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
Andhra Pradesh	35	13	46	14	60	20
Assam	6	0	2	4	7	3
Bihar	0	2	0	1	0	1
Gujarat	18	3	23	8	6	13
Harayana	27	7	52	6	44	13
Karnataka	19	18	33	15	40	15
Kerala	8	6	22	6	28	6
Madhya Pradesh	44	12	62	18	58	18
Maharashtra	22	7	37	13	28	17
Orissa	33	0	34	22	27	24
Punjab	19	8	29	10	14	17
Rajasthan	25	5	31	9	33	11
Tamil Nadu	26	13	26	16	25	17
Uttar Pradesh	14	5	18	6	14	8
West Bengal	10	3	20	4	28	3
Total	22	8	34	11	29	14

Source: Estimated by authors using unit level NSSO (EUS 1999-00)

were at a lower risk of poverty with the maximum number of BPL migrants found in Orissa (24 percent). This is better explained in terms of poor educational achievements of these communities, which restrict their moving up the economic ladder; however, other possibilities including labour market conditions can also influence such outcomes.

3.3. Intra-state Migration

Intrastate migrants as a percentage of total urban population were observed to be the highest in the states of Andhra Pradesh (20 percent) and Maharashtra (16 percent). For the rest of the states intrastate migrants to urban areas were less than 15 percent of their urban population. For the least developed states lower internal mobility could be due to the equal spread in deprivation of economic opportunities. This is evident from a higher rate of interstate migration from these states. For instance, people in the states like Bihar and Uttar Pradesh appear to prefer inter-state mobility to intra-state one. Across Indian states, intrastate mobility from rural areas to urban centres account for 50 to 70 percent, whereas urban to urban movement accounts for 30 to 50 percent of total intra-state mobility. Rural to urban mobility is greater in states characterised by agricultural backwardness and higher incidence of rural poverty. Urban to urban movements is higher in states like Gujarat, Maharashtra. This could be associated with better performance of the secondary and tertiary sectors of these states (see Appendix I). The literacy level among intrastate migrants are better than average literacy levels of the respective states of origin and indicates that individuals begin to search for better economic opportunities when they possess better capabilities (here education). The share of SC-ST among the intra-state migrants is not very different form that of Inter-state migrants except that it is in keeping with the share of SC-ST within the native population of respective states.

Table 4: Intrastate Migration across Major States

States	% Urban Population	% Rural	% Illiterate	% SC-ST
(i)	(ii)	(iii)	(iv)	(v)
Andhra Pradesh	20	66	28	15
Assam	6	65	19	10
Bihar	8	65	22	17
Gujarat	14	54	14	14
Harayana	10	67	35	16
Karnataka	13	47	13	11
Kerala	11	62	8	10
Madhya Pradesh	9	51	24	28
Maharashtra	16	56	18	23
Orissa	15	71	13	18
Punjab	7	48	16	25
Rajasthan	15	61	28	22
Tamil Nadu	15	51	16	11
Uttar Pradesh	12	69	27	14
West Bengal	11	53	25	27
Total	13	59	21	17

Source: Estimated by authors using unit level NSSO (EUS 1999-00)

Note: Col. (ii) reports the intrastate migration to urban areas as a percentage of state's population. Col. (iii) gives the percentage of intrastate urban migrants from rural areas for the respective states. Col. (iv) & Col. (v) depicts percentage of intrastate migrants being illiterate and belonging to SC or ST communities.

3.4. Poverty among Intra-state Migrants

Around 20 percent of the total intrastate migrants to urban areas were below poverty line (Table 5). In the case of intrastate migrants from

rural areas, the incidence of poverty was found to be higher than among those originating from urban areas (with the exception of Punjab). In total, 26 percent of the rural origin migrants were living below the poverty line compared to 12 percent of the urban origin migrants. Poverty among the migrants of rural origin was the maximum in Madhya Pradesh (48 percent), Maharashtra (30 percent) and Andhra Pradesh (29 percent). With the exception of Punjab, Gujarat and Assam the incidence of poverty among intrastate migrants from rural areas was ranging between 20 to 30 percent. Poverty was experienced by lesser number of migrants originating from urban areas with the maximum in the case of Orissa (20 percent). Higher incidence of poverty was reported in case of illiterate migrants. Altogether, 41 percent of the illiterate migrants experience poverty compared to 15 percent of the literates. Except for Punjab and Gujarat, the poverty head count ratio of the illiterate urban migrants ranged between 20 to 60 percent. It appears that the illiteracy factor has cut across the development status of the states and is found to be the major factor determining poverty status. Significant poverty differentials were observed across social groupings as well.(31 percent of the SC/ST migrants were poor, compared to 18 percent poverty among non SC/ST migrants). Poverty among SC/ST migrants was higher in Haryana (57 percent), Tamil Nadu (47 percent) and Madhya Pradesh (40 percent). For the non-SC/ST category, the poverty incidence was generally less than 20 percent with the exception of Madhya Pradesh, which reports 29 percent poverty among the non-SC/ST sections.

