TWIN ISSUES OF DISCRIMINATION AND WORK-RELATED INSECURITY ADDRESSING PLIGHT OF WAGEWORKERS THROUGH SOCIAL CLASS ANALYSIS

September, 2008

Varinder Jain Research Scholar Centre for Development Studies Prasantha Nagar, Ulloor, Thiruvananthapuram – 695 011 Kerala (INDIA) E-mail: <u>varinder@cds.ac.in</u> Mobile: (+91) 989 541 8673

Paper prepared for presentation at the *Fourth Annual Conference on Economic Growth and Development*, to be held at the Indian Statistical Institute, New Delhi (INDIA) during December 17-18, 2008

Twin Issues of Discrimination and Work-related Insecurity Addressing Plight of Wageworkers through Social Class Analysis

This study examines the twin issues of wage discrimination and exposure to multi-faceted work-related insecurity in unorganised establishments through a social class analysis, further examined across migration status. It finds that wageworkers belonging to socially-deprived castes of SC/ST are at disadvantage vis-à-vis their counterparts belonging to Non SC/ST social categories in terms of their experience of wage discrimination and exposure to various work-related insecurities – migration brings an added disadvantage to these wageworkers. The inferences derived by utilising Oaxaca's methodology (for estimating the incidence of discrimination) and Ordered Probit Regression (for estimating the marginal effects of various characteristics on wageworkers' exposure to different insecurities) in this study are based on information collected through primary survey of unorganised establishments located in the urban segment of Punjab – one of the prosperous states of the Indian union. Sample size of the study is 300 wageworkers.

1. MOTIVATION FOR THE STUDY

In an earlier study, Jain (2008), we examined the growth dynamics of Punjab's urban unorganised establishments from labour perspective. It has been found that these unorganised establishments have relied, to a large extent, on labour for ensuring their survival and growth in competing business environs, and consequently, most of the employments generated by these establishments have not been of 'much-good' quality in terms of indicators like wagesetting, earnings, job termination, upward mobility and job satisfaction. Though the analytical exercise undertaken by this study to explore the growth dynamics of unorganised establishments from a labour perspective has been quite comprehensive, the derived inferences urge for further exploration of some of the issues like: Why do wageworkers enjoy a differing quality of employment irrespective of having similar characteristics of migration status, skill status and employment status¹? On the basis of inferences derived from available literature on caste-induced labour market disadvantage and discrimination (Banerjee and Knight (1985), Thorat (1999), Madheswaran and Attewell (2007)), this heterogeneity in wageworkers' differing experience of employment may be explored through their social background. Though we could have done so there itself by including another characteristic of social class, we chose to withhold it primarily because this aspect deserves a much-more comprehensive analysis than a mere indication of social class based differences.

Caste system in India has roots in the early Vedic period (Gupta (1978)) when society was classified into four *varnas* (that later grew into five) viz. *Brahmins*, *Kshatriyas*, *Vaisyas*, *Sudras* and *Ati Sudras*. Such system has implicitly regarded caste as a major factor by which one's *karma* is determined. It was held that one's deeds over his life-course were shaped by his birth and not by his effort. Such caste-based allocation of work had implicit 'graded

¹ Based on Table 8 of Jain (2008)

inequality' that kept higher castes at relative advantage vis-à-vis lower castes in all the aspects ranging from knowledge to the command over resources. The Indian Caste System, which, "is believed to be nearly 3000 years old" (Deshpande (2000b): 322), has deepened social inequalities to such a large extent that even today, a sufficiently large proportion of the poor belong to SC and ST socially-deprived classes (Meenakshi, et al. (2000), Sundaram and Tendulkar (2003)). Though after Independence, the Indian constitution made specific provisions for the empowerment of backward and deprived castes, the discrimination, in one sense or the other, based on caste does prevail in the Indian economy. A majority of the workers belonging to deprived castes are still at the lower rungs of employment ladder with lower skills and relatively restricted scope for upward mobility. Moreover, they receive unfair treatment from their employers either in terms of wages or working conditions or both. Though these aspects received the attention of a number of researchers (Deshpande (2000a), Das (2002), Gang, et al. (2002), Borooah (2005), Thorat and Lee (2005), Ito (2007)), there has been a dearth of literature on caste-based discrimination and deprivation in the context of unorganised manufacturing sector – a sector that employs a sufficiently large proportion of the workforce belonging to these socially-deprived castes².

This study is aimed at examining the aspect of caste-based ill-treatment in the context of Punjab's urban unorganised manufacturing sector³. Specifically, this study addresses the twin issues of discrimination and work-related insecurity – both of these domains of work experience have relevance for examining wageworkers' nature of employment as these are much conditioned by the 'dependent' nature of wageworkers' employment. The study is spanned over five key sections. This first section outlines the motivation for the study. The second section discusses the relevance of social class analysis in the context of Punjab's urban unorganised establishments. The third section examines the incidence of wage differentiation and discrimination in Punjab's urban unorganised establishments. The fourth section examines wageworkers' exposure to work-related insecurity and the fifth section summarises emerging conclusions from the study.

² The secondary NSSO data on unorganised manufacturing does not provide information on the social class of wageworkers, we, through our survey, have found that Punjab's urban unorganised manufacturing sector employs 64 percent of the wageworkers belonging to the SC and ST households. This primary survey has been conducted during March-July, 2006. We surveyed a total of 125 establishments employing 543 wageworkers – out of which, we randomly selected 300 wageworkers for surveying their work-related characteristics.

³ An earlier study by Jodhka (2000) revealed that in case of Punjab, the caste system is not that severe, in its strictest sense, as the process of economic growth have removed the notions of 'pollution' and 'untouchability' to a large extent.

2. PUNJAB'S URBAN UNORGANISED ESTABLISHMENTS AND THE RELEVANCE OF SOCIAL **CLASS ANALYSIS: KEY INSIGHTS FROM SURVEY DATA**

Punjab is one of the prosperous states of the Indian union in terms of real per capita income levels. It has attained growth in the gross state domestic product at the rate of 5.32 percent per annum during the 1980s and later on, with a somewhat slow rate of annual growth (4.71 percent) during the 1990s⁴. Though agriculture is the mainstay of Puniab's economy, the significance of manufacturing sector is emerging recently. There also exists a substantially large unorganised (informal) sector. NSSO's survey (conducted in 1999-2000) signifies the role of Punjab's unorganised sector in providing employment to as many as 20.67 lakh workers – the shares of male and female workers being 89.45 and 10.55 percent respectively, with the dominance of the urban segment⁵ and within the urban segment, the manufacturing sector holds a significant employment share of 23.53 percent⁶. Wage employment in unorganised manufacturing sector is provided by establishments and in the context of Punjab, urban establishments hold significance for providing wage employment to a majority of the workers (84.45 percent, as per Nsso (2008)). We, on the basis of our survey data, discuss below the deprivation of SC/ST wageworkers vis-à-vis non SC/ST wageworkers working in Punjab's urban unorganised establishments.

a. Age at Labour Market Entry

Age at labour market entry is the most important variable having implications for workers' career mobility as an early entry into the labour market affects workers' capabilities



household poverty (Lieten (2002), Amin, et al. (2004), Padhi (2004)). SC/ST workers having poor economic background become relatively more vulnerable to join labour market at relatively smaller ages. Our survey results point out that among the wageworkers entering labour market at

adversely. It is most often the result of

Source: Primary Survey

⁴ See Ahluwalia (2000)
⁵ The urban share in total employment is 67.43 percent.

