Labour Market Mobility
of Low Income Households

According to the "over-urbanisation" thesis, migrants move into the urban areas in search of jobs, and in the face of limited employment opportunities in the high productivity industrial sector, they continue to work in low productivity activities. Urban poverty here is a spillover of rural poverty. But why do migrants not return to the rural areas if they continue to be engaged in low productivity activities? The reason could be that the informal sector offers them a better source of livelihood compared to rural avenues. This argument prompts us to pose a number of questions from an empirical standpoint. Based on primary surveys of slum dwellers in Delhi, the author examines if workers managed to experience a change in their occupation, over time. Even when the broad occupation categories remain the same, does the nature of employment change and do income levels rise? If so, what role do networks play in helping them access better paying jobs. The findings tend to support upward mobility in a limited sense though.

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The "over-urbanisation" thesis argued that migrants move into the urban areas as they are pushed out of the agriculture sector with a deterioration in the land-man ratio. And in the face of limited employment opportunities in the high productivity industrial sector in the urban areas, they continue to work in low productivity activities in the urban informal sector. Urban poverty in this sense has been interpreted primarily as a reflection of rural poverty. But the question, which remains unanswered in this context is, why migrants do not return to the rural areas if they continue to be engaged in low productivity activities. The answer to this question can be found in the work of the critics of the "over-urbanisation thesis". The decision to migrate is based on rationality: migrants continue to reside in the urban areas even when they do not manage to acquire a formal sector job, precisely because even within the informal sector they manage to experience upward income mobility. They are able to reduce the intensity of poverty if not escape it altogether. This argument prompts us to pose a number of questions from an empirical standpoint.

Based on the data on slum dwellers, we examine in this paper if workers managed to experience a change in their occupation, over time. Even when the broad occupation category remains the same does the nature of employment changes and income levels rise? If so, what role does the network play in helping them access better paying jobs. Besides, since slum dwellers continue to stay in the city, does their nature of contact change in course of time. From this point of view it would be interesting to map the contacts that helped access the present jobs with the contacts that got them jobs in the past. These are some of the issues, which not only interest researchers but policy-makers too. If informal mechanisms can enhance social welfare, intervention of the government may actually deteriorate their living conditions instead of causing any improvement. Besides, intervention means a burden on the public exchequer, which in other words, is additional cost to society. Hence, less beneficial outcomes associated with higher costs are less preferable to what individuals can work out for themselves in an informal way, unless it involves considerable negative externalities in terms of health hazards, environmental pollution or any such adverse repercussion on the economy.

In this paper, based on a primary survey of slum dwellers in Delhi, we explore the possibilities of occupational and income mobility for the workers from low income households, largely found to be working in the urban informal sector. The organisation of this paper is as follows. In the next section we focus on occupational mobility, which is followed by changes in contact in accessing jobs in Section II. Income mobility is examined in Section III. The effect of duration of migration on consumption and probability to save is assessed in Section IV and Section V analyses the determinants of income mobility. Finally, Section VI summarises the major findings. The sampling framework used for the survey is as below.

The database of the study is drawn from the surveys carried out for 802 households in 30 slum clusters in Delhi, in the year 1999-2000, and for 200 households in the year 2004-05. The slums considered in our study are only of a particular type: the 'jhuggi-jhompri' colonies given in the list prepared by the Delhi Development Authority (DDA). It may be noted that the list provided by DDA is neither comprehensive nor exhaustive. Various illegal/squatter settlements and marginal settlements located in different parts of the cities are not necessarily covered by this list. Primarily it is the registered slums which have been included in the list. Structures constructed temporarily by the short duration migrants are less likely to be covered in this survey; rather slums, which are stable in nature and have received recognition by the city development authorities, are the centre of focus. A brief description of the sampling procedure followed to select 802 sample households is given below.

We have used a three-stage stratified random sampling framework. Based on the DDA list of 456 slum clusters each with at least 200 households, we decided to select 30 clusters. This survey comprised two components: one is qualitative and the other is

quantitative. The qualitative survey was carried out in three clusters, two from south Delhi and one from north Delhi. As we intended to include all these three clusters in our quantitative survey as well, we followed the random sampling technique to select 27 clusters only.

(i) In stage 1, clusters, each with a population of 200 households, were distributed across seven zones in Delhi. (ii) The proportion of the number of clusters in each zone C_z (z = 1....7) to the total number of clusters across all zones, C was taken as the weight to arrive at the distribution of 27 sample clusters across the seven zones. The number of clusters to be picked up for sampling let us say is X_z. (iii) The next step concerns drawing of X_z number of specific sample clusters from C_z number of clusters located actually in a zone. All the C_z clusters in each zone with their detailed addresses were codified and put in a box from which X_z draws were made. X_{zi} stand specific for the specific cluster in zone Z. The process was repeated for all the seven zones, separately. (iv) Once the specific clusters from each zone were identified, the distribution of 754 sample households was made using the proportion of the number of households in each cluster, (HHX_{zi}), to the total number of households in all 27 clusters (HHX, where X=sigma X_z), as weights. To this we added 48 households selected from the three clusters, 16 each, where the qualitative survey was carried out. (v) In each of these clusters investigators prepared a listing of households with some identifiable characteristics based on which we drew a lottery to pick up the specific households for the detailed interviews enabling to fill in the quantitative questionnaires.[1]

More or less the same principle was followed in the survey of 200 slum households in Delhi for 2004-05.