3.5. Relative Disadvantages of Migrants

So far the paper has broadly discussed the poverty scenario among migrants with different correlates. In this section we specifically attempt to highlight the degree of relative disadvantage faced by the various groups of migrants through an 'Index of Relative Disadvantage' (RDI).

Table 5: Poverty (below poverty line headcount ratio) among Intra-state Migrants at Destination

States	BPL among migrants		BPL among migrants		BPL among migrants	
	Rural	Urban	Illiterate	Literate	SC-ST	Others
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
Andhra Pradesh	29	12	43	15	35	21
Assam	11	4	23	6	17	8
Bihar	20	4	38	8	1	17
Gujarat	6	3	15	3	21	2
Harayana	22	8	30	11	57	10
Karnataka	26	10	41	14	29	16
Kerala	18	10	25	14	26	14
Madhya Pradesh	48	161	61	23	40	29
Maharashtra	30	17	49	19	35	21
Orissa	22	20	45	18	22	21
Punjab	3	7	8	5	11	3
Rajasthan	28	9	38	14	28	18
Tamil Nadu	33	17	42	22	47	23
Uttar Pradesh	22	11	35	12	18	19
West Bengal	25	8	44	8	37	9
Total	26	12	41	15	31	18

Source: Estimated by authors using unit level NSSO (EUS 1999-00)

In order to compute the index of relative disadvantage for the disadvantaged subgroup among the interstate and intrastate migrants, a binary classification of the population has been done according to the following criteria: first; by place of origin of the migrants ('Rural' and 'Urban'), second; by education ('Illiterate' and 'Literate'), and thirdly; by caste ('Scheduled Castes and Scheduled Tribes' and 'Others'). In general, the result indicates that intra-state migrants are more disadvantaged, whereas inter-state migrants, irrespective of their characteristics, are able to minimise the disparities in urban poverty. The relative disadvantage for weaker groups is higher for intra-state migrants relative to inter-state migrants.

In Table 6 the RDI values are listed for the classified migrants' sub-groups. Here, *Col. (ii)* and *(iii)* reports the disparity obtained between the migrants of rural and urban origin in the distribution of urban poverty. It is discernible that for most of the states there is a relative disadvantage (depicted by the positive sign) for being a migrant from rural origin. The extent of relative disadvantage suffered by the interstate migrants from rural areas is the maximum for Punjab (51 percent), Gujarat (37 percent) and Haryana (25 percent). For rest of the states, the sector of origin does not create significant disparity among the interstate migrants. In the case of intrastate migrants, the sector of origin cannot be labelled insignificant because the disadvantage to intrastate migrants from rural to urban areas of all the less developed states is very high (over 40 percent). The disparity in the distribution of urban poverty between the interstate and intrastate migrants from being illiterate and literate is shown in *Col. (iv)* and *(v)*. As expected, for most of the states there is a relative disadvantage in being an illiterate migrant. The relative disadvantage suffered by the interstate migrants is larger in the states of Punjab (35 percent), Haryana (35 percent) and Gujarat (20 percent). For rest of the states, literacy status does not create significant disparity among inter-state migrants. However, in the case of intrastate migrants literacy has profound effect in creating disparities in urban poverty.

Table 6: Relative Disadvantage Index (RDI) values for Inter and Intra State Migrants to Urban Areas by origin, literacy and caste characteristics

States	RDI of Being Rural		RDI of Being Illiterate		RDI of Being SC-ST	
	Interstate	Intrastate	Interstate	Intrastate	Interstate	Intrastate
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
Andhra Pradesh	0.021	0.388	0.025	0.303	0.012	0.083
Assam	-0.020	0.507	-0.023	0.352	-0.003	0.106
Bihar	-0.024	0.769	-0.015	0.471	-0.003	-0.180
Gujarat	0.365	-0.061	0.199	0.143	-0.001	0.234
Harayana	0.253	0.085	0.347	0.112	0.182	0.152
Karnataka	0.008	0.262	0.042	0.149	0.041	0.058
Kerala	-0.024	0.343	0.004	0.057	0.006	0.080
Madhya Pradesh	0.057	0.337	0.057	0.210	0.051	0.078
Maharashtra	-0.001	0.198	0.059	0.150	0.009	0.098
Orissa	0.052	0.012	0.016	0.133	0.010	0.001
Punjab	0.507	-0.170	0.352	-0.024	0.045	-0.009
Rajasthan	0.022	0.459	0.024	0.289	0.017	0.100
Tamil Nadu	0.002	0.293	0.001	0.117	0.000	0.094
Uttar Pradesh	-0.017	0.405	0.004	0.315	-0.006	0.005
West Bengal	-0.074	0.449	0.027	0.455	0.050	0.384
Total	0.020	0.275	0.045	0.209	0.017	0.092

Source: Calculated using NSSO (EUS 1999-00)

Note: A group is said to be relatively disadvantaged whenever RDI value is positive and is recognized relatively advantaged whenever RDI value is negative.