⁶ The urban manufacturing sector, in terms of share in total employment, holds the second position (at 23.53 percent) preceded by the trading and repair services (48.91 percent).

ages below 14 years, a relatively high proportion belong to the SC/ST social class whereas in case of non SC/ST wageworkers, a relatively higher proportion joined labour market in higher age-groups of 15-18 years and 19-22 years. We also found SC/ST wageworkers joining labour market at later ages of above 22 years. Most of these workers are migrants who started working effectively only after their migration. At their native places, they were not adequately employed so we have not considered them employed at that stage⁷.

b. Education

In terms of educational attainment, the wageworkers belonging to the SC/ST social classes have been found to be deprived vis-à-vis their non SC/ST counterparts. A majority of the SC/ST wageworkers are either illiterate or can read and write (with relatively large



proportion of illiterate ones). There are very few who have education up to the middle standard, otherwise those who are literate, have education up to the primary standard. The share of SC/ST workers having secondary level education or any technical diploma/degree is quite

negligible which is not the case with the non SC/ST wageworkers. These wageworkers are relatively better educated and possess education of relatively high standards.

c. Vocational Training and Skill Status

Though a majority of the wageworkers in Punjab's urban unorganised establishments did not take any vocational training, among those who did so, a clear social class disparity can be noticed. A very small proportion of the SC/ST wageworkers have taken vocational training whereas such proportion of the non SC/ST wageworkers is 5.47 times more than the SC/ST wageworkers. Such disparity has had implications for wageworkers' skill status irrespective of the fact that most of the wageworkers receive on-the-job training in unorganised

Source: Primary Survey

⁷ Our survey question enquired specifically: At what age, you have started devoting most of your time to work?

establishments. It has been found that a majority of the SC/ST wageworkers are unskilled. The share of semi-skilled SC/ST wageworkers is also relatively high but there are relatively few SC/ST wageworkers who are the skilled ones but such is not the skill pattern among the



SC/ST non wageworkers. А majority of them are the skilled ones. A large proportion of these wageworkers are also semi-skilled and the share of unskilled wageworkers is very small in this social class. Such disparity in skill status is also

Source: Primary Survey

reflected in employment-status differences among wageworkers belonging to both social groups (as evident from next paragraph).

d. Employment Status

Lower level of skill for SC/ST wageworkers has had implications towards their employment status. One may easily trace segmentation in the employment patterns of Punjab's urban unorganised establishments. Figure 4 reveals that a majority of the casual and contractual jobs are performed by SC/ST wageworkers whereas a relatively high proportion of the regular jobs are occupied by the non SC/ST wageworkers. Interestingly, there is no SC/ST



wageworker having 'permanent' employment status. The SC/ST workers performing the casual and contractual jobs are 8.91 and 1.84 times more than non SC/ST wageworkers. The non SC/ST wageworkers are dominating the SC/ST wageworkers in regular jobs by 1.66 times.

Source: Primary Survey

e. Average Monthly Earnings and Daily Working Time

SC/ST wageworkers receive an average monthly wage of Rs. 2290.89 whereas non SC/ST wageworkers receive the average monthly wage of Rs. 3412.50. More striking differences in this respect are found through a classification of SC/ST and non SC/ST wageworkers by their migration status. These results are plotted as Boxplots in figure 5, which reveals that the migrant SC/ST wageworkers receive the lowest average monthly wage whereas the native

Fig.5. Wageworkers' Monthly Wage, by Migration & Social Class



Source: Primary Survey

non SC/ST wageworkers receive the highest wage. Native SC/ST wageworkers though receive higher wage than the migrant SC/ST wageworkers, they are than the migrant non worse SC/ST wageworkers. Boxplots also reveal the distribution of average monthly wage. It can be inferred that the distribution is more or less symmetric for non SC/ST wageworkers belonging to both migrant native and categories whereas such is not the SC/ST case with non

wageworkers as more of the migrant SC/ST wageworkers are receiving lower wage than the average wage and quite oppositely, more of the native SC/ST wageworkers are receiving more wage than the average wage.

A consideration of average daily working hours further reveals the plight of SC/ST wageworkers vis-à-vis non SC/ST wageworkers. The daily working time, on an average, for the SC/ST wageworkers stand at 13.85 hours whereas the same for non SC/ST wageworkers stand at 10.49 hours. A consideration of the working time as per wageworkers migration status besides social class reveals that the migrant SC/ST wageworkers work relatively longer working hours than the native non SC/ST wageworkers. Such disparity in daily working time has further implications towards the average hourly earnings of wageworkers (as discussed in the subsequent section).

3. WAGEWORKERS' EXPERIENCE OF WAGE DISCRIMINATION

Though a large body of literature examining the incidence of discrimination focuses on the gender dimension, we refrain from making a similar attempt primarily because of a very small share of female workers in total labour force. Rather, we focus on wageworkers' migration status and social class to assess the prevalence of discrimination along these lines.

3.1. Methodology

For locating the determinants of wages, we adopt the standard wage function devised by Mincer (1974). This wage function is based on the human capital approach and thereby considers logarithm of wage as the function of human capital characteristics that includes education, age and labour market experience.

$$\ln W_i = \beta_0 + \alpha_1 Education + \alpha_2 Age + \alpha_3 Age^2 + \alpha_4 Experience$$

In the context of unorganised manufacturing where wageworkers are not that much literate, the wage level is also influenced by wageworker's employment and skill status. Therefore, in addition to the above variables, the Mincerian wage function may be modified as

$$\ln W_i = \beta_0 + \alpha_1 Education + \alpha_2 Age + \alpha_3 Age^2 + \alpha_4 Experience + \alpha_5 ESI$$

where i

= 1 for Migrant SC/ST wageworkers

= 2 for Migrant Non SC/ST wageworkers

= 3 for Native SC/ST wageworkers

= 4 for Native Non SC/ST wageworkers

W is the average hourly wage and ESI is the 'employment-skill index'.

Above evidence on monthly earnings revealed that there are differences in the average monthly wage received by of wageworkers belonging to these four categories. Differences in time worked also influences the average monthly earnings. So, a better way to estimate wage gaps is to consider average hourly wage of these wageworkers. Given this, it needs to be learned further whether there exist any systematic difference in the average hourly wage received by these four categories of wageworkers along their conditional distribution of wages.

A most commonly used approach for estimating the wage gaps utilises the regression approach that examines the wage gap at the mean of the distribution. But, emerging studies in the literature have suggested that the wage gap does not remain uniform throughout the wage distribution. It may be higher in the upper part than that in the lower part of the distribution (see, Meng and Miller (1995); Kuhn (1987)). Therefore, a better approach may be to use the quantile regression⁸ approach devised by Koenker and Bassett (1978); Koenker and Hallock (2001) as it examines the wage gap at every quantile of the distribution – the quantiles need to be specified by the researcher.