I
Occupational Mobility

The ILO report on Kenya (1972) argued that it was not only the high wage formal sector job but also the income opportunity in the informal sector that attracted potential migrants. "Informal-sector employment is undesirable when viewed from above by the formal-sector wage or salary earner, but desirable and an independent source of attraction when viewed from below by the rural immigrant" [ILO 1972: 224]. The Todaro (1969) model argued that subsequent to their migration to the urban areas they search for better opportunities and in due course graduate to the formal sector. Breman (1976), however, argued that the idea of moving to better-paid jobs is mostly fictional because those who join the lower ranks of the urban labour system usually remain there. Standing (1977) also feels that it is difficult for them to escape once they join this sector. "The ability to perform regular sustained work tends to evaporate through lack of use, and the poor diet and medical treatment available to those in the irregular sector tend to undermine their physical and mental capacity to do sustained work," [Standing 1977: 41]. However, within the informal sector the possibility of movement from low productivity jobs to better-paid jobs does exist as several studies based on survey data point out [Banerjee 1986; Mitra 1994; Gupta and Mitra 2002].

The informal sector is not necessarily a manifestation of low productivity jobs only. As the literature on the formal-informal sector relationship points out, the process of interaction between these two sectors is quite complex. Papola (1981) argued that the size of the informal sector is large in situations of both limited industrial spread and rapid industrialisation. In the former case it is mainly a manifestation of residual absorption of labour, whereas in the latter case both are complementary to each other. Also, in this situation the informal sector is described to be no more of low productivity because of its close linkage with the industrial sector and income percolating from this sector to the rest.

As regards the facets of interaction between the informal sector and industrialisation the links may be taken to exist through the following: (a) the labour market, (b) the commodity market, and (c) the production process. On a priori grounds, the nature of the relationship between the share of informal sector employment and industrialisation can be positive as well as inverse. If informal sector employment is taken to be the outcome of sluggish employment growth in the industry, then it would have a negative relationship with respect to the latter. Tokman (1989) argued that the informal sector shows both an "autonomous element", i e, activities being associated with those carried out in the rest of the economy, and that is closely integrated with the rest of the economy. Further, he highlights the linkage between poverty and informal sector employment. While arguing that the chances of reducing the size of informal sector workers by absorbing them into modern activities are slim, he postulates a negative relation between high productivity modern sector employment and the low productivity informal sector employment. Also, in the study by Hemmer and Mannel (1989) the possibility of an inverse relation between industrial and informal sector employment exists. With an extension of the formal sector, they argued, demand for labour within this sector at a given minimum wage may increase (or decrease) depending upon the technological conditions, which in turn at a given volume of labour supply including the migrants, reduces (or raises) the volume of labour in the informal sector. Stark (1982) argued that with the expansion of the modern sector, new employment opportunities are created which may eliminate some of the informal sector jobs if the activities are competitive. On the other hand, the relationship can be complementary if expansion of output and employment in the modern sector generate employment in the informal sector through inter-sectoral linkages. When both the forces are at work, the net relationship may turn out to be competitive or complementary depending upon the relative strength of the forces. However, in Stark's (1982) model, as Datta-Chaudhuri (1989) argued, the expansion or contraction of the informal sector is basically determined by the growth of the formal sector. On the other hand, Datta-Chaudhuri (1989) noted that the informal sector could expand even when the formal sector would stagnate or contract.[2]

Following Papola (1981), we note that the informal sector grows in both the situations of rapid industrialisation and sluggish industrial growth. But employment in the informal sector, while it is induced by industrial growth, offers better-paid jobs and, hence facilitates rapid upward mobility. Delhi, though it is not an industrial city, has experienced fast growth of several other formal sector activities. Recently the expansion of the IT sector and business process outsourcing services (BPO) has added new dimensions to the economic scenario of the city. Many of the informal sector activities have possibly grown in response to the growth of the activities in the formal sector, though an equally large chunk of the informal sector activities might have come up due to population pressure. It would, therefore, be interesting to examine whether slum dwellers in our sample have been able to locate themselves in better-paid jobs in due course after migrating to

the city. A comparison of their first job in the city with their present job can throw light on this aspect. The Todaro model suggests that immediately after migrating to the city, the rural migrants engage themselves in the informal sector, but over time there takes place what he called "eventual attainment of a more permanent modern sector job". Our hypothesis is that not always are such sectoral movements possible due to the sluggish employment growth in the high productivity sector and/or the high levels of skill requirement in these activities; and hence within the informal sector the job search continues and workers shift from low to relatively high-income jobs. Rather than viewing the informal sector as a stagnant pool of low paid work [Breman 1976], or as a temporary stoppage before moving into the formal sector [Todaro 1969] one may focus on the dynamics of the sector itself.

In the quantitative survey those who gave a positive response to the question about their past employment, have been cross-classified as per their present and past employment categories in Table 1, and as per present and past occupation categories in Table 2. The time profile is not common for each of the workers, as the time of entry into the urban labour market varied from individual to individual. Mobility is gauged in relation to the most important activity or occupation that they held in the past. In this sense it included those who registered both an upward and downward mobility.

It is interesting to note from Table 1 that among those who are presently engaged in regular wage/salaried employment, around 51 per cent moved from casual wage employment. Another 25 per cent stated that they had been in self-employment in the past and only 24 per cent continued to be in regular wage/salaried employment both in the past and present. Among those who are presently in casual jobs, a large majority (62 per cent) were in the same employment category in the past as well. However, around 20 per cent of the workers engaged as casual labour presently seem to have lost their regular wage employment, which they held in the past. Similarly, around 19 per cent of the self-

employed (presently) were working previously as regular wage earners. Among those who are presently in self-employment, about 51 per cent shifted from casual employment, and another 30 per cent were engaged in the same employment category in the past. On the whole, there is evidence of significant changes in the nature of employment over time.