Except for Punjab, the relative disadvantage for rest of the states ranges from 6 to 47 percent. Disparity due to illiteracy is very high for intra-state urban migrants for all the less developed states like Bihar, Uttar Pradesh and West Bengal.

Migrants from socially disadvantaged groups are also disadvantaged in terms of poverty status (see *Col. vi* and *vii*), nonetheless, the impact of caste is comparatively lower when compared with other capability attributes. The extent of relative disadvantage suffered by the SC/ST inter-state migrants was higher only for Haryana (18 percent). For rest of the states, social identity is relatively insignificant as regard creating disparities among inter-state migrants. The scenario for the intra-state migrants is similar, with the exception of West Bengal, Gujarat and Haryana, where there is a higher disadvantage in being an SC/ST migrant. Overall it may be concluded that the sector of origin of a migrant and her/his literacy levels are the significant determinants of disparities in urban poverty and that the role of social identity in shaping relative disadvantages is lower compared to other characteristics.

4. Migration-Poverty: A Dynamics Analysis

4.1. Inter-state Migration and Net Gain/Loss in Economic Status

This section evaluates the extent to which interstate mobility benefits migrants when compared with their place of origin across varied characteristic groups. This is done by examining the net gain or loss in the economic status of migrants based on a comparison of the possible transition in the economic ladder. The calculations are made by tracing the variations in probability of non-migrant and migrant population to fall in certain quintiles of MPCE between the place of origin and destination. This is illustrated only for the two largest sender states i.e., Uttar Pradesh and Bihar and the top three receiver states of interstate migrants namely, Maharashtra, Haryana and Gujarat. A higher income and economic growth among these states are the other reasons for their selection.

Table 7a: Comparison of Probability of Being in Different MPCE Quintiles for Interstate Migrants from Uttar Pradesh at Different Destination States and for Non-Migrants in Uttar Pradesh

Migration from Uttar Pradesh												
To Maharashtra												
MPCE Quintiles	Illiterate		Literate		Rural		Urban		SC-ST		Non SC-ST	
	M	NM	M	NM	M	NM	M	NM	M	NM	M	NM
0- 20%	0.10	0.28	0.02	0.16	0.04	0.24	0.00	0.14	0.02	0.33	0.04	0.18
20-40%	0.06	0.24	0.02	0.19	0.03	0.22	0.06	0.17	0.00	0.24	0.03	0.20
40-60%	0.15	0.21	0.14	0.20	0.15	0.21	0.10	0.18	0.15	0.17	0.14	0.21
60-80%	0.28	0.17	0.25	0.22	0.27	0.19	0.14	0.21	0.19	0.15	0.26	0.21
80-100%	0.40	0.11	0.57	0.23	0.52	0.14	0.71	0.30	0.63	0.10	0.53	0.20
To Gujarat												
MPCE Quintiles	Illiterate		Literate		Rural		Urban		SC-ST		Non SC-ST	
	M	NM	M	NM	M	NM	M	NM	M	NM	M	NM
0- 20%	0.06	0.28	0.00	0.16	0.02	0.24	0.00	0.14	0.00	0.33	0.02	0.18
20-40%	0.07	0.24	0.14	0.19	0.14	0.22	0.00	0.17	0.00	0.24	0.12	0.20
40-60%	0.22	0.21	0.18	0.20	0.21	0.21	0.11	0.18	0.91	0.17	0.19	0.21
60-80%	0.34	0.17	0.29	0.22	0.25	0.19	0.58	0.21	0.00	0.15	0.31	0.21
80-100%	0.32	0.11	0.39	0.23	0.38	0.14	0.31	0.30	0.09	0.10	0.37	0.20
To Harayana												
MPCE Quintiles	Illiterate		Literate		Rural		Urban		SC-ST		Non SC-ST	
	M	NM	M	NM	M	NM	M	NM	M	NM	M	NM
0- 20%	0.47	0.28	0.12	0.16	0.28	0.24	0.00	0.14	0.00	0.33	0.26	0.18
20-40%	0.26	0.24	0.10	0.19	0.17	0.22	0.05	0.17	0.15	0.24	0.14	0.20
40-60%	0.04	0.21	0.07	0.20	0.07	0.21	0.03	0.18	0.07	0.17	0.06	0.21
60-80%	0.00	0.17	0.23	0.22	0.18	0.19	0.12	0.21	0.14	0.15	0.17	0.21
80-100%	0.23	0.11	0.49	0.23	0.29	0.14	0.80	0.30	0.64	0.10	0.37	0.20