Having estimated the coefficients of relevant wage-determining factors through the quantile regression approach, the next step is to estimate the wage discrimination. Following Oaxaca (1973), the wage discrimination can be inferred by locating the difference between say, (migrant SC/ST wageworkers') actual hourly earnings and the predicted hourly earnings that they could have received if they could have been treated like other wageworkers say, (native non SC/ST wageworkers) by their employers, other things being equal. A formal specification of Oaxaca's decomposition is:

Let's denote the migrant SC/ST and Native non SC/ST wageworkers by 'm' and 'n' respectively. The θ quantile regression predictions of the hourly earnings of each worker can be expressed as

$$\hat{Y}_{\theta}^{n} = X^{m} \hat{\beta}_{\theta}^{m}$$
$$\hat{Y}_{\theta}^{n} = X^{n} \hat{\beta}_{\theta}^{n}$$

where Y_{θ} (i = m, n) indicates the quantile regression prediction of the θ^{th} percentile of Y, given X. Therefore, the θ^{th} percentile of Y predicted for each group (at the mean values of the covariates) is given by

$$\hat{Y}_{\theta,\overline{X}}^{n} = \overline{X}_{\theta,\overline{X}}^{m} \hat{\beta}_{\theta}^{m}$$

$$\hat{Y}_{\theta,\overline{X}}^{n} = \overline{X}_{\theta,\overline{X}}^{n} \hat{\beta}_{\theta}^{n}$$

$$\wedge i$$

where $Y_{\theta,\overline{X}}$, (i = m, n) indicates the predicted value of the θ^{th} percentile of Y, given the mean values of the covariates. In such situation,

⁸ A significant merit of the quantile regression over the 'Ordinary Least Squares' (OLS) regression is that unlike OLS regression that is based on mean of the conditional distribution of the regression's dependent variable, it allows for a full characterisation of the conditional distribution of the dependent variable. Moreover, in comparison to the OLS regression, it is less sensitive to the presence of outliers in the dependent variable because in quantile regression, the residuals to be minimised are not squared, as is done in case of the OLS regression. Due to this, the residuals do not receive much emphasis. Also, the quantile regression is more efficient than the OLS regression when the distribution of the error term is not normal (Buchinsky (1994)).

Total Wage Gap =
$$\hat{Y}_{\theta,\overline{x}}^{n} - \hat{Y}_{\theta,\overline{x}}^{m}$$

This total wage gap can be decomposed as the explained wage gap and the unexplained wage gap. In Oaxaca's (1973) methodology, the assumption is that the discriminated group (here, migrant SC/ST) is paid the wages of the other group, which means that the migrant SC/ST wageworkers and the native non SC/ST wageworkers are the perfect substitutes of each other. It implies that both native non SC/ST and migrant SC/ST wageworkers, if they have the same age, same education, same labour market experience and similar rating at the employment status and skill index, they should get the same wage.

Or

Or

Above decomposition of the wage gap (in equation III) points that the wage gap exists due to differences in endowments (first term on right hand side) and returns to endowments (second term on the right hand side).

3.2. Wage Discrimination Across Migration Status and Social Class

By using Mincerian wage function, we estimate the regression coefficients. Owing to the fact that we found the presence of heteroskedasticity⁹ in the data, we do not present here the OLS regression results as they are not meaningful. The quantile regression takes care of the heteroskedasticity problem in the data, so we estimate it at five quintiles for migrant SC/ST, migrant non SC/ST, native SC/ST and native non SC/ST wageworkers separately. The results are reported in Table A.1 in appendix.

Using these coefficients, we estimated the predicted hourly wage for these four categories of wageworkers at the mean values of the respective parameters for each quintile. The derived results are presented in Table 1. It is found that in the initial quantiles, the migrant SC/ST wageworkers (first three quantiles), migrant non SC/ST wageworkers (first and third

⁹ The tests such as Szroeter and Breusch-Pagan/Cook-Weisberg confirm the presence of heteroskedasticy in the OLS regression model.

quantile), native SC/ST wageworkers (first and second quantile) and native non SC/ST wageworkers (first, second and third quantile) receive higher actual hourly wage than their predicted hourly wage. In the higher quantiles, these four types of wageworkers receive lower actual hourly wage than their predicted hourly wage.

			Q1	Q2	Q3	Q4	Q5
	Μ	ligrant SC/ST	3.24	4.19	6.09	9.12	13.40
Predicted Hourly	Mig	rant Non SC/ST	3.30	7.55	7.77	10.11	13.39
Wage (Rs.)	N	lative SC/ST	3.02	4.81	9.52	11.77	19.26
	Nat	ive Non SC/ST	8.65	12.75	14.77	18.58	28.36
	Μ	ligrant SC/ST	3.43	4.27	6.16	7.47	9.32
Actual Hourly	Mig	rant Non SC/ST	3.53	7.45	9.34	10.12	11.03
Wage (Rs.)	Ν	lative SC/ST	3.48	5.28	9.06	9.62	14.61
	Nat	ive Non SC/ST	9.51	13.14	15.12	14.61	24.42
Migrant SC/ST w Migra	age at p nt non \$	par treatment with SC/ST	3.20	3.78	6.15	8.92	11.41
Migrant SC/ST w Na	age at p tive SC	par treatment with /ST	3.92	4.84	7.09	10.02	16.56
Migrant Non SC/S with N	ST wag Native S	e at par treatment SC/ST	4.47	9.22	8.40	11.89	19.28
Migrant SC/ST w Nativ	age at p e non S	par treatment with SC/ST	4.12	5.40	8.12	12.91	18.86
Migrant Non SC/3 with Na	ST wag tive nor	e at par treatment າ SC/ST	4.26	11.93	9.28	15.29	22.99
Native SC/ST wa Nativ	age at p e non S	oar treatment with SC/ST	5.26	7.81	11.24	12.73	16.21
	То	tal Wage Gap	0.06	3.36	1.68	0.98	-0.01
Migrant Non SC/ST vs	Gap	Endowment Differences	0.10	3.76	1.62	1.18	1.98
Migrant SC/ST	due to	Differences in Returns	-0.04	-0.40	0.06	-0.20	-1.99
	То	tal Wage Gap	-0.22	0.62	3.43	2.65	5.86
Native SC/ST vs	Gap due to	Endowment Differences	-0.90	-0.03	2.43	1.75	2.70
Migrant SC/ST		Differences in Returns	0.68	0.65	1.00	0.90	3.16
	То	otal Wage Gap	-0.28	-2.74	1.75	1.67	5.87
Native SC/ST vs Migrant Non	Gap	Endowment Differences	-1.45	-4.41	1.12	-0.11	-0.03
SC/ST	to	Differences in Returns	1.17	1.67	0.63	1.78	5.89
	То	tal Wage Gap	5.41	8.56	8.67	9.45	14.96
Native Non SC/ST vs	Gap	Endowment Differences	4.53	7.34	6.64	5.66	9.50
Migrant SC/ST	due to	Differences in Returns	0.88	1.22	2.03	3.79	5.46
	Total Wage Gap		5.35	5.20	7.00	8.47	14.97
Native Non SC/ST vs	Gap	Endowment Differences	4.38	0.81	5.49	3.29	5.36
SC/ST	aue to	Differences in Returns	0.96	4.38	1.51	5.18	9.60
	То	tal Wage Gap	5.63	7.94	5.25	6.80	9.10
Native Non SC/ST vs Native	Gap	Endowment Differences	3.39	4.94	3.53	5.85	12.15
SC/ST	to	Differences in Returns	2.24	3.00	1.72	0.96	-3.05

