Labour Market Changes and Living Standards: A Study of Homeless Population in Japan and Slums in India

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by
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1. Introduction

The role of industry is important in both developed and developing countries in generating high productivity employment and enhancing the standard of living of the population. In the process of development there takes place a structural shift both in the value added and work force composition away from the primary sector first towards secondary and later towards the tertiary sector. This structural change is accompanied not only by a rise in per capita income but also improvement in many other development indicators. It involves upward mobility of individual occupations and incomes and a shift in rural-urban composition of the population (Kuznets, 1966).

The rapid expansion in the services sector is easy to be rationalized in the context of the developed countries because following the rapid progress of industrialization the demand for several services grows faster which in turn reduces the share of the secondary sector in the total product of the economy. But in the case of the developing countries the dominance of the tertiary sector before the secondary sector's relative size could increase to a reasonably high level did invite concerns at least in the past. However, sub-sectors like transport, communication and banking are seen to contribute significantly to the overall economic growth. Especially the role of information technology (IT) and business process outsourcing services (BPOS) in enhancing the overall economic growth has been evident across countries, (World Bank 2004, Gemmel, 1986). Even after the collapse of the "bubble economy" the number of employees has continued to grow in Japan, particularly in information services, business services, medical and social welfare services, recreation, wholesale and retail trade, hotels and restaurants including supermarkets and convenient stores (The Japan Institute of Labour, 1999).

In the process of growth and transfer of population from rural to urban areas the rising pressure on the urban housing and infrastructure, however, can be much in excess of the supply, which in turn may result in escalating land prices and growth of sub-standard living conditions for the relatively weaker sections even in the developed countries. In the context of the developing countries the problem could be more serious as the demand for labour in the high productivity sector can be much below the supplies, leading to a residual absorption of labour in the low productivity informal sector with meager earnings accruing to the workers and compelling them to reside in slums and squatter settlements. Even in the developed countries industrial deceleration can result in adverse labour market outcomes as workers retrenched from this sector may not succeed in locating an alternative profitable avenue for their productive absorption. On the whole, the role of industry as a determinant of growth and standard of living is crucial in the context of both developed and developing countries, and any deceleration in its performance and/or sluggish employment growth in this sector may have serious implications in terms of labour market outcomes and quality of life.

The main focus of this study is two-fold: first, to understand the broad labour market changes that both a developed economy like Japan and a developing economy like India

are experiencing in the recent years, in the backdrop of their respective industrialization and the overall globalization process to which both the economies are exposed. Second, how the households/individuals at the lower stratum of the economy are performing in relation to the macro economic changes that are taking place in both the countries. In other words, whether such households/individuals are benefiting in the process of globalization or alternately adversities are on the increase, is an important question that the study addresses itself to. The basic objective, therefore, is to bring out the changes that the Japanese and the Indian labour markets have been experiencing in the recent years, and to assess the possible linkages of the labour market changes with the living conditions of the workers. Though it is true that in some of the developed countries like Japan the housing and living conditions are an outcome of other demographic factors like the number of aged population, the labour market links with the living conditions are also of relevance from policy point of view.

The work is based on both secondary and primary data. In the case of Japan, we use the following sources of data: Annual Report on National Accounts, 2005 and 2001, (Department of National Accounts, Economic and Social Research Institute), Labour Force Surveys (Ministry of Internal Affairs), Employment Status Surveys,1997 and 2002, (compiled by Statistics Bureau of the Management and Co-ordination Agency - MCA, Ministry of Internal Affairs and Communication), Special Labour Force Surveys 1998, (compiled by the MCA), and the Reports on Worker Dispatch Businesses (Ministry of Labour/Labour, Health and Welfare), and Establishment and Enterprise Census, 1996 1999 and 2001, Annual Report on the Family Income and Expenditure Survey (Statistics Bureau, Ministry of Internal Affairs and Communications) and Housing and Land Survey, 1988, 1993, 1998 and 2003 (Statistics Bureau, Management and Coordination Agency, Ministry of Internal Affairs and Communications). Japan Statistical Yearbook (Statistics Bureau/ Statistical Research and Training Institute, Ministry of Public Management, Home Affairs, Posts and Telecommunications) which compiles data from different sources is an important source of information**.** On homeless population the sample survey carried out by the Ministry of Health and Labour, 2003, and our personal interviews with members of organizations (including the metropolitan government) which are associated with the homeless population, and a couple of in-depth interviews conducted directly with those who are homeless, are used extensively. Some of the earlier work in this field (Fowler, 1996) forms the stepping stone to our analysis.

For India, the labour market changes are discerned on the basis of National Sample Survey and Population Census data. For the low income households residing in slums/squatter settlements, a micro-survey of 200 households in Delhi slums was conducted by us in 2004-05, and the results of this survey we propose to use for the research report. The occupational pattern of the low income households, the role of 'social capital' or informal networks, determinants of earnings, prospects for experiencing upward mobility and the overall deprivation (wellbeing) are some of the aspects that are dealt with.

The organization of the study is as follows. The next section presents framework for analysis. Sections 3 and 4 delineate the labour market changes in the context of Japan and India respectively. Section 5 draws a profile of the homeless population in Japan. And

section 6 focuses on the slum dwellers in the national capital of India. Finally section 7 summarizes the main findings with their policy implications.

2. Framework

Japan

In spite of the oil shocks of the seventies the Japanese labour market continued with low unemployment rates, possibly because of its flexible wage system and the human resource management practices followed in the export oriented industries (Ito, 1992, Womack, Jones and Roos, 1991 and Ariga, Brunello and Ohkusa, 2000). However, following the collapse of the 'bubble economy', the two critical problems that Japan is faced with include recession and rapidly rising unemployment rates since 1990s on the one hand and the sluggish growth of skilled workers on the other[1]. In particular, the manufacturing sector has shown dissatisfying performance in terms of employment. The number of employees decelerated between 1991 and 2001: in the small scale enterprises the number fell by 26.3 per cent and medium and large enterprises by 19.7 per cent. Some of the industries, which experienced a pronounced setback, are general machinery, electrical machinery, transport equipment and precision machinery. Although the small and medium enterprises accounted for much of the decline in the total manufacturing employment, the large establishments primarily caused a decline in employment in the industry groups mentioned above (as given by the Establishment and Enterprise Census data)[2]. The decline in employment has been caused by the closure of the units (primarily in small and medium enterprises), and retrenchment of employees by the existing units (mainly in large units). As shown by the Employment Status Survey, 2002, slightly more than 5million persons lost jobs in the manufacturing sector between 1997 and 2002, and

[1] Wholesale prices of manufacturing goods (1995 base) decreased from 105.2 in 1991 to 94.5 in 2002. Despite a rise in employment till 1997, unemployment rate rose since 1991 to almost 5 per cent in 2001.

[2] The Establishment and Enterprise Census data on the basis of employment size include persons who are dispatched to other establishments run by different companies. But they do not include those who are dispatched from other establishments and not getting wages and allowances. In the case of solo proprietors they include family members who are not receiving wages and allowances.
In the Census of Manufacturers the number of employees represents a total number of regular workers, sole proprietors and unpaid family workers at the end of the year. The definition of regular workers is broad. The set includes persons (a) who are employed on an indefinite or longer than a month labour contract, (b) who were employed for 18 days or longer during the previous or current month out of casual hires on daily or less than monthly basis, (c) who are dispatched by temporary employment agencies, and are loaned workers from a parent company, (d) work full time and receive monthly remuneration as directors, executives, etc. and (e) who are in the family of a solo proprietor and work for him/her, earning monthly salaries or wages. Sole proprietors are those who are engaged in their own businesses and family workers are those who work full-time for them without remuneration.

only around half of them could be reemployed. The impact of employment decline in the manufacturing sector on the labour market is serious, and more so when the situation is seen as leading to the phenomenon of "discouraged dropouts" among the youths[3]. The implications are not only confined to economic domain but also may spill over to social aspects.

The other changes that are being experienced by the Japanese labour market relate to the fall in the lifetime employment, dismissals of white-collar workers and the rise in the relative size of temporary and part-time workers (or 'irregular' workers), the shift from remuneration based mainly on seniority and ability to new systems emphasizing management by objective (MBO) and payment by workers' performance, and more importantly, the de-unionization in the labour market (Suehiro, 2001 and Sato, 2001).One important bearing of this change in terms of the growth of irregular or atypical jobs, is on the living conditions of the workers, particularly those who lost jobs[4]. The growth of atypical employment in a positive sense may mean expansion in the range of employment opportunities which permit more flexible ways of working than with typical employment. But the negative aspect relates to the lack of stability and mostly involves unskilled labour, low wages and generally poor working conditions, which workers have accepted because they could not get anything better.

Under the restructuring process, manufacturing firms near large cities are hardest hit because of the high cost of production, but those in the suburbs are surviving through technology-intensive production (Institute of Labour Studies, 1999).[5] As confirmed by a survey done in Hammatsu City (centrally located at the Tokai region, traditionally specializing in the production of automobiles, motorcycles and musical instruments), although the overseas relocation of small and medium sized parts-makers has intensified, and many establishments have disappeared, employment has not declined. But a shift from labour to technology-intensive production is likely to diminish the demand for low-skilled workers (Institute of Labour Studies, 1999). In the case of the Japanese electric machine industry, the employment of female workers has declined as a direct consequence of reducing the number of production workers because the labour-intensive aspect of production had been relocated to low labour cost developing countries, particularly Asia.[6] Combining gross job flow data with import data for 334 four-digit manufacturing industries Tomiura (2004) shows the relationship between competition and employment during and after the "bubble period": job creation/destruction associated with plant startups/shutdowns was significantly sensitive to import competition though

[3] The term "discouraged dropouts" would mean withdrawal from the labour market due to loss of hope.

[4] Living conditions would include not only housing conditions or nutritional aspects but also the health indicators.

[5] Instutute for Labour Studies, (1999), Globalization of Industry and Labour Flexibility Responses: Lessons Learned from the Japanese Motor Vehicle Industry, Monograph Series No. 10., September.