Note: Calculated using NSSO (EUS 1999-00)
M represents migrants from Uttar Pradesh at three destination states; NM represents non-migrants at the origin state (Uttar Pradesh)

Table (7a) shows the net gains for the migrants from Uttar Pradesh to these three advanced states. It could be observed that for an illiterate resident of Uttar Pradesh there is a probability of 0.52 for living within bottom two MPCE quintiles. Whereas, in case of migrants from Uttar Pradesh to urban Maharashtra the probability of living within bottom two quintiles is only 0.16. This move is beneficial from the social perspective as it could help to curb the poverty in Uttar Pradesh. Similar results would be obtained in case of migration to urban area of Gujarat where, the probability of falling in the bottom 40 percent is only 0.13. But movement of illiterates to urban Haryana is harmful because the probability of falling in the bottom 40 percent is as high as 0.73. Generally it can be observed that the probability of moving into top 20 percent of the economic ladder at these destinations is also significantly higher than compared to the origin.

For the literate non-migrants the probability of falling in bottom two income quintiles at origin is 0.35. But if the individual migrates, the probability of falling in these quintiles falls to 0.04, 0.14 and 0.22 in the urban areas of Maharashtra, Gujarat and Haryana respectively. Thus, the movement of literates is far better accommodated in urban areas of these major recipient states. Also, the probability of falling into top income quintile is close to 0.50 in these states. For rural non-migrants the incidence of MPCE falling under the 40 percent range is as high as 46 percent in Uttar Pradesh. But in the case of the migration of individuals from rural areas of this state to the urban areas of Maharashtra and Gujarat, this would lead them into higher MPCE quintiles. The movement of rural origin migrants to urban areas of Haryana is not gainful as it does not seem to improve upon the chances of moving above in the economic ladder. For the moves originating from urban areas the probability of improving along the MPCE quintiles are very high for all these destination states. In case of non-migrants belonging to SC/ST communities the chance of being in bottom two MPCE quintiles is very high (57 percent) at origin whereas this probability for the same caste

group is much lower in the urban areas of major receiving states. Similarly movement of non-SC/ST population would also be beneficial as the probability of falling in better MPCE quintiles is very high. In terms of movement of migrants to highest MPCE quintiles, Maharashtra provides a better scope for all the population groups as around 50 percent of migrants from Uttar Pradesh are found in the uppermost quintile. Gujarat provides a probability of 0.30-0.35 of falling into highest MPCE quintile. Surprisingly, for SC-ST population it provides a probability of nine percent only. In Haryana, literate or SC-ST or urban origin migrants have better chances to move to the highest MPCE quintile compared to the respective other groups.

Table (7b) reports the probabilities for the migrants of Bihar to fall into various MPCE quintiles in the top three receiving states same as Uttar Pradesh. Mobility within MPCE quintiles of migrants from Bihar is almost similar to that of migrants from Uttar Pradesh. Though, certain differences are found across recipient states and in individual characteristics, the probability of migrants to move to higher MPCE quintiles is better in Maharashtra and Gujarat for all population groups. However, the movement to Haryana is not beneficial for the disadvantaged group of illiterate, SC-ST and rural origin migrants and higher incidence of poverty may be expected among such movers. Also, the prospects to move to the higher MPCE quintiles are not significantly different at destination when compared to the origin. So, migration for a resident of Bihar to the urban areas of these three states is not as much beneficial to a person migrating from Uttar Pradesh.

However, this exercise has certain limitations. For instance, the individual's MPCE quintile at the time of migration is unknown. But this does not distort our findings given the discussion being based on the distribution of population. Another relevant issue is regarding the MPCE quintiles that are not strictly comparable across states as it is quite possible that the middle quintiles of a high-income state may be

Table 7b: Comparison of Probability of Being in Different MPCE Quintiles for Interstate Migrants at Different Destination States from Bihar and for Non-Migrants in Bihar