There seems to have been some upward shift in the employment category if regular wage/salaried jobs are taken as top ranking. But we have noted that the average earnings accruing to workers in regular wage/salaried jobs are not necessarily higher than those in casual or self-employment [Mitra 2003]. However, jobs with a steady and assured flow of income may be preferred to those with fluctuating income, though in terms of averages the latter may yield higher pay-offs. The proportion of those who were in salaried jobs earlier but presently in either casual or self-employment to the total number of workers who were in salaried jobs in the past is 45.7 per cent, which is lower than the percentage of those who were in casual or self-employment but have now moved into regular wage employment. Hence, judged on the basis of employment categories the extent of upward movement seems to exceed the downward movement. Besides, it may be noted (not shown in the table) that a certain proportion of regular workers were unemployed in the past: nearly 45 per cent of those who said that they were either unemployed or outside the labour market are currently in regular wage/salaried jobs.

The occupation categories formed on the basis of the detailed listing of economic activity pursued by the individuals are given in Table 2. Some of the categories in which at least 20 per cent workers have been engaged at present as well as in the past, are semi-professional (23.1 per cent), personal service (22.2 per cent), manufacturing (25 per cent), transport (20 per cent), tailoring etc (33.1 per cent) and construction (41.5 per cent). On the other hand, considerable change in occupations seems to have taken place though it is quite difficult at this stage to discern the changes that are favourable (or unfavourable) in terms of occupational mobility. A large number of construction workers have shifted to sales and trade, accounting for about 32 per cent of the workers in each of these occupations. Around 28 per cent of the total trade workers actually moved from manufacturing and transport. Similarly around 27 per cent of the construction workers were earlier employed in manufacturing and commercial services. The next question that arises is what contact the workers have used to access the current jobs and what did they use in the past? This question is important in understanding the dynamics of information-flow pertaining to the job market.

Table 1: Percentage Distribution of Workers by Present and Past Employment Categories

Present Employment Category	Past Employment			Total
	Regular Wage/Salaried	Casual	Self-Employed	
Regular Wage/Salaried	23.9	51.1	25.0	100.0
Casual	20.0	61.8	18.2	100.0
Self-Employed	19.1	50.9	30.0	100.0

Note: The percentages are given relative to the row total.
Source: Slum Survey, 1999-2000.

Table 2: Cross-Classification of Workers by Present and Past Occupations
(Per cent)

Present Occupations	Past Occupations										
	Semi-prof	Sales	Trade	Pers	Manuf	Com	Trans	Tail	Const	Sec	Rep
Semi-prof	23.1	7.7	7.7	0.0	7.7	7.7	0.0	0.0	30.8	0.0	15.4
Sales	2.6	10.5	18.4	2.6	5.3	13.2	10.5	0.0	31.6	2.6	2.6
Trade	4.2	909	8.4	2.8	15.5	2.8	12.7	4.2	32.4	2.8	4.2
Pers	11.2	11.1	0.0	22.2	22.2	22.2	0.0	0.0	11.1	0.0	0.0
Manuf	0.0	20.8	8.3	4.2	25.0	0.0	8.3	0.0	29.2	0.0	4.2
Com	3.6	10.7	3.6	10.7	9.6	17.9	3.6	3.6	35.7	3.6	3.6
Trans	0.0	13.3	6.7	6.7	6.7	0.0	20.0	0.0	13.3	6.7	26.7
Tail	0.0	0.0	33.3	0.0	0.0	0.0	33.3	33.3	0.0	0.0	0.0
Const	0.0	7.3	7.3	4.9	14.6	12.2	2.4	0.0	41.5	2.4	7.3
Sec	0.0	25.0	0.0	0.0	0.0	25.0	0.0	0.0	50.0	0.0	0.0
Rep	0.0	0.0	9.1	9.1	9.1	9.1	9.1	9.1	27.3	9.1	9.1
Total	3.5	10.5	8.9	5.1	12.1	8.6	8.6	2.3	31.5	2.7	6.2

Note: (1) The percentage distribution is given relative to the row total.
(2) Occp: occupation, Semi-prof: semi-professionals, Pers: personal services, Manuf: manufacturing, Com: commercial services, trans: transport, Tail: tailoring, knitting, Const: construction, Sec: security, and Rep: repairing
Source: Same as Table 1.

II
Change in Contacts

In accessing the present occupations informal networks or contacts operating through relatives and other caste-kinship bonds seem to have played a major role (Table 3). Around 37 per cent of the currently working individuals stated that they did not take any help from others, and another 8 per cent did not give any specific information on the nature of their contact. The remaining 55 per cent, however, sought help from others in finding jobs in the urban labour market. Though the nature of contact varies across occupations certain broad patterns are quite evident. Among semi-professionals, immediate relatives and present employers turn out to be important sources of supplying job information. Among the sales workers the same contacts again appear to be dominant though general relatives and co-villagers both account for around 15 per cent of the total. Among trade workers, next to the immediate relatives are general relatives, and in personal services inhabitants of the same cluster happen to be the most important source of contact. Among manufacturing workers also, next to the immediate relatives and employers are the inhabitants of the same cluster who helped find jobs. NGOs played an important role in accessing jobs in commercial services. In construction, co-villagers and people from the same clusters are two important sources of contact next to immediate relatives and employers. On the whole, other than self-help, which includes accessing job market information directly or pursuing economic activity independently as own account workers, immediate relatives and the present employers have played an important role in seeking employment opportunities. Secondly co-villagers, people from the same neighbourhood (cluster) and general relatives have also assisted in accessing information on the job market. Private contractors and community leaders do not seem to have offered any significant help in this respect. Even NGOs except in the case of commercial services do not seem to have played any major role.