[6] Toyonaga, Mami ,(1998) "Change in the Structure of Employment in the Japanese Electric Machine Industry," Paper presented at the "1998 Asian Regional Conference on Industrial Relations," March 17-18 1998, Tokyo, Japan.

import price fluctuations did not affect total employment largely. Kind (2002) shows that though trade liberalization may increase the global growth rate it may also lead to de-industrialization and lower welfare in one of the regions (the North and the South). With rapid globalization and increased mutual dependency beyond national borders, competition and friction in the world economy are likely to intensify (Yoshimoto, 2002).

On the whole, the hypothesis underlying the study is that globalization has led to adverse labour market outcomes through labour retrenchment, changes in the hiring practices and employment relations and a very high level of mechanization followed by firms to curtail cost and enhance competitiveness. These adverse labour market outcomes are partly reflected in the rising unemployment rates and discouraged drop-outs and partly in terms of increasing irregular employment or the shrinking full-time and life-time employment. The greatest victims of these changes are the relatively older groups of workers and also those who belong to younger age- cohorts and do not have high level of training or education. All this tends to add to homelessness, as many of these populations cannot afford the cost of decent living conditions.

Further, the existence of agglomeration economies raises concentration of activities and migrant job-seekers in large cities, which in turn in the face of job retrenchment etc. would mean a greater number of homeless residents in large cities.

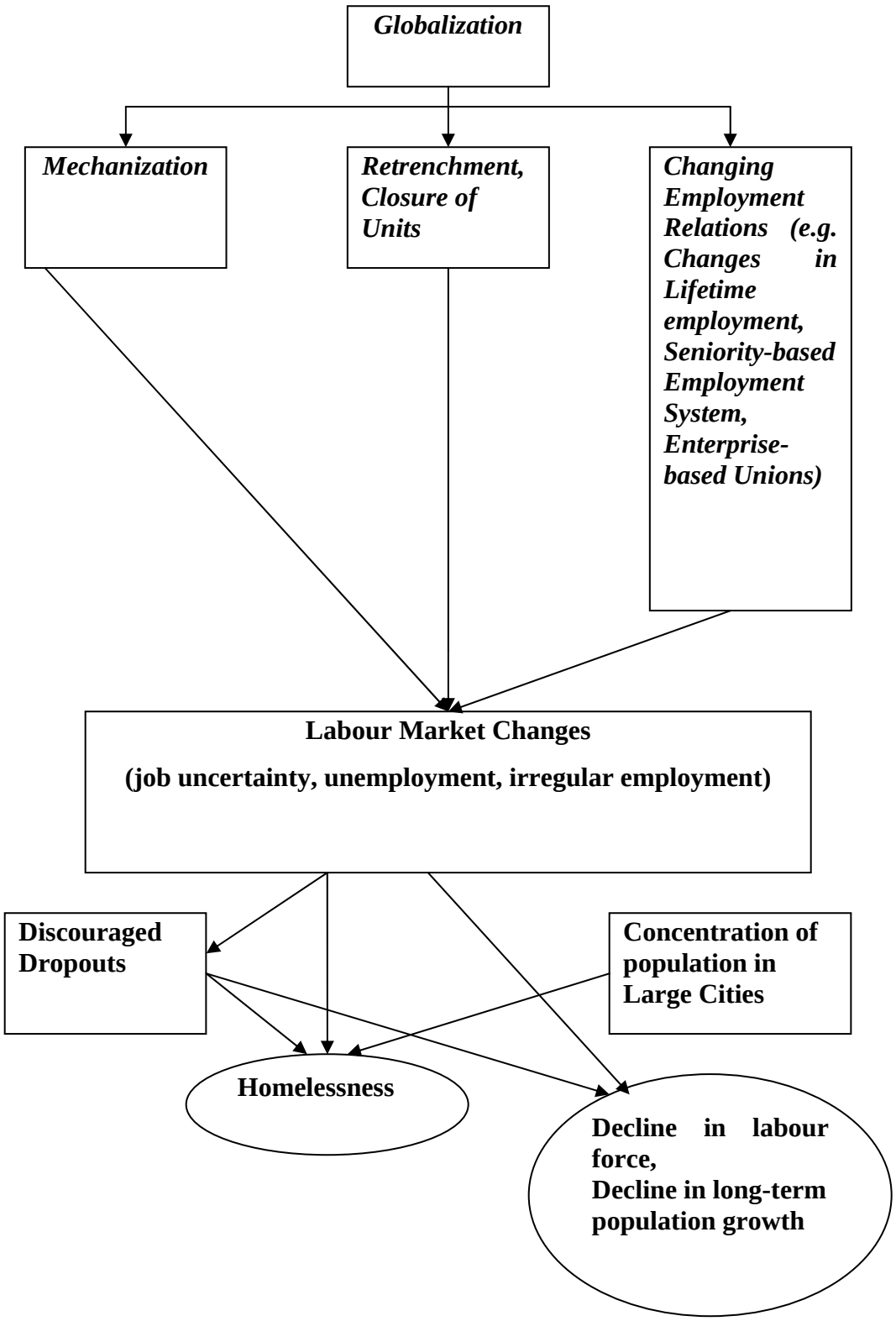
The long run consequences of globalization and changing employment practices can be seen in terms of increasing inactive youngsters, so-called "parasite singles" who in future are likely to reduce the birth rate and labour force growth rate drastically.[7]

The employment relations system in Japan has been influenced largely by institutional, cultural, and economic factors (Tokyo Chamber of Commerce, 2003). Following the oil crisis of the seventies various measures were adopted to reduce cost and augment productivity, industries were deregulated by the government to strengthen the market economy, attitude towards work of both the work force and the unions changed considerably and the corporate management system also changed due to shifts in the pattern of ownership, all of which influenced the Japanese employment practices (Adhikari, 2005). The role of institutions had also undergone changes.[8] With the collapse of the economic bubble and the rapid processes of globalization setting into the economy employment practices have witnessed more significant changes. The labour market changes that are taking place can be seen in an inter-woven framework to understand the outcomes (chart 1).

[7] Parasite singles are unmarried individuals in the age-group 20-34 who live with their parents (estimated to be around 10 million in 2000). This phenomenon results in late marriages and couples with fewer children (Yoshimoto, 2002).

[8] Government by adopting effective macro economic policies, trade unions with a declining rate, educational and training institutions improving the quality of education and employers' association with an objective of private sector-led, vital and affluent economy are the four institutions prevailing in Japan.

Chart 1


Globalization
Mechanization
Retrenchment, Closure of Units
Changing Employment Relations (e.g. Changes in Lifetime employment, Seniority-based Employment System, Enterprise-based Unions)
Labour Market Changes
(job uncertainty, unemployment, irregular employment)
Discouraged Dropouts
Concentration of population in Large Cities
Homelessness
Decline in labour force,
Decline in long-term population growth

Not only the three great pillars of Japanese employment practices- the life-time employment, seniority based payment system and enterprise-based unions – have undergone considerable changes, but also employers began to restrict overtime and reassign staff and even offered incentives for early retirement. Apart from rise in long-term unemployment (for longer than a year), the job-to-applicants ratio for new graduates declined, a large number of graduates started quitting jobs and school pass-outs lacked vocational skills and experience (Japan Business Federation, 2003). Employers prefer to seek mid-career workers whose readymade skills and abilities can be used instantly (JILPT, 2004-05). However, with the closing down of small and medium sized companies the number of middle-aged employees working in one company has declined considerably. Also, as Morishima (2002) points out, the roles and responsibilities of the non-regular work force are changing gradually: part-time workers who had short term contracts in blue-collar type jobs, known as the flexible employment group, are now engaged in both specialized jobs and are providing training. As regards the seniority based payment system, it is evident that rate of wage increase is declining in proportion to an employee's age compared to the past practices and rather the performance-based compensation system is emerging significantly, and all this is forcing unions to rethink their future roles (Adhikari, 2005).

The rate of unionization has declined over time and currently it stands at 19.6 per cent (JILPT, 2004-05). Around 70 per cent of the labour unions are seeking a sharp fall in memberships due to fall in the hiring of full-time workers, withdrawal of membership prompted by mandatory retirement, the withdrawal of individuals retiring on account of crisis in the companies and the increasing number of part-time employees who are not covered by company-based unions (JILPT, 2004-05).

Further to substantiate our hypothesis it may be noted that the declining number of regular-status workers is creating a negative impact on employees and the increasing wage gap between regular and non-regular workers is creating a subclass of poorly paid workers in Japan (Financial Times, January 24, 2005). The increasing number of population falling into the domain of NEET (not in employment, education and training) and withdrawals from jobs (voluntary and involuntary both) are expected to have adverse impacts on living standards. Even if some of them may belong to wealthy background, the rise in dependency ratio among the youths is a reflection of labour market adversities. The long term consequences of all this can be felt in terms of decline in labour force and population growth as well (Chart 1).

In order to increase productivity and remain competitive it is essential to make quick and effective adjustments in mobilizing the resources that the companies possess. Labour force is also one of these resources and to what extent corporations are able to maintain flexibility in the relationships between management and labour is crucial to both the company as well as the union. Management usually views that it should have a free hand in human resource policies and practices as a survival strategy in competitive markets.

On the other hand, workers and trade unions insist on employment stability and income security as the basic rights.

Though traditionally Japan maintained a good labour-management relationship and a low unemployment rate, it has been affected off-late by the on-going changes in today's socio-economic environment. Flexibility has been provoked by the pressure of

globalization, by intensification of world trade and by the imperative to achieve and maintain competitiveness by enterprises, particularly those exposed to international markets. As mentioned above, the three important pillars of the Japanese employment system, which include lifetime employment, the seniority based wage system, and enterprise unions, have come under partial collapse. The unemployment rate has shot up to 5 per cent, and the information technology-related global firms have undergone large scale work force retrenchments. Corporate downsizing and restructuring have of course become important in most of the Asian countries (APO, 2002).

Though flexibility[9] applies to the modern sector only, and most of the Asian countries have a large agricultural sector, perhaps flexibility will be less of a challenge to these countries. But the APO report (2002) quite clearly argues that even the agrarian economies can be susceptible to potentially graver consequences. Losing one's job often means the loss of the only source of income for a large family, with no prospects for locating alternative source of regular income.