TABLE 1: HOURLY WAGE DISCRIMINATION, BY MIGRATION & SOCIAL CLASS

Source: Based on Primary Survey

The predicted hourly wage of migrant SC/ST wageworkers remained lower than other three types of wageworkers across all the quantiles except first which reveals merely the fact that the human capital of migrant SC/ST wageworkers is relatively inferior than other wageworkers. Nevertheless, it is quite meaningful to examine the wage gaps between similar wageworkers irrespective of their social class. An exploration of wage distribution into the hypothetical situation of migrant SC/ST wageworkers receiving similar treatment as migrant non SC/ST wageworkers does not reveal much striking differences but if these migrant SC/ST wageworkers could have received similar treatment as native SC/ST wageworkers, they could have received much higher hourly wages under this situation across all the quantiles. In terms of its constituents, it is found that there exist differences in returns to endowments. But, the inferences derived are not much striking.

But, if we suppose the case where migrant SC/ST wageworkers receive similar treatment as received by native non SC/ST wageworkers, we find the existence of large wage gaps which increase in magnitude with each movement toward higher quantile. A large part of this wage gap is attributed to the endowment differences between these two types of workers. Nevertheless, there exist sufficiently high differences in returns to endowments, which is nothing but a clear manifestation of caste-based discrimination experienced by the migrant SC/ST wageworkers. Likewise is the case with treatment received by native SC/ST wageworkers.

4. WAGEWORKERS' EXPOSURE TO WORK-RELATED VULNERABILITY

4.1. Work-related Vulnerability: A Conceptualisation

Work-related vulnerability may exist across five dimensions viz. job insecurity, economic insecurity, functional insecurity, agency insecurity and recognition insecurity.

4.1.1. Job Insecurity

Job insecurity is often considered as the subjective phenomena and the workers are often asked to assess their job insecurity in terms of its possibility or the threat (Naswall and Witte (2003)). Though we too place significance on workers' subjective perception for evaluating his job insecurity in terms of its possibility or threat, we consider the aspect of job search as well because we believe that in the context of unorganised industry, an equally perilous situation may emerge when in the event of job loss, the worker suffers from low/weak job search potentials. The incidence of job loss cannot affect much to a worker if he possess better job search potentials but if he lacks these potentials then the incidence of job loss assumes the form of job insecurity. Therefore, a consideration of the aspect of job search (in terms of its mode, chance and waiting time) along with job loss (threat and possibility) makes the concept of job insecurity more comprehensive and meaningful from the perspective of the unorganised industry workers.

4.1.2. Economic Insecurity

Economic insecurity is conceptualised by considering earning potential, saving potential and the borrowing behaviour. The earning potential covers both income adequacy and income variability. Income adequacy involves three questions enquiring about income sufficiency, relative living standards and the ability to lend money. Likewise, the saving potential involves regular saving frequency and resourcefulness in old age; Borrowing behaviour is captured through wageworkers' frequency of borrowing and the borrowing source. We also asked the worker to rate his access to credit in case of need. In our conceptualisation of economic insecurity, we have covered the domains of not only the present well-being in absolute and relative sense but also the future well-being. This conceptualisation of economic insecurity may be termed as relatively more wide-ranging than that used in literature¹⁰.

4.1.3. Functional Insecurity

Functional insecurity reveals the hardships related to the working conditions of the unorganised industry workers. In order to capture all the disquieting dimensions related with the working nature of hired jobs, we have covered various aspects such as work-intensity, working environments, job satisfaction and the health adversities. The work-intensity is captured through an enquiry about workers' working time and the nature of work activity. For examining the working time, we asked specifically about workers' stay at workplace, daily working time, compensation for overtime work, Sunday-off and work status in case of illness. Similarly, for examining the nature of work activity, an enquiry is made about workers' compulsion to work under strained working postures and lifting of heavy objects. For exploring about working environs and workers' satisfaction with various aspects related to their job, we asked them to reveal their perceptions. Similarly, for health adversities, we enquired about workers' perception and impact.

 $^{^{10}}$ Ilo (2004), for example, considers a worker as economically insecure if 1) he does not earn adequate incomes 2) he is not able to save 3) if he is not able to save on regular basis. This definition does not consider borrowing behaviour and access to credit. Also, it does not give significance to the variability of earnings – an aspect that is almost a reality in the working lives of the unorganised industry workers.

4.1.4. Agency Insecurity

The notion of agency insecurity provides a new concept to the range of insecurities. The hired workers in unorganised industry, by virtue of their jobs, are treated as dependents who do not have their own voice either because of individualisation or employers' fear or both. In such a situation, the notion of agency insecurity may be considered as the conceptual advance by which we aim to capture both the opportunity and the autonomy experienced by wageworkers in their jobs. The opportunity is captured through the job potentials for facilitating skill learning and social links. For quantifying skill learning, we covered not only job's potential for enriching skill but also its lack of conflicting tasks. The skill-learning component of the agency insecurity is similar to the ILO's notion of skill representative insecurity. Similarly, the aspect of autonomy is captured through the indicators of decision-making and wage bargaining. Under decision-making, we enquired about workers' autonomy in deciding not only about his work but also his working time and under wage bargaining, we tried to quantify his bargaining strength in the process of wage determination.

4.1.5. Recognition Insecurity

The notion of recognition insecurity is related with the aspect of self-respect that is expected from work. This insecurity covers both employers' care and workers' perception. From employers' care, we imply the concern and protection that the workers receive from their employer and from workers' perception, we imply not only the dignity that the workers receive from their work but also the discrimination that they experience at workplace in terms of nature of work, employer and co-workers' treatment and working hours.

4.2. Exposure to Work-related Vulnerability

4.2.1. Incidence of Vulnerability among Wageworkers

Survey data reveals that a majority of SC/ST wageworkers are too much vulnerable to job termination with little/no prior notice. Such vulnerability is also revealed by the frequent job search by a majority of SC/ST wageworkers even when there is not much expectation of job loss. In terms of job loss possibility, only 15.1 percent of the SC/ST wageworkers – in comparison to 61.1 percent of the non SC/ST wageworkers, perceive that they won't lose their jobs during more than one year. Other constituent of job search also reveals similar vulnerability of the SC/ST wageworkers vis-à-vis that experienced by the non SC/ST wageworkers. 77.1 percent of the SC/ST wageworkers – in comparison to 15.7 percent non SC/ST wageworkers, have to depend on contractors for their job search. A relatively large

proportion of the SC/ST wageworkers perceive the low chance of getting another job similar to the current one and a relatively large proportion (14.6 percent) of the SC/ST workers – in comparison to 2.8 percent non SC/ST workers have to wait for a month to get the next job. The proportion of the SC/ST wageworkers who have to wait for even 15 days is relatively larger than the non SC/ST wageworkers.