Our next concern is to examine if the same pattern of contact prevailed in the past as well. Table 4 presents the workers' past occupations and contacts through which they obtained jobs in the past. Apart from immediate relatives no other source of contact appears to be of any significance in the past. In fact, in some of the occupations like sales and commercial services, immediate relatives helped to a much greater extent than self-help. Even in trade and personal services, both immediate relatives and self-help benefited almost an equal percentage of workers. The major difference between the present and past means of job accessibility is that self-help in accessing present jobs turns out to be the most important component in almost all the activities, whereas in the past in a number of activities, immediate relatives have been either more effective or as good as self-help in getting jobs. Keeping in view our definition of self-help, that is, accessing jobs directly or running own economic activity independently or with other family members or friends, this suggests that in the initial stages while entering the urban labour market close relatives matter in a significant way, but subsequently it is the individual entrepreneurship that decides his continuation in the labour market.

It may be interesting to assess if there is any close association between the nature of contact used by individuals in obtaining the present occupation and that in the past. Among those who utilised the help of immediate relatives in the past, only 27 per cent seem to have continued with the same source of contact. The rest developed other contacts; almost one-third of them depended on self-efforts to venture further into the labour market and possibly improve their earnings. On the other hand, those who depended on self efforts in the past continued to do so later as well: about 60 per cent of them accessed present jobs through self efforts and the rest diversified their contacts. It may be inferred from this that initially with respect to certain activities immediate relatives by and large matter in seeking an entry to the labour market but at a later stage self efforts and/or other sources of contact are crucial for the realisation of upward occupational mobility. From this perspective, it may be illustrated that one who accessed the job of a helper in a tea-stall through relatives in the initial stages, has eventually landed up as an owner of a tea-stall in some part of the city. And this would indeed tend to favour upward mobility in a limited sense though. However, in order to draw any such conclusion the occupational mobility needs to be substantiated by income mobility.

Table 3: Present Occupation and Contacts (Percentage Distribution)

Present Occupation	Contact												
	Imm Rel	Spo Rel	Gen Rel	Co-vill	Same Caste	Same Cluster	Frien	Emp	NGO	Prv Con	Lead	Self	Other
Semi-prof	18.8	0.0	13.0	1.4	0.0	1.4	0.0	23.2	1.4	0.0	0.0	34.8	0.0
Sales	22.4	0.6	7.5	7.5	1.9	5.0	0.0	8.7	0.0	0.6	0.0	37.3	1.2
Trade	23.2	1.6	7.6	4.9	0.5	3.2	0.0	4.9	0.5	0.5	1.1	43.8	3.8
Pers	14.2	3.0	5.3	1.8	2.4	15.4	0.6	12.4	0.6	0.0	0.0	30.8	21.2
Manuf	17.9	4.3	5.1	3.4	2.6	10.3	0.0	18.8	0.0	3.4	0.0	29.9	1.7
Com	17.5	5.8	5.1	2.2	1.5	5.8	0.7	14.6	10.9	1.5	0.0	19.7	7.3
Trans	20.2	2.5	5.0	7.5	2.5	0.0	0.0	7.5	2.5	2.5	0.0	32.5	2.5
Tail	23.5	0.0	0.0	0.0	0.0	0.0	0.0	8.8	2.9	0.0	2.9	50.0	2.9
Const	6.6	2.1	3.1	5.2	1.7	6.3	0.0	9.4	0.4	1.4	0.7	51.7	1.0
Sec	20.0	0.0	0.0	20.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	30.0	0.0
Rep	33.3	0.0	10.4	4.2	2.1	2.1	2.1	12.5	0.0	0.0	0.0	18.8	0.0
Total	17.0	2.3	5.8	4.3	1.6	6.5	0.2	11.2	1.7	1.0	0.4	37.4	2.2

Notes: (1) Semi-prof: semi-professionals, Pers: personal services, Manuf: manufacturing, Com: commercial services, trans: transport, Tail: tailoring, knitting, Const: construction, Sec: security, and Rep: repairing.
(2) Imm Rel: immediate relatives, Spo Rel: Spouse's relatives, Gen Rel: general relatives, Co-vill: co-villagers, Same Caste: members of the same caste group, Same Cluster: members of the same cluster, Frien: friends, Emp: employer, NGO: non-government organisation, Lead: leader of the community/slum cluster, Prv Con: private contractors, Self: self-help/self-initiative, other: other contacts.
The percentage distributions are given relative to the row total. In the table each row does not add up to 100 per cent as some of the respondents did not respond to this question, comprising the category of 'contact not mentioned', which is not included in the table.
(3) Some of the respondents have more than one contacts. But we have taken the most important one for each of the respondents.
Source: Same as Table 1.