Several important questions arise in this context. How can labour market flexibility be introduced most effectively? And how can balance be struck between external and internal labour market flexibility? Can the Japanese corporations retain competitiveness without being forced to make compromise with worker security? The APO (2002) report argues that given the demographic changes of a declining birth rate, increased life expectancy both resulting in top-heavy work force, the global competition affecting the business world, government policies not showing much success in eliminating bad debts, facilitating structural reforms, and accelerating progress in the field of information technology, the introduction of flexibility measures has become necessary. External flexibility has to be avoided – only recommendations for internal flexibility have been made by the researchers. The most common measure cited is job mobility, or reassignment and redeployment of workers implemented with a training program being carried out within the company's own network, or the internal labour market. However, these measures are not always sufficient. Growing number of companies have introduced greater measures of flexibility by adopting performance- based evaluation in the place of traditional seniority-based wage and promotion system. As a result older employees are getting obsolete while younger cohort of the staff is getting incentives, and also part time employment is on the rise (APO, 2002).[10]

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[9] Flexibility can be of different types: external flexibility which involves hire and fire and internal flexibility which means increased freedom for management to change the conditions pertaining to work and employment, including fixing wages, regulating hours of work, and organizing the production process, but without changing numbers of employees or employment status (APO, 2002).

[10] APO (2001), summarizes a survey that was conducted to register the order in which employment adjustment measures are carried out in Japan: a. reducing overtime workers, b. transfer of workers from one department where jobs are reduced to another where jobs are increasing, c. suspend or limit the employment of mid-career workers, d. reduce work hours and days so that production activities stop and during the suspension of production activities government provides financial assistance in the form of a subsidy for employment adjustment (50 per cent of wages in large enterprises and two-thirds for

In the context of globalization, several south and east Asian countries are seen to be holding enormous potentiality to generate growth, and within these countries large cities are viewed as the major centers of economic growth. Cities account for a large majority of the total infrastructural investment in the country, and thus agglomeration economies are quite significant (Fujita and Thisse, 2003; Mills, 1967; Henderson,1986; and Kuchiki, 2005). As a result, the productivity augmenting effects of these large cities attract new firms and activities, which in turn lead to rapid inflow of population from rural and other relatively smaller urban centers. While economies of scale grow at a decreasing rate with city size, diseconomies of scale grow at least at a constant rate if not at an increasing rate, implying that beyond a threshold level large cities manifest themselves in terms of more diseconomies than the positive externalities they may offer resulting in higher cost of production. In response to globalization as firms in large urban settlements/cities are hardest hit for their high cost of production (Institute of Labour Studies, 1999; The Japan Institute of Labour, 1999)[11], unemployment and homelessness both are likely to be more prevalent in these cities.[12]

India

A large body of literature has emerged in the context of globalization and economic reforms suggesting that in many of the labour surplus economies like India, a deliberate choice was made in the past ironically in favour of the capital-intensive technology in the organized industry. This was primarily because of rigid labour laws and labour unions, which introduced distortions in the factor market and led to sluggish employment growth even in a time – the eighties- when the Indian industrial growth was quite satisfactory. And to help the economy recover from such a sluggish growth scenario and boost the overall growth of the economy so that improvements can be attained on the balance of payment front as well, a series of reforms encompassing industry, trade, financial sector

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small and medium enterprises are compensated in terms of government-operated employment insurance) and e. to curtail the employment of new graduates.

[11] Though during the bubble period job creation was focused in large metropolitan areas the pull of metropolitan areas has weakened since the collapse of the bubble (The Japan Institute of Labour, 1999).

[12] A study conducted by the Ministry of International Trade and Industry and cited in Iguchi (1998) asserts that the net production and employment effects in Japan of growing overseas production by Japanese companies have turned negative in 1995, as the export substitution and re-import effects overwhelmed the export inducement effects. The impact, however, varies across sectors and across geographic locations (Iguchi, 1998). Loss of employment has been remarkable only in textile, food precision machinery, and primary metal. But productivity and incomes have been rising in electrical machinery, oil, primary metal, and chemicals. However, by location, the number of establishments and employment has decreased especially in *Kanto* (south), and *Kinki,* where large cities are located. But in neighbouring areas of Kanto (north) and Tokai, where export industries are concentrated, employment increased despite the loss of some establishments.

and labour market, were recommended since 1991.This is expected to generate employment opportunities along with economic growth.

Flexibilisation in the labour market, however, has not resulted in any significant improvement in the employment elasticity in the organized industry in India[13]. In the past also, the limited spread of the high productivity industry and adoption of capital-intensive technology led to a residual absorption of labour in the low productivity informal sector.

As a result, the phenomenon of 'working poor' in the informal sector remains a widely prevalent phenomenon. And more importantly, the low productivity informal sector does not seem to be having strong and generative linkages with the organized industry (Harriss and Harriss, 1984 and Shaw, 1990). Hence, informal sector employment, poverty and adverse living conditions including slums and squatter settlements with no access to safe drinking water and sanitation, tend to overlap (Mitra, 1994). The surplus labour released from the agriculture sector is not able to find an entry in a big way to the high productivity segment of the job market, partly because of the mismatch between the skill requirements and what is available, and partly due to sluggish growth in demand for labour. The rising cost of living, including land and housing, in the face of meager earnings accruing to the informal sector workers due partly to excess supplies of labour in relation to demand and partly low productivity charactering the activities that they are engaged in, explain such overlaps between informal sector employment, poverty and slum dwelling (Chart 2).

Chart 2: Type of Residence, Sector of Employment and Standard of Living

- Sector of Employment -

	Informal Sector		**Formal Sector**	
Type of Residence	**Poor**	**Non-Poor**	**Poor**	**Non-Poor**
Slum	A	B	C	D
Non-Slum	E	F	G	H

Note: For details see Mitra (1994).

3. Labour Market Changes in Japan: Empirical Analysis

Value Added Composition and Employment Structure

In explaining the labour market functioning in the recent years – in particular, to analyze the question, whether the Japanese way of organizing labour will survive the prolonged economic recession, together with a declining population growth rate and ageing of labour force, or a dramatic structural change is likely to set in - Ariga, Brunello

[13] This is of course a matter of great debate in the Indian context. For details see, Mitra (2005), Hasan and Mitra (2003), Uchikawa (2003),

and Ohkusa (2000), however, refute the view that the analysis has to be based on special analytical tools. On the contrary following the work of Aoki (1988) and Koike (1988, 1995) they address themselves to the issues on the basis of typical modern economic analysis. In providing empirical support to our hypotheses and analyzing the data we also follow the same line of argument.

We begin our analysis by looking into the sectoral distribution of value added and the changes in the shares over time. The old series is given for the period 1970 through 1998 in 1990 prices whereas the new series is available since 1990 with 1995 as the base. We have converted the figures from 1999 to 2003 into 1990 base though strictly speaking both the series are not comparable, as the methodology has changed considerably in the new series compared to the earlier one. However, keeping in mind this limitation, it is noted from Table 1 that while the share of agriculture declined over time, that of manufacturing has been fluctuating within the range of 28 to around 30 per cent between 1980 and 2003. On the other hand, construction shows a steady decline from 11.63 per cent in 1981 to only 7.23 per cent in 2003. The share of services, however, has increased over the years.

Table 1: Distribution of value added across industry divisions (%)

Year	Agri.	Min.	Manuf	Cons.	Elec.	Trade	Finan.	Real Estate	Trans.	Serv.	GDPIND/ AGGDP
1980	3.55	0.53	28.29	11.62	3.07	14.11	4.22	12.00	6.98	15.63	91.75
1981	3.48	0.50	28.38	11.63	3.00	14.04	4.19	11.94	6.94	15.92	91.78
1982	3.57	0.48	28.61	11.06	3.05	14.20	4.13	11.79	6.81	16.28	91.24
1983	3.52	0.43	28.67	10.04	3.11	14.24	4.51	11.74	7.00	16.74	91.74
1984	3.48	0.38	29.24	9.58	3.03	13.67	4.84	11.82	7.17	16.80	92.22
1985	3.29	0.33	30.02	9.28	2.95	13.14	4.87	12.05	7.03	17.04	92.97
1986	3.20	0.32	28.91	9.49	2.85	13.49	5.48	12.24	7.04	16.99	92.38
1987	3.15	0.28	28.75	10.01	2.76	13.86	5.95	12.19	6.94	16.10	93.33
1988	2.87	0.27	29.12	10.36	2.73	13.97	6.27	12.00	6.94	15.47	93.71
1989	2.80	0.23	29.23	10.45	2.69	13.86	6.62	11.69	7.13	15.29	94.88
1990	2.66	0.27	29.51	10.57	2.74	14.21	6.22	11.39	6.93	15.49	95.52
1991	2.35	0.25	29.79	10.52	2.80	14.46	5.98	11.31	6.84	15.70	95.97
1992	2.47	0.25	29.06	10.49	2.79	14.48	5.82	11.64	6.73	16.28	96.03
1993	2.18	0.24	28.11	10.88	2.80	14.25	5.52	12.25	6.80	16.96	95.04
1994	2.34	0.20	27.68	10.78	2.86	14.10	5.82	12.44	6.82	16.96	95.23
1995	2.18	0.19	28.62	10.13	2.86	14.17	5.66	12.34	6.76	17.10	95.73
1996	2.15	0.19	29.07	9.85	3.00	13.58	5.16	12.47	6.92	17.60	95.20
1997	2.03	0.19	29.78	9.14	2.98	13.61	5.42	12.63	6.89	17.34	95.21
1998	2.03	0.20	28.62	8.63	3.21	13.53	5.53	13.17	6.99	18.09	94.80
1999	1.92	0.19	29.05	8.49	3.25	12.92	5.78	13.37	6.86	18.31	94.55
2000	1.90	0.21	30.38	8.09	3.25	12.22	5.77	13.29	6.84	18.49	94.47
2001	1.82	0.23	29.26	7.85	3.32	12.28	6.18	13.43	7.10	18.65	94.81
2002	1.91	0.22	28.60	7.59	3.36	12.24	6.44	13.69	7.14	18.79	94.76
2003	1.69	0.22	30.51	7.24	2.50	11.74	6.13	13.51	7.06	18.61	94.64

Note: GDPIND is the aggregate of value added from all industry divisions. AGGDP is aggregate GDP which includes producers of government services (electricity, gas and water supply, service activities, public administration) and producers of private non-profit services to households. Agri.: agriculture, Min: mining, Manuf.: manufacturing, Cons.: construction, Elect.: Electricity, Finan.: finance, Trans: transport, Serv.: services.
Source: Annual Report on National Accounts, 2005 and 2001, Department of National Accounts, Economic and Social Research Institute, Cabinet Office, Government of Japan.