Migration from Bihar												
To Maharashtra												
MPCE	Illiterate		Literate		Rural		Urban		SC-ST		Non SC-ST	
Quintiles	M	NM	M	NM	M	NM	M	NM	M	NM	M	NM
0- 20%	0.00	0.27	0.00	0.12	0.00	0.23	0.00	0.08	0.00	0.32	0.00	0.17
20-40%	0.00	0.22	0.00	0.16	0.00	0.21	0.00	0.12	0.00	0.23	0.00	0.19
40-60%	0.61	0.21	0.22	0.19	0.37	0.21	0.00	0.14	0.00	0.18	0.33	0.21
60-80%	0.25	0.18	0.38	0.23	0.33	0.20	0.45	0.21	0.00	0.15	0.35	0.22
80-100%	0.14	0.12	0.40	0.29	0.30	0.16	0.55	0.45	1.00	0.12	0.32	0.22
To Gujarat												
MPCE	Illiterate		Literate		Rural		Urban		SC-ST		Non SC-ST	
Quintiles	M	NM	M	NM	M	NM	M	NM	M	NM	M	NM
0- 20%	0.00	0.27	0.00	0.12	0.00	0.23	0.00	0.08	0.00	0.32	0.00	0.17
20-40%	0.00	0.22	0.00	0.16	0.00	0.21	0.00	0.12	0.00	0.23	0.00	0.19
40-60%	0.02	0.21	0.03	0.19	0.03	0.21	0.00	0.14	0.00	0.18	0.02	0.21
60-80%	0.91	0.18	0.39	0.23	0.73	0.20	0.21	0.21	0.00	0.15	0.60	0.22
80-100%	0.07	0.12	0.59	0.29	0.24	0.16	0.79	0.45	0.00	0.12	0.38	0.22
To Harayana												
MPCE	Illiterate		Literate		Rural		Urban		SC-ST		Non SC-ST	
Quintiles	M	NM	M	NM	M	NM	M	NM	M	NM	M	NM
0- 20%	0.50	0.27	0.00	0.12	0.33	0.23	0.00	0.08	0.77	0.32	0.02	0.17
20-40%	0.02	0.22	0.16	0.16	0.08	0.21	0.00	0.12	0.10	0.23	0.06	0.19
40-60%	0.04	0.21	0.46	0.19	0.18	0.21	0.45	0.14	0.06	0.18	0.29	0.21
60-80%	0.41	0.18	0.19	0.23	0.35	0.20	0.00	0.21	0.03	0.15	0.51	0.22
80-100%	0.04	0.12	0.19	0.29	0.06	0.16	0.55	0.45	0.04	0.12	0.13	0.22

Note: Calculated using NSSO (EUS 1999-00)

M represents migrants from Bihar at three destination states; NM represents non-migrants at the origin state (Bihar)

equivalent to uppermost quintile of low-income states. Therefore, in order to minimise this problem, we focus interest on the population falling in the bottommost MPCE quintiles and the proportion moving towards the topmost quintile in destination states which are definitely better than the origin states.

4.2. Duration of Migration and Poverty

The duration of migration is one of the important attributes of migration. However, this attribute has not received significant attention in literature regarding its implication for gains from migration. This section tests the possible impact of migrant's duration of stay at the destination on the state of economic well being of migrant households. Such a proposition is based on the risk-proneness of mobility in the first place and a relatively longer duration of stay serving towards reducing such risks. Over time the labour market conditions can increase the probability of receiving a gainful employment and higher wages. These changes could be due to either endogenous element such as better search and work experience or with exogenous elements such as economic growth over time. For instance, we have illustrated that better education significantly helps the migrants to move out of poverty as educated people stand better chances of finding well-paid jobs over time. In addition, this section also attempts to comprehend how individual characteristics, along with the duration of migration, affect the poverty status of individuals.

For this analysis, Cox regression has been employed. This regression model allows the risk determination of being poor to depend not only on time component but also on the personal characteristics of the individual. Formally, the hazard function can be written as

$$\lambda(t) = \lambda_0(t)\exp(\beta \cdot z) \quad \text{.... (2)}$$

Where, β is column vector of parameters and z is the row vector of covariates. The hazard function is the product of an underlying duration

dependent risk $\lambda_0(t)$ and another factor $\exp(\beta.z)$ that depends on covariates. The duration dependent risk $\lambda_0(t)$ is calculated for a baseline or reference group. The hazard function enables one to estimate the relative risks of other groups in relation to this baseline group. Based on equation (2), the survivorship function can be written as

$$S(t;z) = [S_o(t)]^{\exp(\beta.z)} \quad \ldots.(3)$$

Where $S_o(t)$ is the survivorship function for the baseline or reference group. Each exponential of the coefficients in equation (2) represents the effect of the covariate on the hazard function for the reference group. When there are no covariates present, $\exp(\beta.z)$ reduces to unity. Values greater than 1 indicate that the relative risk of being above poverty line is greater for this group compared with the reference group. Thus, when the survivorship probabilities are known at various durations, the survivorship probabilities for the other groups can be found easily. The main assumptions of this model are that migrant's heterogeneity is captured by the set of covariates included in the analysis and relative risks remain constant over the duration of migration. The proportionality assumption was tested by plotting ln[-ln(proportion remaining BPL)] for the various categories, which were found to be nearly parallel and hence taken to be valid. However, this analysis may also, to some extent, suffer with selection bias because no information regarding success or failure could be obtained regarding migrants who have returned to their place of origin. In this regard, the results could be, at best, considered to be indicative of the success or failure of the migrants in urban India.