A majority of the SC/ST wageworkers find their earnings quite insufficient for meeting their household needs adequately. Similarly, a large majority perceive their living standards lower in comparison to the others and a majority have no ability to lend money. Moreover, these workers often experience the incidence of income variability - the proportion of SC/ST wageworkers reporting the high incidence of income variability is 58.5 percent, which is more than 3 times that experienced by the non SC/ST wageworkers. The situation of SC/ST and non SC/ST wageworkers is somewhat similar in terms of their saving potential. There are very few wageworkers in either of the social class reporting high ability to save on regular basis. Similar is the perception about their ability to have better living standards in old age. Another constituent of income insecurity viz. the borrowing behaviour also does not reveal much difference among the SC/ST and non SC/ST wageworkers. A majority belonging to both of these wageworkers borrow money from others but a relatively large proportion of the SC/ST wageworkers have to borrow from the contractors. Sharp differences among these both types of wageworkers exist in terms of their access to credit in case of need. 58.9 percent of the SC/ST wageworkers - in contrast to only 11.1 percent of the non SC/ST wageworkers, have lower access to credit in case of need.

32.8 percent of the SC/ST wageworkers always stay at their workplace during night. Such workers have been quite few (9.3 percent) among the non SC/ST wageworkers. Similarly, 34.9 percent of the SC/ST wageworkers work for more than 14 hours a day. A majority of the SC/ST wageworkers due to their casual nature of jobs are being asked to work on Sundays as well, which is not the usual practice for the non SC/ST wageworkers. The most troubling aspect is the fact that a relatively large proportion (65.1 percent) of the SC/ST wageworkers experience such work during illness whereas 32.4 percent of the non SC/ST wageworkers experience such work intensity. Regarding the nature of work activity, it has been found that a relatively large proportion of the SC/ST wageworkers have to work under strained working postures. The proportion of those having the job responsibilities of lifting heavy objects is also relatively high among the SC/ST wageworkers. The proportion of wageworkers not

perceiving their working environs as tough, unhygienic and risky is quite low across both types of wageworkers. Similar pattern is revealed in wageworkers' responses for their satisfaction in various job-related aspects. Regarding health adversities of wage work, the perception and the experienced impacts leave both kinds of wageworkers in similar situation of exposure to too much vulnerability.

Moreover, it is found that the type of wage works done by the SC/ST wageworkers do not contribute much towards enriching their skills and most often, the jobs of these wageworkers involve a variety of conflicting tasks. Their jobs also do not enable these workers, in a significant way, to improve their social links. Similarly, under autonomy insecurity, the SC/ST wageworkers are relatively unable to determine not only their own working times but also the way of doing their jobs. These wageworkers are also not much autonomous in wage bargaining than their counterparts belonging to the other social category of non SC/STs. Similarly, there is almost negligible proportion of the SC/ST wageworkers who can express always their grievances to the employer. Similarly, a negligible 1 percent of the SC/ST wageworkers — in comparison to 6.5 percent non SC/ST wageworkers, trust fully their employer for personal interests. Similar attitude gets reflected in employer's reaction on little absence of wageworker from work. A large majority of the SC/ST wageworkers are not much optimistic for getting either paid sick leave or accident relief. Consequently, these wageworkers do not feel much dignity in their employments. They experience relatively higher incidence of discrimination in comparison to their non SC/ST counterparts.

4.2.2. Constructing Insecurity Indices

Above analysis has revealed that the wageworkers in Punjab's urban unorganised establishments are exposed to various insecurities in various ways. Nevertheless, the analytical exercise remains somewhat erroneous unless some attempt is made to add precision to the estimate of respective insecurity. Indexing is a suitable approach to intermix various constituents of the same broad characteristic. In literature, a number of ways for adding various constituents into a single index has been discussed¹¹. Among all these methods, the equal weighting procedure being used in constructing the UNDP's 'Human Development Index' and ILO's 'Decent Work Index' is termed as the best one as it does not require the estimation of weights for different constituents. Moreover, it is also termed as the convenient solution in circumstances when it becomes difficult to reach at the consensus of

¹¹ See, Saith (2006); Chakraborty (1996)

weighting different constituents¹². Therefore, we also prefer to calculate various indices of insecurity by weighting equally its different constituents. These indices range between the values of 1 and 3 - 1 representing fully secure workers and 3 representing fully insecure workers.

4.2.3. Various Insecurity Indices and Variations as per Social Class & Migration Status

Table 2 presents the estimated indices of various insecurities and their constituents across wageworkers differing in terms of their social class and migration status. The results make it evident that the SC/ST wageworkers are relatively more vulnerable to all the insecurities and their constituents (except health adversities). But, such exposure is not homogeneous across SC/ST wageworkers as the insecurity exposure is relatively more for migrant SC/ST wageworkers than their native counterparts across all the insecurities.

Incocurity Type	SC/ST			1	A 11		
insecurity Type	Migrant	Native	All	Migrant	Native	All	
Job Loss	2.43	1.98	2.35	2.00	1.47	1.57	2.07
Job Search	2.38	1.70	2.26	1.95	1.29	1.43	1.96
Job Insecurity	2.41	1.84	2.30	1.98	1.38	1.50	2.02
Earning Potential	2.63	2.48	2.60	2.31	2.12	2.16	2.44
Saving Potential	2.45	2.44	2.45	2.27	2.22	2.23	2.37
Borrowing Behaviour	2.52	2.16	2.46	2.24	1.90	1.97	2.28
Economic Insecurity	2.53	2.36	2.50	2.27	2.08	2.12	2.36
Work-Intensity	2.42	2.05	2.35	2.29	1.87	1.95	2.21
Working Environs	2.39	2.15	2.34	2.36	2.01	2.08	2.25
Job Satisfaction	2.53	2.29	2.49	2.32	1.81	1.91	2.28
Health Adversities	2.25	2.12	2.23	2.34	2.27	2.28	2.25
Functional Insecurity	2.40	2.15	2.35	2.33	1.99	2.06	2.25
Opportunity	2.31	2.05	2.26	1.97	1.60	1.68	2.05
Autonomy	2.65	2.47	2.62	2.36	1.91	2.00	2.40
Agency Insecurity	2.48	2.26	2.44	2.17	1.76	1.84	2.22
Employer's Care	2.67	2.47	2.64	2.49	2.08	2.16	2.47
Worker's Perception	2.33	1.90	2.26	1.97	1.70	1.76	2.08
Recognition Insecurity	2.50	2.18	2.45	2.23	1.89	1.96	2.27
Overall Work-related Insecurity	2.46	2.16	2.41	2.20	1.82	1.90	2.22