Income Mobility

In order to compare the past income and the present income of the workers they have been cross-classified by various size classes formed on the basis of present and past income (Table 5). Figures along the leading diagonal give the proportion of workers whose income remained in that size class both in the past and the present. In other words, these are the workers who did not experience any significant change in their income in either direction, and hence did not move out of these size classes.[3]

The entries above the leading diagonal show the percentage of workers whose incomes in the past were higher than the present. On the other hand, the cells below the leading identify cases which experienced improvement over time. As noted from Table 5 most of the entries above the leading diagonal are either 0 or nominal. On the other hand, elements below the leading diagonal showing upward movement in terms of income size classes are large and account for the bulk of the workers for whom present and past incomes are reported. Some of the entries in particular show significant changes in income of the workers. Around 47 per cent of those who were in the income size classes Rs 0-300, Rs 301-500, Rs 501-1,000 and 1,001-1,500, moved to the present income size class of Rs 1,501-2,500 and another 23 per cent moved to Rs 2,501-4,000.

Though there is evidence in favour of upward income mobility, cases showing stagnancy or downward mobility are also present. In the class of past income of Rs 1,501 to 2,500, around 50 per cent remained in that bracket itself. But it may be noted that more than 35 per cent in that income class in the past have registered an increase. Again, around 83 per cent of those who earned an income of Rs 2,501 to Rs 4,000 per month in the past, are currently in the lower income categories. More importantly, all from past income category of Rs 4,000 and above have slipped to lower income groups. In fact, it appears as if the income mobility is mainly confined to very low levels of past income, while some of those in higher income brackets in the past have experienced a decline. But what is noteworthy is that by and large the percentage of those experiencing downward mobility over time is much less than those who could undergo an increase. Some of the top income classes which reveal largely a decline in the income profile constitute a very small proportion of the total workers. Hence, the number of persons at the aggregate who show improvement in income is much larger than the number of workers whose income declined over time. Therefore, the important point which emerges from the analysis is that the scope for upward mobility exists even among those in the lower income brackets, while among the relatively higher income brackets further mobility is rather sluggish. Public work programmes, and other income support measures including credit assistance, market accessibility and skill upgradation possibly can hasten the process of upward mobility in the relatively lower as well as upper income brackets.

As we piece together information on past and present occupation and employment, contacts and income of the slum workers, there seems to be substantive improvement over time. Though from the detailed listing of occupations, only a nominal number of workers are employed in the formal sector, within the informal sector itself upward mobility has taken place. Improvements are not necessarily to be judged only in terms of change in occupation categories, which we have formed broadly on the basis of the detailed listing; intra-occupational upward mobility in terms of

income cannot be ruled out. From this it may be inferred that the decision to migrate is not irrational even when they are seen to be working within the informal sector their entire life, providing little support to the graduation hypothesis of the Todaro model. In the absence of rural diversification, even petty informal sector activities in the urban areas provide a source of livelihood and open up the scope for substantial changes to take place in future as they combine self-initiatives with their other sources of informal networks or "social capital". Escaping poverty, therefore, is an outcome of various informal mechanisms, operating simultaneously within the informal sector, which engage an overwhelmingly large majority of the workers from slum households. In the next section we examine the association between the duration of migration and the living standard to draw further inferences in the context of upward mobility.

IV
Consumption Expenditure and Saving

We examine the association between per capita total expenditure (PCE) per month for the sample households and the duration of migration in terms of the number of years spent in the city (DMIG) after controlling for other variables like household size (HHSZ), gender of the household head (GEND, 0 for males and 1 for females), proportion of the number of children in the age group 0-14 to the total number of household members in the household (PCHILD), literacy (dummy with a value of

Table 4: Past Occupation and Contacts

Past Occupation	Percentage Who Received Help from Immediate Relatives	Self-Help
Semi-professional	11.1	66.7
Sales	25.9	18.5
Trade	30.4	30.4
Personal Service	30.8	30.8
Manufacturing	19.4	41.9
Commercial Service	40.9	13.6
Transport	22.7	54.5
Tailoring, Knitting	16.7	50.0
Construction	25.9	42.0
Security	14.3	28.6
Repairing	6.3	18.8
Total	24.5	35.8

Source: Same as Table 1.

Table 5: Cross-Classification of Workers by Past and Present Income
(*In per cent in each size class*)

Present Income	(Past Income in Rs)								Total
	0-300	301-500	501-1000	1001-1500	1501-2500	2501-4000	4001-5000	5000 and above	
0-300	3.7	0.0	1.2	0.0	0.0	0.0	0.0	0.0	1.2
301-500	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
501-1000	5.6	2.0	4.7	2.9	4.5	33.3	0.0	0.0	4.7
1001-1500	11.1	11.8	17.6	14.7	9.1	33.3	100	0.0	14.5
1501-2500	35.2	44.7	58.8	50.0	16.6	0.0	100		47.1
2501-4000	31.5	19.6	23.5	14.7	22.7	0	0.0	0.0	22.4
4001-5000	9.3	2.0	3.5	5.9	9.1	0	0.0	0.0	5.1
5000 and above	0.0	7.8	4.7	2.9	4.5	16.6	0.0	0.0	4.3
Total	100	100	100	100	100	100	100	100	100
	(21.2)	(20.0)	(33.3)	(13.3)	(8.6)	(2.4)	(10.4)	(0.8)	(100.0)

Notes: (1) Each column adds up to 100 per cent.
(2) Figures in parentheses across the last row add up to 100 per cent.
(3) Incomes are given in 1999-2000 prices.
Source: Same as Table 1.