The hazard coefficients $\exp(\beta.z)$ for inter-state as well as intra-state migrants are presented in Table (8). The coefficients in the model for interstate migrants show that education status is positively related to attainment of APL status for the migrants with economic motive. Compared to an illiterate migrant, an educated migrant has a likelihood of over 50 percent to be above poverty line. It is surprising to note that

secondary level education does not help much in elevating the economic status of individuals as compared to the primary educated persons. Religion of the migrants also affects their economic status though its association would demand further enquiry into the patterns of such migration. Compared to SC/ST, being an 'other caste' inter-state migrant marginally increases (with coefficient 1.016) the likelihood of achieving APL status. The interstate migrants to urban areas of middle and high per capita state are 6 percent and 2 percent more likely to experience poverty, respectively. This could be because people generally do not migrate to low per capita income states with the motive of finding employment; rather they migrate to take up assured employment. Interstate migrants from urban areas are 15 percent more likely to be above poverty line in rural areas compared to migrants from rural areas and female migrants are more likely by 17 percent to be above poverty line compared to their male counterparts.

Table 8: Characteristic Hazard Coefficients for Achievement of APL Status by migrants

Variables	Categories	Exp(B)	
		Interstate	Intrastate
Education (Illiterate)	Below Primary	1.599	1.707
	Secondary	1.490	1.630
	Higher	1.626	1.875
Religion (Hinduism)	Islam	0.915	0.774
	Christianity	0.789	1.079
	Sikhism	0.747	1.187
	Others	0.940	0.813
Caste (SC-ST)	Others	1.016	1.022
State (Low PCI)	Medium PCI	0.942	1.046
	High PCI	0.977	0.845
Location (Rural)	Urban	1.154	1.417
Sex (Male)	Female	1.171	1.297

Note: All the values are significant at five percent level of significance. Reference categories are given in parentheses.

The second model in the Table (8) for intrastate migrants also shows the same picture for the education variable. However, education increases the likelihood of moving above the poverty line by a larger extent compared to being illiterate among intrastate migrants. In the case of religion, Christian and Sikh intrastate migrants are more likely and Muslims and others are less likely, to be above poverty line compared to their Hindu counterparts. Intrastate migrants belonging to the 'other caste' category, and coming from urban areas, are more likely (by 2 percent and 41 percent, respectively) to be above poverty line compared to their respective reference categories. Female intrastate migrants with economic motives are 29 percent more likely to be above poverty line compared to males. Intrastate migrants in medium PCI state are more likely and in high PCI states they are less likely to be above poverty line compared to the reference category by 4 percent and 15 percent respectively. It could be possibly due to lower employment generation in these states coupled with higher inflow of interstate migrants.

While it useful to examine proportional hazard coefficient for each variable by itself, it is often instructive to look at the effect associated with a particular combination of characteristics. For instance, what is the effect on the likelihood of moving above poverty line, relative to the baseline group, of having illiterate and female status? This can be found by merely multiplying the appropriate coefficient. Thus, a female interstate migrant to urban area who is below primary education would have (1.17*1.59) ~ 1.87 times the chance of going above poverty line, at each 'duration point', compared to the baseline group.

Table 9: Relative Risk Factors of Migrants by education categories (Interstate and Intrastate) by Sex, Sector of Origin and Caste

Education Categories	Female		Urban		Other Caste	
	Inter state	Intra state	Inter state	Intra state	Inter state	Intra state
Illiterate	1.17	1.30	1.15	1.42	1.02	1.02
Below Primary	1.87	2.21	1.85	2.42	1.62	1.74
Secondary	1.75	2.11	1.72	2.31	1.51	1.67
Higher	1.90	2.43	1.88	2.66	1.65	1.92

Table (9) illustrates the results of these calculations for interstate and intrastate migrants to urban areas of India for categories of education, sex of the migrant, type of place of origin (rural/urban) and Caste category. The values in Table (9) indicate that for female interstate migrants to urban areas, the chance of going above the poverty line is 1.90 times that of the baseline group (for reference categories see Table 8). Interstate migrants from urban areas having higher education and interstate migrants of other caste having higher education are respectively 1.88 and 1.65 times more likely to move above the poverty line compared with baseline categories. Similarly, conclusions can be drawn from Table (9) for intrastate migrants. Female intrastate migrants to urban area having higher education, originating from urban areas, with high education and belonging to 'other caste' category with high education have respectively 2.43, 2.66 and 1.92 times higher chance of crossing the poverty line compared to respective baseline categories.