TABLE 2: VARIOUS INSECURITY INDICES, BY SOCIAL CLASS AND MIGRATION STATUS

Source: Based on Primary Survey

Economic insecurity is the major insecurity troubling the migrant SC/ST wageworkers followed by recognition insecurity, agency insecurity, job insecurity and the functional insecurity. Migrant non SC/ST wageworkers are largely troubled by the functional insecurity. They also suffer considerably from economic insecurity and recognition insecurity. Their exposure to job insecurity is much lower than that experienced by the migrant SC/ST

¹² Sehnbruch (2004)

wageworkers. Native SC/ST wageworkers are also troubled largely by economic insecurity and agency insecurity. They also suffer considerably from the functional insecurity and agency insecurity. Nevertheless, their exposure to job insecurity is much lower than that experienced by migrant SC/ST and migrant non SC/ST wageworkers. Native non SC/ST wageworkers have the least exposure to various work-related insecurities among these four categories of wageworkers. The major insecurity experienced by these wageworkers is that of the economic insecurity and within which they are most constrained by their restricted saving potentials. They suffer somewhat from functional insecurity, recognition insecurity and agency insecurity; and they do not have much serious exposure to job insecurity – they, in spite of having relatively higher job loss index, are relatively better in terms of job search index.

4.3. Determinants of Wageworkers' Exposure to Vulnerability: An Ordered Probit Regression Approach

4.3.1. Methodology

Nevertheless, from above analysis, it remains unclear: what is the contribution of specific worker characteristic to wageworkers exposure to various work-related insecurities. For such an analysis, one has to control for other characteristics while examining the impact of a specific characteristics on wageworkers' exposure to insecurity. Regression tool is most widely used econometric tool for estimating the contribution of each characteristic in such a situation.

The dependent variable measuring wageworkers' exposure to insecurity is inherently ordered (with options 1 (relatively secure), 2 (moderately insecure) and 3 (severely insecure). In such a situation, an appropriate econometric technique is the 'Ordered Probit Regression'. The ordered probit estimates the underlying score as a linear function of the independent variables and a set of cutpoints.

The probability of observing outcome i corresponds to the probability that the estimated linear function, plus random error, is within the range of cutpoints estimated for the outcome:

$$\Pr(outcome_{j} = i) = \Pr(k_{i-1} < \beta_{1}x_{1j} + \beta_{2}x_{2j} + \dots + \beta_{k}x_{kj} + \mu_{j} \le k_{i})$$

 μ_j is assumed to be normally distributed. The coefficients $\beta_1, \beta_2, \dots, \beta_k$ together with the cutpoints k_1, k_2, \dots, k_{I-1} , where I is the number of possible outcomes. k_0 is taken as $-\infty$ and k_I is taken as $+\infty$.



If $X_i\beta < k_1$ then predict $Outcome_i$ = Relatively Secure If $k_1 < X_i\beta < k_2$ then predict $Outcome_i$ = Moderately Insecure If $X_i\beta > k_2$ then predict $Outcome_i$ = Severely Insecure

Based on above analysis highlighting differences in SC/ST and non SC/ST wageworkers' exposure to insecurity, separate equations are estimated for SC/ST and non SC/ST wageworkers. The results are estimated by adopting the model which includes wageworkers' basic characteristics such as gender, age and migration status along with employment status and skill status. The variable of 'Labour Market Experience' is not included due to the problem of multicollinearity.

4.3.2. Analysis

As post-estimation to the ordered probit regression analysis¹³, we have estimated the marginal effects of selected worker characteristics on his exposure to severe insecurity. These marginal effects are presented in Table 3. These results reveal that a change of workers' gender from male to female increases her severe exposure to job insecurity and recognition insecurity. This impact has been relatively severe for the SC/ST wageworkers. Similarly, the marginal change in age is having negative impact on non SC/ST wageworkers' exposure to various insecurities. Such effect has been found in case of SC/ST wageworkers as well except economic insecurity and functional insecurity.

TABLE 3: MARGINAL EFFECTS OF SELECTIVE CHARACTERISTICS ON SEVERE EXPOSURE OF VARIOUS INSECURITIES

	Job Insecurity		Economic Insecurity		Functional Insecurity		Agency Insecurity		Recognition Insecurity	
	SC/ST	Non SC/ST	SC/ST	Non SC/ST	SC/ST	Non SC/ST	SC/ST	Non SC/ST	SC/ST	Non SC/ST
Gender	.14880	.00156	04134	04080	28978	05034	25250	01601	.14063	.00542
Age	00431	00004	.00872	00071	.00966	00824	.00174	00277	01196	00054
Migration Status	.18231	.01107	17864	.05162	.012479	.17348	.12668	.04619	.31380	.10757
Employment Status	.38639	.00436	.56973	.07060	.37207	.08754	.26684	.02794	.31077	.00189
Skill Status	.15098	.00051	.24533	.16042	.01189	05090	.36911	.03152	.18274	.00391

Note: the marginal effects imply change in worker characteristics, in case of categorical variables, it is from 0 to 1; gender is 0 for males and 1 for females; migration status is 0 for natives and 1 for migrants; employment status is 0 for regular/permanent workers, 1 for contractual workers and 2 for casual workers; skill status is 0 for skilled workers, 1 for semi-skilled workers and 2 for unskilled workers

A change in migration status from native to migrant is causing wageworkers' severe exposure to various insecurities. SC/ST wageworkers are relatively more vulnerable to job insecurity, agency insecurity and the recognition insecurity in this respect whereas non SC/ST wageworkers become more vulnerable to severe exposure of economic insecurity and functional insecurity with a change in the migration status. A change in the employment status from regular to contractual to casual status makes SC/ST wageworkers relatively more vulnerable to various insecurities in comparison to the non SC/ST wageworkers. Similarly, a change in the skill status from skilled to semi-skilled to unskilled is making the SC/ST wageworkers relatively more vulnerable to various insecurities.

¹³ The coefficients derived from the ordered probit regression are reported in Table A.2 in appendix

5. Emerging Conclusions

This study by revealing the relative deprivation of SC/ST wageworkers upholds the relevance of social class analysis in India's unorganised manufacturing sector. With a specific case of Punjab's urban unorganised establishments, it examines the diversity in wageworkers' nature of employment across two domains of discrimination and work-related insecurity. It finds that there exist considerable wage gap between SC/ST and non SC/ST wageworkers. Though a large part of this wage gap is due to endowment differences between two sets of workers, a high degree of discrimination in returns to endowments also exist. Similarly, SC/ST wageworkers are also relatively more exposed to various work-related insecurities. An analysis of the marginal effects of various worker-related characteristics on workers' severe exposure to various insecurities has revealed that the lack of skill makes SC/ST wageworkers more vulnerable to the severe exposure of various insecurities. A straightforward policy suggestion emerging from this analysis hints at the provision of skill to the wageworkers in general and SC/ST wageworkers in particular due to its direct impact on various insecurities.