1 for those who are literate and 0 for illiterates, EDUC), dummy differentiating between short and long distance migrants from the natives (SDMIG and LDMIG respectively), CAST dummy representing 1 for scheduled caste and scheduled tribe population and 0 otherwise, TOK dummy taking a value of 1 for having access to token or voter's identity or ration card and 0 otherwise, and NGO representing the accessibility of the household to the services of non-government organisations (1 and 0 for positive and negative responses respectively). Besides, six zone specific dummies are considered as the city of Delhi has been divided into seven zones in total. The income of the household head (HHINC) is also taken as a determinant of the standard of living. In an alternate specification we have considered the occupation dummies, instead of income of the principal earner. As there are three types of employment included in the survey, two dummies for self-employment (SELF = 1, 0 otherwise) and regular wage or salaried employment (RSAL = 1, 0 otherwise) have been included, casual employment being the reference category. Similarly, 10 occupation specific dummies (OCCPi, i= 0 to 9) are considered, repair services (OCCP10) being the reference group.

Among the female headed households – where the principal earner is a woman – the standard of living is expected to be lower than that of the male-headed household as labour market discrimination yields lower earnings for women compared to male workers. With a rise in the percentage of children in the household, per capita consumption may actually rise as many of them join the labour market directly or indirectly and augment the family income. Since their volume of consumption is less than that of an adult, their participation in the labour market even with meagre earnings tends to raise the standard of living in per capita terms rather than deteriorate. Among the scheduled castes/tribes the levels of living are usually believed to be lower than others as they may not qualify for high-income jobs due to the lack of skill.

With education and with accessibility to a "token for ownership of property" or voter's identity or ration card and services provided by the NGOs, the standard of living is expected to improve. Among the migrants the long duration ones are supposed to be better off because of their familiarity with the urban job market. With a rise in income – or alternately employment/occupation categories which are expected to provide stable jobs and income – per capita expenditure is likely to increase. It is an empirical question whether short-distance migrants are better off as compared to the long-distance ones or otherwise. Though there is no strong reason to expect any specific result on a priori grounds, the short-distance migrants may be better off due to the property that they have at the place of origin. In other words, better initial conditions possibly allow them to access relatively higher income jobs as they are at an advantage from social and cultural point of view as well.[4] The long distance migrants are on the other hand at the mercy of the labour-contractors, and their job-search is also highly fragmented and limited by their contacts in a culturally more alien atmosphere.

Access to certain type of clusters endowed with basic amenities is possible only through contacts. In this respect certain communities or groups with specific regional/cultural background operate more prominently than the rest. Some of these factors are expected to get captured by the zone specific dummies. In other words, the significance of the zone specific dummies can bring out the

differences in the standard of living that can be attributed to location specific advantages/disadvantages and cultural factors of the groups residing in these areas.

The empirical results reported in Table 6 can be summarised as follows. In the equation for per capita consumption expenditure, one of the variables which is highly significant is household size that reduces the standard of living. Literates appear to be better off as compared to those who are illiterate. With a rise in the percentage of children it is confirmed that consumption expenditure per capita increases, which indirectly tends to confirm the participation of children in the labour market. Income of the household head has a positive effect on consumption per capita. Interestingly, access to a token etc, does not seem to raise the level of living; rather it dampens the per capita expenditure. This is possibly because households with access to a token or voter's identity or ration card invest in housing, which could at times be at the cost of consumption expenditure. Instead of income if we consider the employment categories in terms of dummies, those who are in regular wage or salaried jobs appear to have lower consumption expenditure per capita while that of self-employed is not different from the casual workers. This is possibly because if the household head is engaged in a stable employment the probability of other members joining the labour

Table 6: Regression Results for Per Capita Total Monthly Expenditure (Model: OLS)

Exp Var	Equation 1		Equation 2		Equation 3	
HHSZ	-117.34	(-12.45)*	-95.19	(-10.69)*	-95.06	(-10.70)*
DMIG	44.93	(0.82)	46.83	(0.84)	41.85	(0.75)
EDUC	90.59	(2.97)*	80.67	(2.58)*	73.40	(2.33)*
GEND	16.39	(0.26)	-3.33	(-0.05)	20.03	(0.31)
PCHILD	1.98	(2.75)*	0.68	(0.98)	0.51	(0.74)
HHINC	0.04	(6.25)*				
CAST	-27.48	(-0.92)	-23.01	(-0.74)	-15.27	(-0.49)
ZONE1	-22.22	(-0.36)	-23.34	(-0.37)	-18.50	(-0.29)
ZONE2	-137.53	(-1.88)**	-135.53	(-1.81)**	-129.61	(-1.73)**
ZONE3	-43.62	(-0.68)	-36.30	(-0.56)	-30.33	(-0.47)
ZONE4	-146.97	(-2.32)*	-148.06	(-2.29)*	-144.17	(-2.23)*
ZONE5	-62.87	(-0.95)	-71.66	(-1.07)	-81.59	(-1.20)
ZONE6	-68.80	(-0.81)	-69.98	(-0.81)	-80.12	(-0.93)
NGO	63.96	(1.17)	64.55	(1.16)	59.25	(1.07)
TOKEN	-265.77	(-4.31)*	297.78	(-4.73)*	-288.44	(-4.56)*
SDMIG	-16.06	(-0.20)	-38.58	(-0.47)	-42.80	(-0.52)
LDMIG	59.23	(0.71)	70.44	(0.83)	65.60	(0.77)
SELF			29.48	(0.79)		
RSAL			-113.67	(-3.06)*		
OCCP0					58.99	(0.58)
OCCP1					-151.70	(-1.65)**
OCCP2					-69.22	(-0.78)
OCCP3					-280.85	(-2.80)*
OCCP4					-117.65	(-1.24)
OCCP5					-80.11	(-0.87)
OCCP6					-9.27	(-0.08)
OCCP7					-11.49	(-0.09)
OCCP8					-187.47	(-2.18)*
OCCP9					-103.15	(-0.58)
INTERCEPT	1496.59	(11.79)*	1648.31	(12.52)*	1719.04	(11.49)
R²		0.26		0.24		0.24
N		800		800		800

Notes: 1 Figures in parentheses give t ratios. * and **represent significance at 5, 10 and 20 per cent levels respectively.