To obtain a firm idea of the actual number and timing of moving into above poverty line implied in Table (9), the relationship defined in equation (3) is used. The second column in Table (10a) and Table (10b) gives the estimate of $S_o(t)$ at selected point of time (i.e. the survivorship function for baseline group) for interstate and intrastate migrants to urban areas of India. Corresponding survivorship function for the individuals with characteristics varying from the baseline group are found by raising $S_o(t)$ to the appropriate power. Thus, survivorship function in poverty for interstate female migrant with higher education during first year of migration is $S_o(t)^{1.90}$.

The remaining columns in Tables (10a) and (10b) represent the survivorship in poverty of interstate and intrastate female migrants defined by their education level (also see Figure 1 and 2). So, 94 percent of illiterate female interstate and 93 percent of illiterate female intrastate migrants to urban areas remain under poverty line during their first year

Table 10 a: Proportion of Interstate Migrants Remaining under Poverty Line: Baseline Group and Female Interstate Migrants by Education Categories

Years since Migration	Baseline Survival	Illiterate	Below Primary	Secondary	Higher
1	0.95	0.94	0.90	0.91	0.90
5	0.68	0.64	0.49	0.51	0.48
10	0.50	0.44	0.27	0.29	0.26
15	0.38	0.32	0.16	0.18	0.16
20	0.28	0.22	0.09	0.11	0.09
25	0.21	0.16	0.05	0.07	0.05

Table 10 b: Proportion of Intrastate Migrants Remaining under Poverty Line: Baseline Group and Female Intrastate Migrants by Education Categories

Years since Migration	Baseline Survival	Illiterte	Below Primary	Secondary	Higher
1	0.94	0.93	0.88	0.88	0.87
5	0.70	0.63	0.46	0.47	0.42
10	0.49	0.40	0.21	0.23	0.18
15	0.35	0.26	0.10	0.11	0.08
20	0.23	0.15	0.04	0.05	0.03
25	0.16	0.09	0.02	0.02	0.01

of migration. This value is as high as 90 percent in the case of female migrants in all educational groups and as the duration of migration increases the value comes down for all the educational status. This happens because as the duration of migration increases it helps in gaining more experience in the job market and also it helps in developing better social network as hypothesised before.

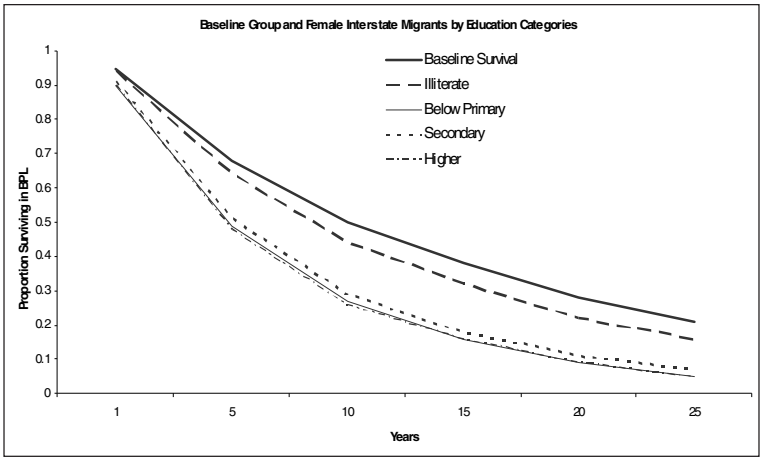

Figure 1: Survivorship curve for baseline group and female interstate migrants by education categories

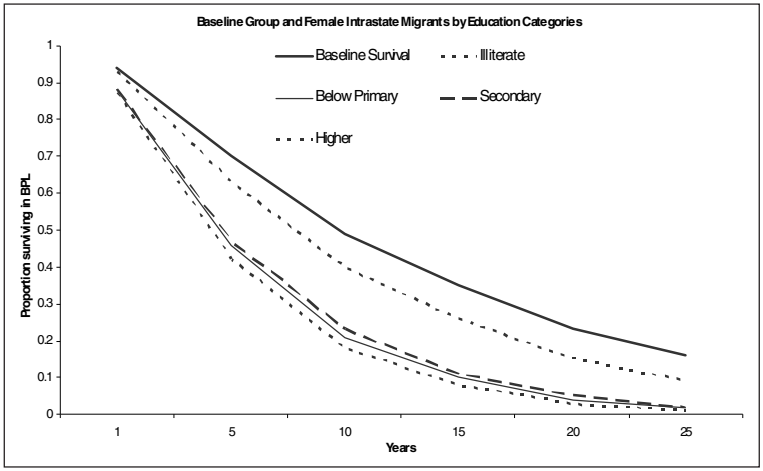

Figure 2:Survivorship curve for baseline group and female intrastate migrants by education categories