APPENDIX:

		Q1	Q2	Q3	Q4	Q5
	Misses t 00/0T	0.0168	0.0155	0.0015	-0.0042	-0.0105
	Migrant SC/ST	(0.0103)	(0.0114)	(0.0082)	(0.0078)	(0.0145)
		-0.0123	-0.0062	-0.0001	0.0168	-0.0303
	Native SC/ST	(0.0268)	(0.0227)	(0.0325)	(0.0393)	(0.0350)
Education		-0.0080	0.0065	0.0111*	0.0278	0.0120*
	Migrant Non SC/ST	(0.0313)	(0.0298)	(0.0335)	(0.0330)	(0.0342)
		0.0151	0.0203	0.0260***	0.0242**	0.0154*
	Native Non SC/ST	(0.0083)	(0.0077)	(0.0100)	(0.0120)	(0.0149)
		0.0103	0.0241	0.0201	0.0179	0.0321
	Migrant SC/ST	(0.0177)	(0.0153)	(0.0157)	(0.0178)	(0.0126)
		0.0777*	0.0549	0.0436*	0.0339	0.0322
A a a	Native SC/ST	(0.0249)	(0.0296)	(0.0380)	(0.0427)	(0.0448)
Age	Misses New 20/0T	0.0556	0.0323	0.0535	-0.0630	0.0141
	Migrant Non SC/SI	(0.1327)	(0.1138)	(0.1272)	(0.0860)	(0.1009)
	Notice New OO/OT	0.0400	0.0092	0.0224	0.0042	0.1328
	Native Non SC/ST	(0.0365)	(0.0360)	(0.0527)	(0.0591)	(0.0865)
	Missent CC/CT	-0.0002	-0.0004*	-0.0003	-0.0003	-0.0005
	Migrant SC/ST	(0.0003)	(0.0003)	(0.0003)	(0.0003)	(0.0002)
		-0.0010	-0.0006	-0.0003	-0.0001	0.0004
	Native SC/ST	(0.0005)	(0.0005)	(0.0005)	(0.0006)	(0.0006)
Age-Squared	Missent Neg SC/ST	-0.0006	-0.0001	-0.0002	0.0013	0.0004
	Migrant Non SC/ST	(0.0015)	(0.0013)	(0.0015)	(0.0009)	(0.0011)
	Nativa Nan SC/ST	-0.0002	0.0001	-0.0002	0.0001	-0.0013
	Native Non SC/ST	(0.0004)	(0.0004)	(0.0006)	(0.0007)	(0.0009)
	Missent CO/CT	0.0025*	0.0104	0.0020*	0.0049	-0.0038
	Migrant SC/ST	(0.0068)	(0.0072)	(0.0052)	(0.0080)	(0.0099)
Lobour	Nativa SC/ST	0.0031	-0.0112	-0.0110	-0.0083	-0.0452
Labour	Nalive SC/ST	(0.0209)	(0.0157)	(0.0164)	(0.0253)	(0.0289)
Experience	Migraph Nap SC/ST	-0.0223	-0.0160	-0.0343	-0.0498	-0.0623
Lybenence	Nigrant Non 30/31	(0.0209)	(0.0215)	(0.0263)	(0.0304)	(0.0350)
	Nativo Non SC/ST	-0.0175	-0.0127	0.0001*	0.0113	-0.0009
	Native Non 3C/31	(0.0140)	(0.0102)	(0.0108)	(0.0135)	(0.0164)
	Migrapt SC/ST	0.4512*	0.3857	0.4832*	0.4483	0.6646*
	Migrant 30/31	(0.1261)	(0.0834)	(0.0600)	(0.0713)	(0.1304)
	Native SC/ST	0.3195	0.4396**	0.3491	0.3027*	0.3648*
Employment-	Nalive SC/ST	(0.1976)	(0.1507)	(0.2040)	(0.2674)	(0.3197)
Skill Index	Migrant Non SC/ST	0.5562*	0.3402	0.4956***	0.6005	0.6151
	Migrant Non SC/ST	(0.2890)	(0.2862)	(0.3634)	(0.3682)	(0.4123)
	Native Non SC/ST	0.4456	0.4911**	0.4401	0.3680	0.2949*
	Native Nori SC/ST	(0.0893)	(0.0931)	(0.1032)	(0.0730)	(0.1531)
	Migrant SC/ST	0.5474	0.5377	0.6087	0.8094	0.5991
	Migrant SC/ST	(0.2724)	(0.2092)	(0.2182)	(0.2707)	(0.2013)
Constant	Native SC/ST	-0.1506	0.1294	0.3640	0.5836	0.9321
	Nalive SC/ST	(0.4266)	(0.4147)	(0.4803)	(0.5835)	(0.5977)
	Migrant Non SC/ST	-0.2061	0.2166	-0.1569	2.1431	0.8925
	Migrant Non SC/ST	(2.3890)	(2.0680)	(2.2622)	(1.6264)	(1.8113)
	Native Non SC/ST	0.1736	0.8236	0.6822	1.2958	-0.9452
		(0.7763)	(0.7096)	(1.1063)	(1.2689)	(1.7466)
	Migrant SC/ST	0.4110	0.4643	0.4722	0.4510	0.5569
Pseudo-R ²	Native SC/ST	0.6619	0.4826	0.3737	0.3736	0.5048
	Migrant Non SC/ST	0.6437	0.6268	0.5687	0.5134	0.6561
	Native Non SC/ST	0.4633	0.3631	0.3160	0.3872	0.4141

TABLE A.1: HOURLY WAGE (QUANTILE) REGRESSION RESULTS, BY SOCIAL GROUP

Note: the bootstrap standard errors are reported in parentheses; Coefficients marked with *, ** and *** imply that these coefficients are significant at 1 percent, 5 percent and 10 percent level of significance respectively. Source: Based on Primary Survey