2 The occupation categories are as follows:OCCP0 = Semi-professionals, OCCP1= Sales Workers, OCCP2 = Trade Workers, OCCP3 = Personal Services, OCCP4 = Manufacturing, OCCP5 = Commercial Services, OCCP6 = Transport, OCCP7 = Tailoring etc, OCCP8 = Construction, OCCP9 = Security Workers.

Source: Based on slum survey, 1999-2000.

market is low, and hence the consumption expenditure tends to get affected adversely. Occupation wise the regression results show that on an average consumption per capita is lower in the household if the head is engaged in personal services. The dummy for construction also takes a negative sign. Across space, zones 2 and 4 are found to have lower levels of living compared to the rest.

It is surprising that the duration of migration does not turn out to be significant in the equation for per capita expenditure. This could be due to the inclusion of the income variable in the equation – the effect of migration is possibly captured by the income variable. However, as we estimate a binomial logit model for those who can save and cannot save, irrespective of the nature or the amount of saving, the following results are obtained. With a rise in the duration of migration the probability of not saving declines, implying that the long duration migrants are more likely to save. Similarly, with literacy and income, the likelihood of saving rises. Households, which have access to services provided by NGOs are also more likely to save.

The empirical results also indicate that the long-distance migrants are less likely to save compared to the short-distance migrants and the local residents, though in terms of consumption expenditure the differences were not statistically significant. As income is replaced by the nature of employment dummies, we note that household heads in regular wage employment show a lower probability to save than the casual labour dependent households. Similar results were also observed in the case of consumption expenditure, which go against the common belief. But it could be due to the fact, as mentioned above, that jobs of the household-heads, which are relatively less uncertain, possibly keep other members of the households outside the labour market. Also, it is natural that a more risk prone household would show a higher

Table 7: Binomial Logit Model for Income Mobility
(Maximum Likelihood Estimate)

Variables	Coefficient	Marginal Effect
NTW1	-0.72 (-1.40)***	-0.09
NTW2	-0.85 (-1.41)***	-0.12
NTW4	-0.06 (-0.08)	-0.006
NTW6	-1.02 (-0.74)	-0.16
NTW7	-1.68 (-0.99)	-0.31
EDU1	0.26 (0.44)	0.03
EDU2	-0.03 (-0.04)	-0.003
EDU3	-0.91 (-0.71)	-0.14
PROP	-0.41 (-0.86)	-0.04
SCST	-0.27 (-0.54)	-0.03
OBC	0.15 (0.26)	0.02
HHSZ	0.21 (1.81)**	0.02
GEND	-2.06 (-2.45)*	-0.39
POLC	0.57 (1.12)	0.07
AGE	0.42 (3.70)*	0.05
AGSQ	-0.005 (-3.82)*	-0.001
INTER	-6.52 (-2.68)*	
Chi-Sq	31.01*	
N	203	

Notes: (1) For income mobility those who had a change: 1, and those who did not: 0
(2) *, ** and *** represent significance at 5, 10 and 20 per cent levels respectively.
(3) NETW3 and NETW 5 in the income mobility function are dropped due to absence of observations.
(4) N represents the number of individuals for which this income information could be obtained corresponding to entry level job and present job.
Source: Based on Slum Survey (2004-05).

probability to save to face contingency than a household which expects to receive a steady flow of income. All this would suggest that casual labour dependent households may end up having a larger magnitude of total household income and a higher probability to save than others.[5] Relating to occupation dummies the empirical results show that commercial services and transport hold the possibility of a higher saving. Across space, those in zone 1 are more likely to save compared to their counterparts in other zones.

V
Determinants of Income Mobility

Based on the survey of 200 slum households in 2004-05, we have tried to identify certain determinants of income mobility. This is tried in a binomial logit framework assigning 1 to those whose income changed and 0 to those whose income did not change. Since the bulk of the respondents reported an increase in income, modest though, between the entry level job and the present job (after adjusting for price changes), these results may be interpreted to understand upward mobility.

Some of the social capital networks are perceived in terms of connections with relatives (NETW1), co-villagers and neighbours (NETW2), members of the same caste group (NETW3), friends (NETW4), colleagues at or employer of the present or previous job (NETW5), religious organisations, NGOs, private contractors and government employment exchange (NETW6), slum or community leader (NETW7), who helped them migrate or access information on the job market. The effect of these networks is examined in the income mobility function keeping self-help as the comparison category.

Along with network dummies, education dummies (EDUi=1,2.3)[6] with illiterates as the comparison group, household size (HHSZ), caste groups differentiating among scheduled caste/tribe (SCST), backward caste (OBC) and the rest as the comparison group, gender dummy (GEND with 0 for males and 1 for females), access to political contact (POLC, 1 for having contact and 0 for its absence) and availability of property at the place of origin (PROP, 1 for having property and 0 otherwise) and age (AGE) as a proxy for experience in the job market are included as explanatory variables. Age-square (AGSQ) is also considered to verify if the possibility of mobility declines after a certain age.