Keeping in view the collapse of the bubble economy the entire time period has been divided into two phases: period 1 (PD1), starting from 1980 to 1992 and period 2 (PD2), starting from 1992 to 2003. However, as the figures from new series and old series may not be comparable in a strict sense, we have calculated the growth rate only from the old series, redefining the second period from 1992 to 1998. It is evident from Table 2 that the manufacturing growth rate decelerated considerably in the post 1992 period compared to the eighties. Construction, trade and agriculture registered a negative value added growth rate during the second period. Several other sectors like financing, real estate, transport and services also experienced a fall in the growth rates in the second period relative to the first. On the whole, the aggregate GDP growth rate decelerated from nearly 4 per cent per annum in the first period to a barely 1 per cent per annum in the second period.

Table 2: Growth rates in value added (% per annum)

Period	Agriculture	Mining	Manu-facturing	Cons-Truction	Electricity	Trade	Finance
1980/2003	-0.78	-1.37	2.80	1.25	3.15	2.14	4.08
PD1:80/92	0.83	-2.73	4.66	3.85	3.25	4.55	8.33
PD2:92/03	-1.93	0.63	1.40	-2.97	-1.00	-1.00	2.14
PD:92/98	-1.50	-2.77	1.82	-4.50	3.51	0.21	0.29

Real Estate	Trans-Port	Services	GDPIND	AGGDP	POP	Per Capita GDP
3.32	3.32	3.41	2.69	2.53	0.36	2.16
4.06	4.06	4.09	4.37	3.92	0.52	3.40
2.26	2.26	2.19	0.93	1.04	0.25	0.79
2.95	2.95	2.82	1.40	1.53	0.27	1.26

Note: Same as Table 1.
Source: Based on National Accounts Figures. See Table 1.

Following the line of Kaldor's (1967) hypothesis to check whether manufacturing is the engine of growth the yearly growth rate of the aggregate GDP net of manufacturing value added (ROGDP**)** has been regressed on the annual growth rate of manufacturing value added (ROGMFG). Also a slope dummy (D) has been introduced to examine if the effect of the manufacturing growth rate on the aggregate growth rate changed in the second period (1992-2003) compared to the first (1980-1991). The results suggest that manufacturing did play a crucial role in pulling the overall growth rate during the eighties.

However, the slope dummy is highly significant with a negative coefficient suggesting that the impact of manufacturing on the overall growth rate has dropped in the nineties. Since the magnitude of the coefficient of the slope dummy is as high as the coefficient of the rate of growth of manufacturing sector, the elasticity of overall growth rate with respect to manufacturing growth rate turns out to be highly negligible in the nineties (0.03), implying that the overall growth rate is largely influenced by the growth performance of the other sectors.

ROGDP = 0.0145 + 0.3478 ROGMFG – 0.3211 D(ROGMFG)
(3.82)* (3.49)* (-2.63)*
Adj. R2 = 0.32; * represents significance at 5 per cent level.

The estimates of employment shares derived from the National Accounts data reveal a steady decline in the share of agriculture over the years, which is in conformity with the development experience of the nations (Table 3). However, there has occurred a continuous fall in the share of manufacturing as well, particularly 1993 onwards. On the other hand, the share of services shot up from 16.09 in 1980 to a little over 31 per cent in 2003 (Table 3). At higher levels of development, diversification of activities towards the services is not unusual. But the falling share of manufacturing in total employment, which was only one-fourth of the work force in 1980, does pose concern. Particularly given the steady fall in the per capita income growth rate in the second period despite a drop in the population growth rate (Table 2), the decline in the share of manufacturing in total employment cannot merely be treated as usual feature of diversification away from manufacturing towards services prompted by a rapid increase in the demand for the latter, as seen in the work of Kuznets (1966) and Chenery and Syrquin (1975). Table 4 showing the growth rates in employment in different activities further substantiates with evidence that manufacturing employment declined as fast as 3.41 per cent per annum in the second period. It is only the services sector which grew at a rapid rate of 3.37 per cent per annum during the post-1992 period, almost matching the growth rate experienced during the first period. The total employment also shows a marginal decline of 0.15 per cent per annum during the second period. Is it because of globalization forcing firms to adopt higher levels of mechanization in an attempt to reduce cost accompanied by the closure of units and retrenchment? However, before turning to this point it may be important to examine the employment structure from the labour force surveys as well.

Table 3: Employment shares (%) from National Accounts data

year	Agri	Min	Manuf.	Cons.	Elec.	Trade	Finan.	Real Estate	Trans.	Serv.	Govt	Pvtnp	Total
1980	12.90	0.26	23.96	10.08	0.58	17.78	3.02	1.02	5.67	16.09	6.67	1.98	100
1981	12.40	0.25	24.03	9.88	0.58	17.95	3.09	1.10	5.57	16.40	6.69	2.07	100
1982	12.06	0.24	23.71	9.69	0.58	18.09	3.13	1.12	5.64	16.94	6.67	2.11	100
1983	11.50	0.22	23.74	9.48	0.58	18.08	3.18	1.16	5.61	17.73	6.59	2.14	100
1984	11.02	0.21	24.14	9.10	0.58	18.09	3.21	1.17	5.49	18.23	6.58	2.17	100
1985	10.81	0.20	24.21	9.00	0.58	18.00	3.19	1.20	5.52	18.68	6.45	2.17	100
1986	10.39	0.19	23.97	9.02	0.63	17.98	3.24	1.24	5.61	19.04	6.46	2.23	100
1987	10.08	0.18	23.61	8.98	0.63	17.98	3.29	1.31	5.46	19.77	6.44	2.26	100
1988	9.62	0.18	23.84	9.37	0.63	17.81	3.22	1.35	5.41	19.89	6.36	2.31	100
1989	9.17	0.17	24.00	9.58	0.63	17.46	3.23	1.39	5.51	20.28	6.22	2.35	100
1990	8.76	0.16	23.99	9.65	0.63	17.17	3.33	1.46	5.47	20.88	6.13	2.38	100
1991	8.27	0.15	24.27	9.76	0.62	16.97	3.26	1.48	5.39	21.39	6.04	2.40	100
1992	7.93	0.14	24.28	9.88	0.63	16.79	3.21	1.49	5.43	21.72	6.00	2.49	100
1993	7.53	0.13	23.68	10.19	0.64	16.82	3.17	1.49	5.53	22.30	6.01	2.52	100
1994	7.39	0.13	23.16	10.42	0.65	16.67	3.16	1.52	5.50	22.74	6.02	2.64	100
1995	7.31	0.12	22.55	10.54	0.66	16.64	3.14	1.55	5.63	23.19	6.01	2.67	100
1996	7.14	0.12	22.31	10.58	0.66	16.64	3.04	1.53	5.73	23.55	5.98	2.73	100
1997	7.00	0.11	22.04	10.69	0.66	16.51	2.95	1.54	5.69	24.18	5.90	2.73	100
1998	6.94	0.11	21.33	10.43	0.66	16.64	2.98	1.60	5.65	24.82	5.93	2.91	100
1999	6.49	0.12	19.04	10.29	0.66	18.11	3.02	1.45	5.90	27.24	5.53	2.15	100
2000	6.35	0.11	18.74	10.24	0.66	18.04	3.00	1.44	6.03	28.30	5.48	1.62	100
2001	6.20	0.11	18.36	9.96	0.66	18.10	2.91	1.42	5.95	29.45	5.46	1.43	100
2002	5.99	0.11	17.73	9.89	0.65	17.95	2.96	1.42	5.95	30.43	5.45	1.45	100
2003	5.96	0.10	17.41	9.71	0.65	17.81	2.85	1.35	6.06	31.19	5.44	1.46	100

Notes: 1**.** Govt and Pvtnp stand for producers of government services and producers of private non-profit services to households respectively. For other short abbreviations see Table 1.

2. Employment figures given in the National Accounts series for the period from 1955 to 1998 and for the period from 1990 to 2003 show some discrepancies for the overlapping years. We have taken the figures from 1980 to 1998 from the former and from 1999 to 2003 from the latter to minimize the discrepancies.

Source: Report on National Accounts from 1955 to 1998, and Economic and Social Research Institute, Cabinet Office, Government of Japan, 2001 and Annual Report on National Accounts, 2005, Department of National Accounts.

Table 4: Growth rates in employment across activities from National Accounts data (% per annum)

Year	Agriculture	Mining	Manufacturing	Construction	Electricity	Trade
1980/2003	-2.910	-3.646	-0.712	1.002	1.225	0.439
80/92	-03.022	-4.075	1.043	0.898	1.844	0.424
92/003	-2.742	-2.623	-3.406	-0.506	0.109	0.720
92/98	-1.765	-4.313	-1.720	1.199	1.199	0.083

Finance	Real Estate	Transport	Services	Govt. & Pvt. Non-profit services	Total
0.215	1.989	0.910	3.302	-0.282	0.587
1.496	4.088	0.609	3.484	0.696	0.957
-1.098	-0.987	0.840	3.367	-2.652	-0.147
1.400	1.400	2.449	2.449	0.850	0.315

Source: Same as Table 3.