	Job Insecurity		Economic Insecurity		Functional Insecurity		Agency Insecurity		Recognition Insecurity	
	SC/ST	Non SC/ST	SC/ST	Non SC/ST	SC/ST	Non SC/ST	SC/ST	Non SC/ST	SC/ST	Non SC/ST
Gender	.62001	.33938	10632	27569	-1.07301*	46313	68942*	36592	.35459	.41702
	(.40849)	(.42775)	(.37228)	(.43386)	(.32612)	(.42761)	(.30066)	(.38796)	(.33264)	(.67076)
Age	02363***	01607	.02264	00424	.02681***	05949*	.00440	04935*	03014***	06538
	(.02063)	(.02663)	(.01940)	(.02381)	(.01583)	(.02435)	(.01606)	(.02136)	(.01799)	(.04262)
Migration Status	1.98368*	1.0662*	49428***	.27507	.36924	.87652*	.32573	.57627***	.86948*	1.94348*
	(.34224)	(.35343)	(.31286)	(.38447)	(.25510)	(.36792)	(.25355)	(.34304)	(.30191)	(.68984)
Employment	2.11669*	1.43234*	1.47944*	.41786	1.03204*	.63174*	.67228*	.49664***	.78312*	.22870
Status	(.33819)	(.32233)	(.27419)	(.30989)	(.23490)	(.31387)	(.20941)	(.27718)	(.25245)	(.58353)
Skill Status	.82707*	.16943	.63707*	.94952*	.03299	36731	.92995*	.56034	.46050***	.47209
	(.29345)	(.36284)	(.26999)	(.38252)	(.23220)	(.35678)	(.23553)	(.34549)	(.26852)	(.66539)
/ k ₁	1.10044	.93834	43209	-1.51353	02667	-4.05696	.04996	-2.39661	-2.27503	-5.05315
	(.96208)	(1.27778)	(.95199)	(1.17265)	(.78309)	(1.22508)	(.78371)	(1.03409)	(.94031)	(2.21796)
/ k ₂	6.00144	3.49229	2.79278	1.69479	2.92965	76941	2.44590	.39690	1.47392	.73899
	(1.14704)	(1.38288)	(.97412)	(1.17148)	(.79476)	(1.11144)	(.81565)	(1.03979)	(.87622)	(1.97207)
Number of Observations	192	108	192	108	192	108	192	108	192	108
LR chi ² (7)	239.31	75.59	132.30	34.83	49.14	33.53	115.12	55.86	118.57	39.47
Prob > chi ²	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Pseudo R ²	0.6404	0.44496	0.4597	0.2581	0.1718	0.2368	0.3357	0.2933	0.4049	0.5150
Log Likelihood	-67.18	-46.27	-77.75	-50.06	-118.45	-54.02	-113.92	-67.29	-87.15	-18.58

TABLE A.2: ORDERED PROBIT RESULTS FOR WAGEWORKERS' EXPOSURE TO VARIOUS WORK-RELATED INSECURITIES, BY SOCIAL CLASS

Note: *, **, *** imply that the estimated coefficients are significant at 1 %, 5 % and 10 % level of significance Source: Based on Primary Survey

References:

Ahluwalia, M. S. (2000) Economic Performance of States in Post-Reforms Period, *Economic* and *Political Weekly*, 35(19): 1637-1648

Amin, S., et al. (2004) Poverty and Other Determinants of Child Labor in Bangladesh, *Southern Economic Journal*, 70(4): 876-892

Banerjee, B. and J. B. Knight (1985) Caste Discrimination in the Indian Labour Market, *Journal of Development Economics*, 17(April): 277-307

Borooah, V. K. (2005) Caste, Inequality and Poverty in India, *Review of Development Economics*, 9(August): 399-414

Buchinsky, M. (1994) Changes in the U.S. Wage Structure 1963-1987: Application of Quantile Regression, *Econometrica*, 62(2): 405-458

Chakraborty, A. (1996) On the Possibility of a Weighting System for Functionings, *Indian Economic Review*, 31(2): 241-250

Das, M. B. (2002) Employment and Social Inequality in India: How Much Do Caste and Religion Matter, University of Maryland, College Park

Deshpande, A. (2000a) Caste at Birth? Redefining Disparity in India, *Review of Development Economics*, 5(1): 130-144

--- (2000b) Does Caste Still Define Disparity? A Look at Inequality in Kerala, India, *The American Economic Review*, 90(2): 322-325

Gang, I. N., et al. (2002) *Caste, Ethnicity and Poverty in Rural India*, IZA DP No. 629, Institute for the Study of Labor, Bonn, Germany

Gupta, D. (1978) From Varna to Jati: The Indian Case System from the Asiatic to the Feudal Modes of Production, Surat: Centre for Social Studies

Ilo (2004) Economic Security for a Better World, International Labour Organisation, Geneva

Ito, T. (2007) Caste Discrimination and Transaction Costs in the Labor Market: Evidence from Rural North India, Hi-Stat Discussion Paper Series No. 200, Institute of Economic Research, Hitotsubashi University, Kunitachi, Tokyo, Japan

Jain, V. (2008) An Inquiry into the Growth Dynamics of Punjab's Urban Unorgansied Establishments: A Labour Perspective, *International Journal of Business and Emerging Markets*, (Forthcoming):

Jodhka, S. S. (2000) 'Prejudice' without 'Pollution'? Schedule Castes in Contemporary Punjab, *Journal of Indian School of Political Economy*, 12(3&4): 381-403

Koenker, R. and G. Bassett, Jr. (1978) Regression Quantiles, *Econometrica*, 46(1): 33-50

Koenker, R. and K. F. Hallock (2001) Quantile Regression, *Journal of Economic Perspectives*, 15(4): 143-156

Kuhn, P. (1987) Sex Discrimination in Labor Markets: The Role of Statistical Evidence, *The American Economic Review*, 77(4): 567-583

Lieten, G. K. (2002) Child Labour and Poverty: The Poverty of Analysis, *The Indian Journal of Labour Economics*, 45(3): 451-464

Madheswaran, S. and P. Attewell (2007) Caste Discrimination in the Indian Urban Labour Market: Evidence from the National Sample Survey, *Economic and Political Weekly*, 4146-4153

Meenakshi, J. V., et al. (2000) Estimates of Poverty for Sc, St and Female-Headed Households, *Economic and Political Weekly*, 2748-2754

Meng, X. and P. Miller (1995) Occupational Segregation and Its Impact on Gender Wage Discrimination in China's Rural Industrial Sector, *Oxford Economic Papers*, 47(1): 136-155

Mincer, J. (1974) *Schooling, Experience and Earnings,* New York: The National Bureau of Economic Research

Naswall, K. and H. D. Witte (2003) Who Feels Insecure in Europe? Predicting Job Insecurity from Background Variables, *Economic and Industrial Democracy*, 24(2): 189-215

Nsso (2008) Unorganised Manufacturing Sector in India: Employment, Assets and Borrowings, Report No. 525(62/2.2/2), NSS 62nd Round (July 2005-June 2006), National Sample Survey Organisation, Ministry of Statistics and Programme Implementation, Government of India, New Delhi

Oaxaca, R. (1973) Male-Female Wage Differentials in Urban Labor Markets, *International Economic Review*, 14(3): 693-709

Padhi, S. P. (2004) Child Labour and Poverty: A Re-Examination of Cross Regional Analysis, *The Indian Journal of Labour Economics*, 47(2): 375-390

Saith, A. (2006) From Universal Values to Millennium Development Goals: Lost in Translation, *Development and Change*, 37(6): 1167-1199

Sehnbruch, K. (2004) From the Quanity to the Quality of Employment: An Application of the Capability Approach to the Chilean Labour Market, Centre for Latin American Studies working paper 9, University of California, Berkeley

Sundaram, K. and S. D. Tendulkar (2003) Poverty among Social and Economic Groups in India in 1990s, *Economic and Political Weekly*, 5263-5276

Thorat, S. (1999) Caste and Labour Market Discrimination, *The Indian Journal of labour Economics*, November):

Thorat, S. and J. Lee (2005) Caste Discrimination and Food Security Programmes *Economic and Political Weekly*, 30(39): 4198-4200