The estimates of the binomial logit model attempted show that age (not linearly though)[7] and household size raise the probability of experiencing income mobility. Workers from larger households are possibly compelled to strive hard to enhance their income. Female workers are less likely to experience income mobility compared to the male workers. Networks which operate through relatives and neighbours/co-villagers tend to reduce the scope for upward mobility though they are indispensable at the time of entry to the labour market. Caste-kinship bonds are important in the initial stages to access jobs but for further mobility – whether intra- or inter-occupational – self-initiatives bring in more information and generates skill and other pre-requisites. Education does not turn out to be an important determinant of mobility, suggesting that skill and work experiences play a crucial role in explaining rise in income in the informal sector. Further, there is no evidence in support of caste discrimination in the context of mobility. Political contact too does not help in augmenting income though there is ample evidence

showing slums being used as major "vote banks" [Edelman and Mitra 2006].

VI
Conclusion

In this paper we made an attempt to examine the upward income mobility hypothesis. Though most of the workers seem to be employed in the informal sector both in the past and present, a large majority of them have experienced improvements in terms of earnings. Both inter- and intra-occupational changes within the informal sector itself have been beneficial to the workers. At the entry point, networks through relatives, etc, are important but at a later stage self-efforts help them improve their nature of job and climb up the income ladder. On the whole, though the graduation hypothesis, i e, transfer of labour from the informal to the formal sector, does not seem to receive much empirical support, movements within the informal sector are substantive and prove to be beneficial. However, the cases of downward income mobility, particularly among those located in the higher income brackets in the past, have also been noted. The only major support in favour of the hypothesis is that the cases of downward mobility are much fewer in number than upward mobility. The duration of migration does not seem to have any significant effect on the expenditure per capita, but it shows a positive influence on the probability to save. With experience the workers are likely to gain in terms of income mobility. To conclude, while the evidence in favour of upward mobility is not overwhelming, it would be equally erroneous to reject the supporting facts howsoever few they may be. Income support measures including the scope to up-grade skill can fasten the process of upward mobility in the relatively lower income brackets and stop the process of downward mobility in the relatively higher income brackets. What is noteworthy is that even in these low income households, with no major income support policy the workers are able to earn a source of livelihood based on self-initiatives and "social capital". These informal security mechanisms and the self-efforts need to be taken into consideration in framing the policy directives so that they remain cost efficient as well as compatible with the needs and requirements of the residents. Such complementary relationship is essential in making policies popular and effective. EPW

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Notes

1 Based on the detailed quantitative survey carried out in 1999-2000 we later went back to the households to clarify certain responses in relation to the income mobility aspect, as the original survey did not include some of the responses clearly.
2 Mitra (1994) noted that in relative terms industry and informal sectors are inversely related though the elasticity of employment in the informal sector

with respect to the employment in the industrial sector is positive.
3 However, within the groups, movements might have taken place.
4 With a rise in the distance between the places of origin and destination in India, the social differences increase and so also the linguistic variations.
5 Since total household income of these households (in an attempt to reduce uncertainty) is greater than others, their consumption per capita may also be higher than others.
6 With illiterates as the reference category, EDU1 represents those who are literate and those who have studied up to class 9, EDU2 encompasses those who have studied above class 9 and completed secondary education but not graduation, and EDU3 represents graduates or those who have acquired a higher level of education including technical and non-technical, professional, and vocational courses.
7 This means that after a certain age the probability of mobility declines.

References

Banerjee, Biswajit (1986): *Rural to Urban Migration and the Urban Labour Market,* Himalaya Publishing House, Delhi.

Breman, Jan (1976): 'A Dualistic Labour System? A Critique of the 'Informal Sector' Concept', *Economic and Political Weekly*, November 27, December 4 and 11.

Datta-Chaudhuri, Tamal (1989): 'A Theoretical Analysis of the Informal Sector', *World Development,* Vol 17, No 3.

Edelman, Brent and Arup Mitra (2006): 'Slum Dwellers' Access to Basic Amenities: The Role of Political Contact, Its Determinants and Adverse Effects', *Review of Urban and Regional Development Studies,* Vol 18, No 1.

Gupta, Indrani and Arup Mitra (2002): 'Rural Migrants and Labour Segmentation: Micro-Level Evidence from Delhi Slums', *Economic and Political Weekly*, January 12.

Hemmer, H and C Mannel (1989): 'On the Economic Analysis of the Urban Informal Sector', *World Development*, Vol 17, No 10.

International Labour Office (1972): *Employment, Incomes and Equality: A Strategy for Increasing Productive Employment in Kenya*, ILO, Geneva.

Mitra, Arup (1994): *Urbanisation, Slums, Informal Sector Employment and Poverty: An Exploratory Study*, B R Publishing Corporation, Delhi.

– (2003): 'Occupational Choices, Networks and Transfers: An Exegesis Based on Micro Data from Delhi Slums', Manohar, New Delhi.

Papola, T S (1981): *Urban Informal Sector in Developing Economy*, Vikas Publishing House, Delhi.

Standing, Guy (1977): 'Urban Workers and Patterns of Employment' in S Kannappan (ed), *Studies of Urban Labour Market Behaviour in Developing Areas*, International Institute for Labour Studies, Geneva.

Stark, Oded (1982): 'On Modelling the Informal Sector', *World Development*, Vol 10, No 5.

Todaro, M P (1969): 'A Model of Labour Migration and Urban Unemployment in Less Developed Countries', *The American Economic Review*, Vol LIX, No 1.

Tokman, Victor E (1989): 'Policies for a Heterogeneous Informal Sector in Latin America', *World Development*, Vol 17, No 7.