Also from the annual labour force survey data the decline in the share of manufacturing is evident over the years (Table 5). Between 1984 and 1992 it was more or less stable at around 24 per cent but subsequently it decelerated to around 18 per cent by 2004. The share of trade, hotel, finance and real estate remained more or less unchanged during the entire period whereas that of services picked up from 20 per cent in 1980 to around 34.5 per cent in 2004. The rate of growth of employment in different activities computed from annual labour force survey data (Table 6) suggests a faster fall in employment in manufacturing in the second period (-2.54 per cent per annum) than the pace of increase between 1984 and 1992 (1.11per cent per annum). Employment in construction experienced a decline at a rate of 0.61 per cent per annum in the second period. Total employment also fell marginally during this period (-0.18 per cent per annum), though services growth rate remained above 3 per cent during both the periods.

Table 5: Employment structure (%) from Annual Labour Force Survey

Year	Agri-culture	Fishing	Mining	Cons-truction	Manu-Facturing	Electricity, Transport	Trade, Hotel, Finance & Real Estate	All services
1984	8.12	0.76	0.14	9.14	24.94	6.52	26.64	20.01
1985	7.99	0.77	0.15	9.13	25.02	6.47	26.43	20.20
1986	7.69	0.77	0.14	9.12	24.67	6.56	26.72	20.59
1987	7.55	0.73	0.14	9.02	24.11	6.41	27.07	21.23
1988	7.22	0.67	0.12	9.32	24.19	6.39	27.02	21.36
1989	6.84	0.72	0.11	9.43	24.22	6.49	26.81	21.80
1990	6.58	0.64	0.10	9.41	24.08	6.50	26.79	22.31
1991	6.14	0.57	0.09	9.48	24.34	6.45	26.63	22.70
1992	5.83	0.56	0.09	9.62	24.38	6.49	26.38	23.01
1993	5.43	0.51	0.09	9.92	23.72	6.65	26.50	23.50
1994	5.35	0.43	0.09	10.15	23.18	6.69	26.42	23.90
1995	5.27	0.42	0.09	10.27	22.55	6.88	26.51	24.25
1996	5.09	0.40	0.09	10.33	22.28	6.91	26.50	24.64
1997	4.94	0.40	0.11	10.45	21.99	6.83	26.35	25.13
1998	4.87	0.40	0.09	10.16	21.22			
1999	4.75	0.43	0.09	10.17	20.81			
2000	4.61	0.45	0.08	10.13	20.49			
2001	4.46	0.42	0.08	9.86				
2002	4.23	0.44	0.08	9.76				
2003	4.21	0.43	0.08	9.56	18.65	5.76	27.15	33.19
2004	4.17	0.35	0.06	9.23	18.17	5.59	26.86	34.48

Note: All services include medical, education, compound, services not elsewhere classified and government services.

Source: Annual Report on the Labour Force Survey, 2004, 2001 and 1986, Statistics Bureau, Ministry of Internal Affairs and Communication (2004), Ministry of Public Management, Home Affairs Posts and Telecommunications (2001), and Management and Co-ordination Agency (1986), Japan.

Table 6: Rate of growth of employment estimated from Labour Force Survey data (% per annum)

Period	Agri.	Fish.	Min.	Cons.	Manuf.	Elect., Transport	Trade, Hotels, Finance, Real Estate	All Services	Total
1984/ 1992	-2.74	-2.81	-5.13	2.18	1.11	1.42	1.44	3.30	1.25
1992/ 2004	-2.90	-2.01	-2.82	-0.61	-2.54	-1.72	0.01	3.34	-0.18
1984/ 2004	-3.08	-3.42	-2.81	0.93	-0.95	0.12	0.56	3.12	0.65

Note and Source: Same as Table 5.

The occupational classification of the workers also shows a significant drop in the percentage share of the manufacturers, machine operators and construction workers from around 30 per cent in 1980 to 23 per cent in 2002 (Table 7). The proportion of managers and officials to the total also decelerated by one percentage point. Labourers, on the other hand, increased as a percentage of total work force, possibly indicating the increasing phenomenon of retrenchment and the availability of some of those workers as labourers.

Table 7: Occupational classification (%)

Year	Prof. & Tech.	Managers & Officials	Clerical & Related	Sales	Protective Service & Service	Agri. etc.	Trans. & Com.	Min.	Mfg., & Cons.	Lab.
1980	7.91	3.97	16.69	14.40	8.26	10.30	4.48	0.09	29.86	3.03
1985	9.26	3.63	17.58	14.83	8.63	8.64	3.91	0.07	29.09	3.96
1990	11.04	3.82	18.51	15.04	8.56	7.17	3.73	0.05	27.24	4.38
1995	12.23	3.65	19.39	14.64	9.45	5.62	3.67	0.05	26.13	4.80
2000	13.28	3.20	19.93	14.13	10.50	4.98	3.43	0.05	24.51	5.38
2001	13.62	3.15	19.48	15.10	10.81	4.82	3.34	0.05	23.49	5.51
2002	14.06	2.95	19.40	14.76	11.33	4.60	3.33	0.06	23.19	5.51

Note: Service workers for 1980 include sweepers and garbage men but for the rest of the years they are excluded.

Source: Based on Annual Labour Force Survey, Statistical Survey Department, Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications, cited in Japan Statistical Year Book, 2004, Statistics Bureau/Statistical Research and Training Institute, Ministry of Public Management, Home Affairs, Posts and Telecommunications, Japan.

Employment Elasticity

Based on the data from 1980 through 2003 employment elasticity of growth has been estimated by regressing logarithm transformation of sector specific employment on the logarithm transformation of sector specific value added (LNGVA) and a slope dummy (D*LNGVA) making a distinction between the first and second periods, 1992 being the dividing line (Table 8). Only in construction, trade and transport sectors there has been an improvement in the elasticity of employment with respect to value added in the second period though the extent of rise is only 0.01, 0.003 and 0.007 respectively. One would expect the employment elasticity to be high in the construction sector because of its high labour intensive nature. But it has been only 0.28 and 0.29 during the first and second periods respectively. In mining, manufacturing, and finance there has been a decline in the employment elasticity in the second period relative to the first. In manufacturing, even in the first period the elasticity turned out to be highly negligible (0.08) and statistically insignificant too, which declined further and became negative in the second period. In services, on the other hand, though there has been no improvement in the employment elasticity over time, it was as high as 0.94 in the first period, which continued to be so in the second period as well. At the aggregate level, conforming to the findings of the Japan Institute of Labour (2002), there is no change in the employment elasticity in the second period compared to the first (0.23).

Table 8: Employment elasticity of growth (pd.1:1980 to 1991 and pd.2:1992 to 2003)

Sector	Constant	Ln(GVA)	D*Ln(GVA)	Adj. R^2
Agriculture	4.67 (1.22)	0.19 (0.47)	-0.036 (-4.84)*	0.71
Mining	-1.52 (-1.06)	0.57 (2.78)*	-0.05 (-5.96)*	0.81
Manufacturing	6.34 (4.07)*	0.08 (0.62)	-0.009 (-2.02)*	0.14
Construction	3.44 (7.79)*	0.28 (6.65)*	0.01 (7.96)*	0.90
Electricity	0.35 (0.52)	0.36 (4.85)*	0.002 (0.48)	0.82
Trade	6.51 (14.09)*	0.045 (1.05)	0.003 (2.36)*	0.42
Finance	3.94 (12.27)*	0.14 (4.20)*	-0.004 (-2.05)*	0.41
Real Estate	-3.91 (-2.79)*	0.78 (5.89)*	-0.007 (-1.23)	0.79
Transport	4.20 (12.96)*	0.16 (5.05)*	0.007 (5.59)*	0.92
Services	-3.13 (-4.02)*	0.94 (13.08)*	0.0004 (0.14)	0.97
Government &	9.79	-0.35	0.0001	0.23

Private Non-Profit	(8.23)*	(-2.95)*	(0.03)	
Aggregate GDP	5.82 (19.29)*	0.23 (9.64)*	0.0005 (0.42)	0.93

Source: Based on National Accounts Data.

Labour Productivity

Productivity differentials across sectors are quite evident (Table 9). Minami (1994) suggested that if the ratio of labour productivity in agriculture or services sector to that in manufacturing is less than unity then productivity differential is said to exist. And from this point of view the dual structure seems to have existed in Japan. Further, within the manufacturing sector itself Minami (1994) noted a dual structure: historically the difference between the largest and smallest enterprises was 70 percentage points in terms of wage rate, 80 percentage points for labour productivity and 90 percentage points for capital-labour ratio, which can possibly be explained on the basis of the greater incidence of life-time employment and seniority-based wage systems in large scale enterprises. However, the proportion of workers employed by small and medium-sized enterprises decreased during economic upswings but increased during downswings, suggesting that together with agriculture and services they served to cushion fluctuations in the labour market.

Table 9: Productivity (inYen) and Growth in Productivity (% per annum).