5. Conclusions

This paper has attempted to comprehend the nexus between migration and urban poverty in India. From our empirical analysis it is evident that low-income states were major senders of interstate migrants and high-income states were major receivers. These low-income states

are characterised by low levels of intrastate migration indicating that migration is linked with disparity in regional development. The net gains from migration depend not only on the choice of appropriate destination but also on attributes of the migrants. The analysis reveals that the groups of migrants disadvantaged by caste, education and residence remain disadvantaged as far as the (economic) gains from migration are concerned. Finally, it is indicated that a longer duration of migrancy helps in elevating the economic status of the migrants as they can escape the poverty trap by seeking alternatives including investments in human capital or considerable work experience with better job search. However, it would be unwise to think of an exogenous policy on income generating activities only in urban areas because the effects could turn out to be quite the reverse of what is expected and may accelerate in-migration (see Todaro 1969). Further, we suggest that there should be a balanced strategy towards eradicating urban poverty – mainly through policies that mitigate miseries at the point of origin.

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References

Cox D R (1972): 'Regression Models and Life Tables (with discussion)', *Journal of the Royal Statistical Society*, Series B 34, 187-220.

Deaton, A & Jean Dreze (2002): 'Poverty and Inequality in India: A Re-examination', *Economic and Political Weekly*, September 7, 3730-48.

Jayraj D & S Subramanian (2002): 'Child Labour in Tamil Nadu in the 1980s A Preliminary Account of Its Nature, Extent and Distribution', *Economic and Political Weekly*, March 9.

Lall S. V., S Harris & Z Shalizi (2006): 'Rural-Urban Migration In Developing Countries: A Survey of Theoretical Predictions and Empirical Findings', World Bank Policy Research Paper 3915, May 2006.

National Sample Survey Organisation (2001): Employment-Unemployment Survey 1999-2000, Central Statistical Organisation, Government of India.

Todaro M. (1969) A Model of Labor Migration and Urban unemployment in Less Developed Countries, *American Economic Review*, 59, 138-48.

Venkatanarayana M (2005): 'On the Non-Random Distribution of Educational Deprivation of Children in India', Centre for Development Studies, Working Paper No. 372, Trivandrum.

Appendix I: Income Growth Rates of States during Post reform period

States	Primary	Secondary	Tertiary	Overall
Andhra Pradesh	1.72	7.18	6.70	5.19
Assam	1.41	5.18	2.69	2.45
Bihar	0.25	7.29	7.80	4.44
Gujarat	1.15	4.72	7.27	6.60
Harayana	1.24	5.57	7.39	5.66
HP	0.22	11.33	8.62	6.31
Karnataka	2.83	8.14	10.71	7.37
Kerala	1.90	-9.01	6.97	5.29
Madhya Pradesh	1.90	5.30	7.03	4.54
Maharashtra	2.04	5.96	6.45	5.43
Orissa	1.68	-2.01	7.53	3.35
Punjab	2.37	5.75	6.30	4.38
Rajasthan	4.73	8.79	8.32	7.18
Tamil Nadu	1.22	6.24	10.21	6.88
Uttar Pradesh	3.12	9.11	6.18	5.53
West Bengal	4.90	7.73	9.03	7.35
All India	3.11	6.61	8.97	6.58

Source: NSSO 1993, 1999

Note: Post reform refers to the period from 1993-1999.

Appendix II: Employment Growth Rates of States during Post reform period

States	Primary	Secondary	Tertiary
Andhra Pradesh	-1.00	-0.53	5.62
Assam	-1.18	4.59	9.96
Bihar	0.78	7.66	3.91
Gujarat	1.74	-0.86	6.77
Harayana	-0.49	3.89	3.19
HP	-1.71	5.47	5.47
Karnataka	-0.66	0.67	6.26
Kerala	-3.38	2.79	7.39
Madhya Pradesh	-0.31	5.05	6.70
Maharashtra	-0.76	1.02	5.96
Orissa	-0.54	5.58	3.83
Punjab	0.17	3.27	8.04
Rajasthan	-0.35	2.84	4.24
Tamil Nadu	-2.84	0.93	5.81
Uttar Pradesh	-0.61	4.87	4.72
West Bengal	-0.49	-0.37	4.03
All India	0.16	2.72	2.82

Source: NSSO 1993, 1999.
Note: Post reform refers to the period from 1993-1999.

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