Year	Agriculture	Mining	Manufacturing	Construction	Electricity
1980	125153	946333	536427	523970	2403265
1981	130695	928649	549722	548032	2399477
1982	139942	964468	570732	539720	2480288
1983	146869	928370	579006	507919	2573657
1984	157414	882231	604533	525378	2610855
1985	158931	842581	647619	538969	2669261
1986	163764	881933	640845	559280	2415247
1987	173953	860088	678311	621090	2427103
1988	175244	887636	717022	649462	2532081
1989	187319	858868	748069	670411	2624020
1990	193935	1110495	786370	700444	2796517
1991	185652	1113980	802151	704259	2941863
1992	203234	1152258	782279	693607	2911205
1993	187535	1150787	767536	690244	2840684
1994	206585	1014419	778016	673377	2873056
1995	198089	1062593	841674	636907	2894577
1996	207617	1152692	898566	641818	3140658
1997	200822	1205467	936419	592475	3146712
1998	198643	1235972	908950	560817	3275481

1999	202141	1138581	1043665	564561	3344829
2000	209882	1312584	1138385	554325	3461960
2001	207669	1466988	1129333	558554	3585313
2002	228025	1484869	1154982	549182	3681383
2003	209256	1567582	1293350	550254	3749333
1980/1992	3.85	1.35	3.62	2.96	1.40
1992/2003	0.81	3.25	4.81	-2.46	2.72
1992/1998	0.26	1.54	3.54	-3.54	2.31
1980/2003	2.13	2.28	3.51	0.25	1.93

Year	Trade	Finance	Real Estate	Transport	Services	Govt & Pvtnp	Aggregate
1980	360737	635907	5323810	559453	441628	472560	495339
1981	363985	631968	5060508	579475	451758	476138	507144
1982	371221	624290	4983343	571390	454635	516956	518413
1983	377445	679314	4865000	598903	452577	494110	522541
1984	376913	752631	5034543	652219	459987	481041	541168
1985	381351	797488	5254186	664939	476653	458604	561845
1986	398601	899350	5241800	667116	474241	504183	575285
1987	429518	1008005	5169209	708792	453721	457231	596846
1988	460600	1143047	5233039	752639	456737	454130	626545
1989	487400	1256557	5172942	794545	463079	386685	647278
1990	528749	1194250	4993831	810094	474171	351913	669040
1991	556863	1197518	4988465	829567	479673	324997	680950
1992	563586	1184551	5121494	809400	490056	318173	680681
1993	547694	1125827	5330020	794380	491685	395527	680123
1994	550332	1200090	5315937	807026	485660	376846	683644
1995	564453	1195373	5284942	795921	488709	341201	692619
1996	562822	1170275	5614064	832893	515430	399412	724305
1997	571138	1273223	5686401	839429	497043	404018	727930
1998	550503	1257290	5566141	838868	493673	420087	714574
1999	487886	1309726	6326545	795915	459744	513695	723605
2000	475763	1352011	6496004	796943	458885	579406	743362
2001	480509	1504813	6683040	845682	448573	562490	747183
2002	488340	1557152	6883199	858843	442154	572963	755684
2003	486492	1675411	7384472	858945	440173	606388	779726
1980/1992	4.12	6.83	-0.03	3.63	0.60	-3.67	2.97
1992/2003	-1.72	3.24	3.25	0.54	-1.17	5.83	1.19
1992/1998	0.13	1.43	1.55	0.89	0.37	3.34	1.21
1980/2003	1.70	3.87	1.34	1.77	0.10	0.36	1.94

Note: (1) 'Pvtnp' stands for private non-profit organization and 'Aggregate' stands for aggregate GDP divided by total employment.

(2) The figures in last four rows give the growth rates per annum.
Source: Based on National Accounts Data.

Labour productivity growth in manufacturing shot up in the second period compared to the first almost by 1 percentage point (Table 8). In construction sector, on the other hand, labour productivity growth became negative in the second period. At the aggregate level also there has been deterioration in the labour productivity growth in the second period though it continued to be positive. The elasticity of overall productivity growth with respect to manufacturing productivity growth, however, turns out to be only 0.22 for the entire period, suggesting nominal contribution made by this sector to the productivity performance at the aggregate level. In other words, the influence of other sectors is more important than that of the manufacturing sector on the aggregate labour productivity growth[14]. This is mainly because of the declining share of manufacturing in terms of employment.

The decomposition of value added growth in terms of employment growth and productivity growth indicates that in manufacturing much of the rise in value added growth took place due to rise in labour productivity (Table 10), which in turn is strongly related to the growth in capital-labour ratio (Minami, 1994). The contribution of employment growth to value added growth actually turns out to be negative in the manufacturing sector. On the other hand, at the aggregate level though the contribution of productivity growth dominated that of the employment growth, the latter is at least positive.

Table 10: Decomposition of value added growth in terms of employment and productivity

Growth Rate (% p.a.)	Manufacturing	Aggregate
GVA	2.80	2.53
Employment	**-0.712**	**0.587**
Productivity	3.51	1.93

Source: Based on National Accounts Data.

Other Aspects of Employment and Unemployment

Turning to unemployment, it may be noted from Table 11 that the number of unemployed grew at a rate of 7.39 per cent per annum over the period 1992 to 2004, much in excess of the population growth or labour force growth. In fact, employment growth for this period turned out to be negative. Even among those who are listed as employed it may be noted that nearly two percent are not at work (Table 12). Besides, another 15 per cent of those at work are not engaged mainly in work. Either they are combining employment with

[14] AGGR = 0.011 +0.22 MFGGR ; Adj.R^2 = 0.28, where AGGR and MFGR
(2.86)* (3.10)*
are aggregate and manufacturing productivity growth rates respectively.

house keeping or they are working while at school. Hence, only around 84 per cent of those who have been identified as total workers are engaged mainly in work.

Table 11: Rate of growth of labour force, employment and unemployment (% p.a.)

Period	Population	Population (Age 15 and above)	Labour Force	Total Employment	Unemployment
1980/1992	0.52	-0.04	1.24	1.25	0.76
1992/2004	0.24	0.56	0.10	-0.18	7.39
1980/2004	0.35	-0.34	0.79	0.65	4.51

Source: Annual Labour Force Survey, see Table 5.

Table 12: Percentage of not at work among total employed

Year	%Not at work among total employed	%Working while house keeping and attending school among those who are employed and at work	%Engaged mainly in work among total employed
1980	1.55	14.59	84.09
1981	1.61	14.77	83.87
1982	1.54	14.95	83.75
1983	1.55	15.13	83.55
1984	1.51	15.46	83.28
1985	1.45	15.53	83.24
1986	1.42	15.53	83.29
1987	1.40	15.60	83.20
1988	1.35	15.67	83.18
1989	1.35	15.70	83.16
1990	1.41	15.79	83.04
1991	1.51	15.75	82.98
1992	1.52	15.15	83.56
1993	1.57	14.13	84.53
1994	1.52	13.93	84.77
1995	1.53	14.05	84.64
1996	1.53	14.17	84.52
1997	1.59	14.27	84.37
1998	1.63	14.34	84.26
1999	1.66	14.33	84.26
2000	1.57	14.47	84.19
2001	1.62	14.58	84.01
2002	1.71	14.42	84.11
2003	1.73	14.27	84.23

2004	1.67	14.14	84.42

Source: Annual Labour Force Survey. .

Table 13 gives the distribution of total employment in terms of self-employment, family workers and employees (temporary and regular workers). Though over time the percentage shares of the first two categories have declined, and that of employees increased by almost 13 percentage points between 1980 and 2004, within the category of employees the percentage of regular workers has declined noticeably. On the other hand, the relative size of temporary workers almost doubled between 1980 and 2004. From Table 14 one may note that temporary employment grew at a faster rate than any other category of employment during both the periods. However, the rapid growth in temporary employment could not compensate for the negative growth in regular employees or daily employees. As a result total employees could not experience any major increase (rather rose only marginally) during the second period. All his is indicative of the changes that are taking place in employment practices, i.e., the shift from life-time employment to short term contractual employment (irregular or atypical employment). Surprisingly the proportion of daily workers to total has also declined suggesting a deceleration in activities based on daily wage labourers. Given this scenario, as we examine the unemployment rate (defined as the proportion of unemployed to the total labour force) the rise is evident from Table 14. Possibly the decline in the demand for daily wage labourers has raised the unemployment rate.

Table 13: Composition of employment

Year	%Self-employed in total workers	%Family Workers in total workers	Family work <15 hrs to total family work (%)	Employees in total workers(%)	Regular Emp. to total emp.(%)	Tem. emp. to total emp.(%)	Daily emp. to total emp.(%)
1980	17.18	10.89	8.62	71.73	90.30	6.45	3.27
1981	16.90	10.61	8.61	72.33	90.31	6.54	3.15
1982	16.73	10.41	8.86	72.69	90.09	6.78	3.10
1983	16.36	10.01	9.41	73.40	89.66	7.25	3.09
1984	15.94	9.80	9.73	73.97	89.71	7.32	2.98
1985	15.77	9.63	10.20	74.27	89.64	7.44	2.92
1986	15.58	9.33	10.07	74.82	89.79	7.38	2.83
1987	15.48	9.29	10.02	74.91	89.52	7.81	2.64
1988	15.14	9.03	10.31	75.49	89.33	7.93	2.73
1989	14.62	8.67	10.17	76.35	89.25	8.04	2.71
1990	14.05	8.27	10.64	77.37	89.27	8.13	2.61
1991	13.49	7.68	10.84	78.54	89.50	7.96	2.54
1992	13.10	7.09	10.75	79.54	89.65	7.99	2.36
1993	12.62	6.48	10.53	80.65	89.52	8.11	2.36
1994	12.34	6.31	10.57	81.14	89.57	8.10	2.33

1995	12.14	6.15	10.58	81.51	89.47	8.23	2.28
1996	11.79	5.89	10.99	82.05	89.33	8.42	2.25
1997	11.77	5.73	11.44	82.22	88.87	8.81	2.32
1998	11.68	5.63	12.26	82.41	88.49	9.18	2.35
1999	11.67	5.51	12.92	82.50	87.98	9.68	2.34
2000	11.34	5.27	12.65	83.09	87.45	10.31	2.22
2001	10.81	5.07	12.92	83.73	87.11	10.62	2.27
2002	10.58	4.82	13.44	84.22	86.36	11.39	2.25
2003	10.45	4.69	13.85	84.47	86.19	11.53	2.29
2004	10.36	4.58	14.14	84.61	86.05	11.78	2.15

Source: Annual Labour Force Survey, see Table 5.

Table 14 : Rate of growth of different categories of workers (% p.a.)

Year	All Workers	Self-Employed	Family Workers	All Employees	Regular Employees	Temporary Employees	Daily Employees
1980/1992	1.25	-0.90	-1.91	2.05	1.96	3.98	-0.36
1992/2004	-0.18	-2.05	-3.56	0.29	-0.10	3.98	-0.21
1980/2004	0.65	-1.62	-3.27	1.40	1.23	3.62	-0.28

Source: Based on Annual Labour Force Survey, see Table 5.

The unemployment rate increased steadily from barely 2 per cent in 1980 to around 5 per cent in 2004 (Table 15). But as Tachibanaki (1987) pointed out the rate of unemployment is not a good indicator to represent the labour market condition in Japan because of the discouraged worker effect[15]. After re-estimating the adjusted rates of unemployment figures from the labour supply function Tachibanakai and Sakurai (1991) noted that the adjusted rates are much different from (higher than) the unadjusted rates. We have attempted a simple adjustment here. With unemployment if we add those who reported to be employed but not at work, then the rate goes up to 3.54 per cent in 1980 and nearly 7 per cent in 2003. Also, it may be noted that among the unemployed the percentage of those who quitted involuntarily went up over time, indicating the phenomenon of increasing retrenchment. Further, a noticeable rise has taken place in the unemployment rate of younger persons and older males (The Japan Institute of Labour, 1998), and the latter category is more susceptible to becoming homeless.

Table 15: Unemployment rate (%)

Year	Unemployment Rate (%)	Unemployed and not at work	Quitted involuntarily/ unemployed

[15] A large number of workers retire from the labour market in a recession, and they are not counted as unemployed or a part of labour force.

		among employed/labour force (%)	(%)
1980	2.0	3.54	
1981	2.2	3.78	
1982	2.4	3.86	
1983	2.6	4.16	
1984	2.7	4.18	32.30
1985	2.6	4.02	30.13
1986	2.8	4.15	31.14
1987	2.8	4.21	33.53
1988	2.5	3.83	28.39
1989	2.3	3.59	25.35
1990	2.1	3.48	24.63
1991	2.1	3.57	22.79
1992	2.2	3.65	
1993	2.5	4.04	24.70
1994	2.9	4.36	26.04
1995	3.2	4.64	26.19
1996	3.4	4.83	26.22
1997	3.4	4.92	23.48
1998	4.1	5.67	30.47
1999	4.7	6.25	32.18
2000	4.7	6.22	31.88
2001	5.0	6.58	31.18
2002	5.4	6.98	42.06
2003	5.3	6.89	41.71
2004	4.7	6.31	37.70

Source: Based on Annual Labour Force Survey, see Table 5 and Japan Statistical Year Book 2004, Statistics Bureau/Statistical Research and Training Institute, Ministry of Public Management, Home Affairs Posts and Telecommunications, Japan.

The employment decline during 1996 through 2001, however, seems to have taken place in all size categories of private establishments (Table 16), though the very large units which employ 1000 and more workers showed the maximum fall (-3.45 per cent per annum). Even between1991-96 employment was almost stagnant in these units. All this tends to indicate that large establishments are the worst sufferers though one would expect that internal adjustment could have prevented such a massive retrenchment. Possibly the internal adjustments were carried out in the first half of the nineties. But that was perhaps not adequate, as a result of which the establishments had to enforce retrenchment subsequently. The decade of 1990 through 2000 has been marked by both increasing employment and a higher displacement rate for white collar workers: while white collar jobs increased by about 13 million between 1990 and 2000, the employment

stability of individual white collar employment decreased, which was prompted by the closing of business establishments, decreases in the amount of work, and the elimination of certain kind of work (The Japan Institute of Labour, 2001). Also, there is a strong mismatch between the expanding number of job seekers on the one hand and few public employment security offices on the other which is a cause of rising unemployment, both structural and frictional (The Japan Institute of Labour, 2002).

Table 16: Private establishments and persons engaged by number of persons engaged (1972-2001)

Year	Total	1- 4	5--9	10- 29	30- 49	50--99	100- 299	300- 499	500- 999	1000 +
72-75	0.72	1.75	3.01	2.58	0.87	-0.33	-1.91	-3.17	-2.83	-1.55
75-78	2.16	2.69	4.53	3.57	2.38	2.16	1.04	0.16	-1.77	-4.72
78-81	2.59	2.71	3.28	3.15	3.22	2.83	2.19	1.28	-0.13	-0.27
81-86	1.37	0.19	1.26	1.90	1.80	1.49	2.18	1.73	1.50	0.76
86-91	2.22	-0.65	1.76	3.27	3.09	2.98	2.94	2.93	3.71	2.49
91-96	0.91	-0.75	0.31	1.50	1.54	1.49	1.62	1.91	0.78	0.18
96-01	-0.95	-1.37	-1.01	-0.83	-0.72	-0.65	-0.55	0.07	-0.90	-3.45

Source: Based on the Establishment and Enterprise Census, Statistical Survey Department, Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications, Reproduced in Japan Statistical Year Book, 2004, see Table 15.

The Employment Status survey brings out several interesting results. This survey prior to 1982 used to be carried out only once in three years. But after 1982 the survey is being conducted once in every five years. The percentage figures and growth rates of select variables are given in Tables 17 and 18. The results show that the percentage of working persons in the total dropped over time. For the first time since the commencement of the survey the number of persons engaged in work declined by 0.60 per cent per annum over the period, 1997 to 2002. Among the working persons, the percentage of those who changed job increased somewhat from 3 per cent in 1979 to around 5 per cent in 2002. The number of working persons who changed jobs increased at a rate of 2.68 per cent per annum between 1997 and 2002. This is indicative of volatility in the job market. As individuals are not able to access steady jobs in a continuous manner, the change of jobs has become more frequent. Similarly among the non-working individuals the percentage of those who quitted jobs increased from 6 to 9 per cent over the same period.

The proportion of those who desire to continue the present job to the total number of working persons dropped almost by 4 percentage points between 1979 and 2002. In terms of growth rate it decreased by 1.15 per cent per annum over the period 1997 through 2002. Among the ones who desired to have additional jobs almost 37 per cent in 2002, against 33 per cent in 1979, indicated that they were actually seeking jobs. Again, among the working persons those who had a desire to change jobs accounted for almost 12 per cent in 2002, and this figure too showed an increasing tendency over time (8.69 per cent in 1979). Further, among those who reported to have a desire to change jobs almost 45 per cent were on look out of jobs in 2002, though the figure was 37 per cent in 1979.

A substantive percentage of non-working persons expressed their desire to work (around 30 per cent), and nearly half of them were seeking work in 2002, which rose from around 40 per cent in 1979. Among the non-working persons the number of those who quitted jobs increased at a rate of 5.09 and 3.63 per cent per annum between 1992-97 and 1997-02 respectively. All this is suggestive of the fact that increased job market tightening has raised the number of non-working persons over time (which increased by 2.15 per cent per annum between 1997 and 2002), though many of them still aspire to work, implying that much of the job-loss has been involuntary rather than voluntary.

Table 17: Percentage of select variables from Employment Status Survey

Y	Working persons to total (%)	Those who changed jobs to working persons (%)	Who quitt-ed jobs to non-work-ers (%)	Who desire to continue present job to the working persons (%)	Those who are seeking jobs to those who want additional jobs (%)	% of working persons who desire to change jobs	Those seeking jobs to working persons desiring to change jobs	Desiring to work as a % of non working persons (%)	Those seeking work among non-working but desiring to work (%)
79	61.99	3.24	6.40	83.44	33.20	8.69	37.41	30.85	39.86
82	63.43	2.61	7.58	83.08	39.51	8.59	43.70	30.27	41.53
87	62.16	4.37	7.47	82.43	37.58	9.91	41.97	28.94	42.50
92	63.88	4.54	7.05	82.86	36.22	9.50	40.52	25.66	40.17
97	62.82	4.34	8.52	81.08	38.12	10.67	43.93	28.58	46.51
02	59.55	5.12	9.17	78.90	37.07	12.03	45.02	28.51	47.28

Note: In the percentage figure for working persons to total, the total includes population 15 years old or more.

Source: Based on Employment Status Survey, Statistics Bureau, Management and Coordination Agency. See Japan Statistical Year Book, 2004. Employment Status Survey, 2002, Statistics Bureau, Ministry of Internal Affairs and Communication, Japan.

Table 18:Growth rate of select variables from Employment Status Survey（%p.a.）

Pd	Work-ing per-sons	Those who changed jobs among work-ing persons	Who quitt-ed jobs amo-ng non-work-ing pers-	Who desire to continue present job among the working persons	Those who are seeking jobs among those who want additional jobs	Work-ing persons who desire to change jobs	Those seeking jobs among working persons desiring to change jobs	Those desiring to work among non working persons	Those seeking work among non-working but desiring to work

			ons						
79-82	1.87	-5.34	5.44	1.72	8.18	1.47	6.65	-0.81	0.55
82-87	0.88	11.18	1.68	0.73	-3.37	3.76	2.95	1.08	1.54
87-92	1.67	2.42	-0.98	1.77	-0.04	0.80	0.10	-2.22	-3.35
92-97	0.38	-0.51	5.09	-0.06	3.29	2.70	4.31	3.44	6.38
97-02	-0.60	2.68	3.63	-1.15	-0.17	1.80	2.29	2.10	2.43

Source: See Table 17.

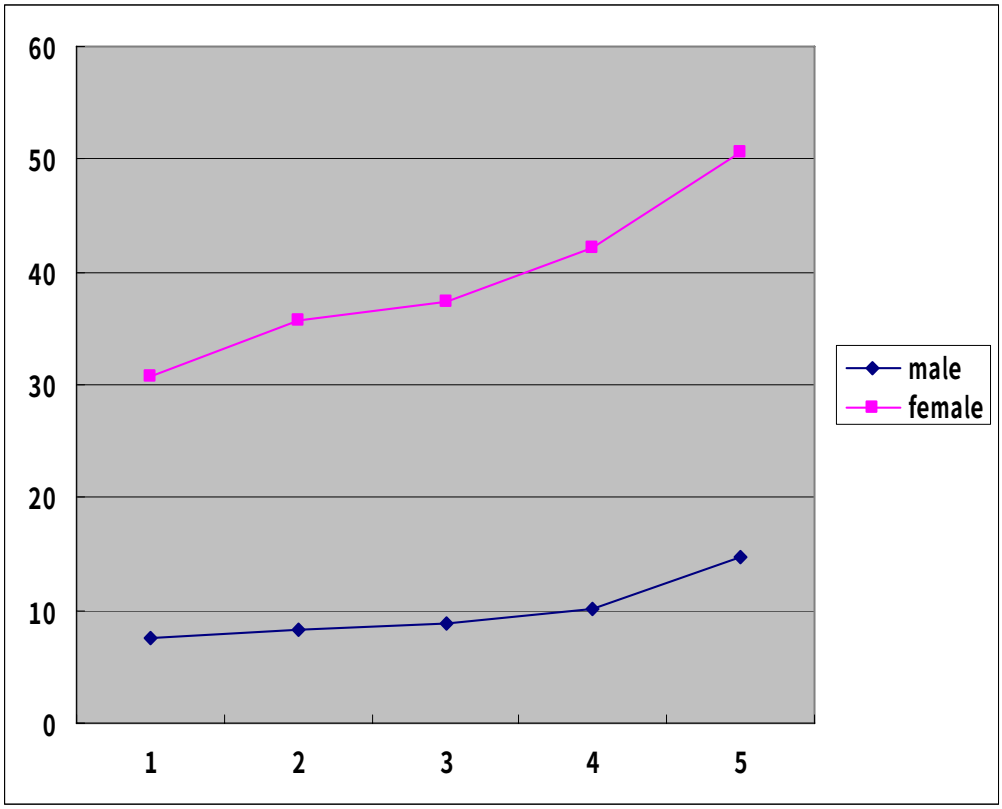
Certain other important findings of the survey include the following: the industry-wise breakdown of workers shows a decline of more than 2 million in 2002 from 1997 in manufacturing and the construction sector observed the first decline since the commencement of the survey. Many other sectors, such as agriculture, wholesale and retail trade, and eating and drinking places, finance and insurance etc also showed decline in 2002 relative to 1997 while services continued to rise. Working hours per week are polarizing into the work of short hours (less than 35 hours) and that of long hours (49 hours or more), the most noticeable decline being in the range of 35 to 42 hours. Age-wise break-up shows that young generation correspond to a high ratio of "changed a job"[16] and both young generation and persons in early 60's show high ratio of "quitted a job"[17]. The ratio of persons wishing to change the present job to persons engaged in work has increased over time - though females showed a higher ratio than males the gap between sexes narrowed down in 2002. Persons wishing to change the present job because of low wage or salary (2270 thousands) continue to increase in 2002 since 1997 and reach approximately 1.6 times 1992 figure. The proportion of "irregular employees"(part-time and temporary employees) to total employees showed a substantial rise for both the sexes during the period of 1997 to 2002 (from 10.1 to 14.8 and 42.2 to 50.7 per cent for males and females respectively – see Figure 1). It may also be noted that some of the workers have shifted from regular employment to irregular employment over time. Those who changed to irregular employment during the five year period of 1997 to 2002 accounted for 35.5 per cent of those who changed usual labour force status from regular staffs. On the other hand those who were able to change to regular employment comprised 24.8 per cent of those who changed usual labour force status of irregular employment during the same period. These findings substantiate with evidence our hypothesis of changing labour market outcomes in the process of globalization. However, some economists in the late seventies and early

[16] Persons who changed a job to persons engaged in work a year ago.

[17] Persons who left a job to persons engaged in work a year ago.

eighties viewed that the prevalence of life-time employment in Japan was an exaggerated belief because only 30 per cent of the male work force had had the opportunity to access such jobs, (Bruce-Briggs, 1982; Tajima, 1982; and Koike (1977). But Hashimoto and Raisian (1985) while examining the Japan-U.S. differences in employment tenures and earning profiles, refuted this view and also noted that even in small firms in Japan employment tenure was not necessarily short. Though the differences were consistent with three prominent hypotheses in the literature – the specific human capital, the screening, and the agency hypotheses – the authors tend to support the first one. Following Hashimoto and Raisian's (1985) work, if we accept that, to begin with, Japan had the privilege of offering life-time employment and seniority based wage system, then we need to note the changes that are taking place in the recent years.

Figure 1: Ratio of irregular employees to total employees



Note: Years are 1982, 1987, 1992, 1997 and 2002.
Source: Based on Employment Status Survey**, s**ee Table 17.

Holzhausen (2000) argued that the core of the Japanese employment system, i.e., the long-term development of human capital inside the firm, is not yet subject to change although the seniority rule is losing its influence on promotion and wage decisions with the increasing effect of qualification and competence rather than age and tenure. Further, Sato (2000) presented evidence to suggest that the non-regular workers are generally

satisfied with their work lives[18]. However, Osawa (2000) dismisses the view that the differences in the treatment of regular and irregular workers do not constitute discrimination. The irregular workers include the 'full-time part-timers' and 'para-part-timers' who have the same schedule of working hours as full-time regular employees but are treated differently[19]. She argues that the available evidence does not support the full-time part timers being treated more like regular employees and less like real part-timers during the first-half of the nineties. Also, there is evidence to show that the gap between the remuneration of real part-timers and that of regular employees has widened in the second half of the last decade. In terms of theoretical explanations, as Nagase (1994) pointed out, the compensation wage hypothesis can partly explain the differences in the wage rates of the regular and irregular workers, the former being around 30 per cent higher than the latter. Sato (2001), however, accepts that there is a need to develop new kinds of safety net to match new modes of employment. Both Osawa (2001) and Weathers (2001) hold strongly that advocates of deregulation and reforms have made insufficient efforts to grasp the true nature of working conditions for temporary dispatch personnel.

By the end of 2005 the employment situation is, however, improving as reported by the Japan Times (February 1, 2006). The job-offers-to-seekers ratio hit parity in December 2005, that is, the job seekers matched that of jobs available for the first time in last 13 years. The 4.4 per cent unemployment rate for 2005 is the lowest since 1998 when it was 4.1 per cent. The nation's potential labour force (job holders plus the jobless) grew by 80,000 to reach 66.50 million in 2005 for the first time in seven years, suggesting that Japan's labour market is expanding despite a decline in the population. However, this improvement is only marginal given the severity of the labour market problems.

Results from Factor Analysis:

Having analyzed the employment and value added structure, productivity and unemployment rates it may be useful to integrate most of these components in the light of our hypothesis, suggesting that globalization forcing firms to reduce cost and enhance

[18] In the context of non-regular employment a distinction has to be made between atypical and non-standard employment. 'Typical employment' is defined as 'having a continuous employment relationship with a particular company and working full-time for that company.' Thus 'atypical employment' is any form of employment that does not meet these criteria. 'Standard employment' has no fixed period specified. It may be permanent, and it is certainly indefinite. Non-standard employment may be defined as employment, where there is a fixed term specified, and in practice it refers to contract employees. While all non-standard employment is atypical not all atypical employment is non-standard. The standard/non-standard distinction is defined narrowly, according to whether or not there is a term specified to the employment relationship. The typical/atypical distinction, by contrast, has three defining terms: period of employment, working hours and work place, Sato (2000).

[19] In 1999 irregular workers accounted for 25 per cent of all employees and part-timers among them comprised 56 per cent (Osawa, 2000).

competitiveness has led to high level of mechanization in the manufacturing sector. And this has resulted in high levels of productivity growth in the manufacturing sector but has been accompanied by rising unemployment rate. In the work of Ariga, Brunello and Ohkusa (2002) there exists an inverse relationship between aggregate productivity and unemployment rate[20]. A substantial slowdown of productivity growth experienced especially during the 1990s should, therefore, increase the natural unemployment rate. But we have noted from Table 9 that though the aggregate productivity growth rate decelerated in the second phase, productivity growth in manufacturing rather shot up during the nineties. Hence, there is need for rationalizing this pattern relating to rise in unemployment rate. We argue that productivity rise in the manufacturing sector induced by the adoption of capital-intensive technology is less likely to result in higher levels of employment – rather it leads to rise in unemployment rate. In order to test this hypothesis in factor analysis framework we have considered the following variables for the period of 1980 to 2003: labour force participation rate (LFPR), unemployment rate (UNEMP), the percentage share of manufacturing employment in total work force (MFGEMP), the percentage share of construction employment in total work force (CONEMP), labour productivity in manufacturing sector (MFGPROD) and labour productivity in the construction sector (CONPROD). Since most of these variables are seen to be inter-related the regression approach in an attempt to explain the variations in unemployment rate suffers from the problem of multicolinearity. Hence, we have attempted factor analysis with a view to understanding the relationship from empirical point of view.

In factor analysis each standardized variable is expressed as a linear function of several factors. If X_i is a standardized variable, it may be expressed in terms of *k* number of factors: $f_1,\ f_2, \ldots f_k$

$$X_i = \sum_{j=1}^{k} a_{ij} f_j + e_i$$

where $j = 1, 2, \ldots k$ and a_{ij} is the factor loading and e_i a random error. The number of factors chosen is usually less than the number of variables under consideration though the number of factors produced can be as many as the number of variables. In other words, only the significant factors, i.e., the factors with eigen values or latent roots greater than 1, are taken into account for interpretation. Eigen value is computed as the column-wise sum of the square of the factor loadings of all the variables on a given factor. If there are p number of variables, the eigen value of the j th factor, E_j, will be given by

$$E_j = \sum_{i=1}^{p} \left[a_{ij}\right]^2$$

The results presented in Table 19 shows that two factors are statistically significant in the sense that they have eigen values greater than 1. Both these factors explain almost 80.5

[20] An increase in productivity growth raises the asset value, and as a result both the ratio of matches to vacancies and aggregate unemployment fall but vacancies increase. Also, economies with higher rates of productivity growth and lower turnover rates have both a higher share of those firms which depend on internal labour market (i.e., firms using both internal training and external recruitment to fill their skilled vacancies as opposed to firms which depend purely on occupational labour market, relying exclusively on external hiring), and a lower aggregate unemployment rate.

per cent of the total variations. Factor 1 the most dominant one, has high factor loadings corresponding to four variables: labour force participation rate, unemployment rate, manufacturing employment and manufacturing productivity. The signs of labour force participation rate and unemployment rate are opposite suggesting that both have moved inversely in Japan though one would rather expect a direct relationship between them. Interestingly manufacturing productivity and unemployment rate both have the same signs, which tend to support our hypothesis that increase in labour productivity has occurred at the expense of employment or in other words, mechanization has aggravated the problem of unemployment. The share of manufacturing employment in total work force and unemployment rate are inversely related, suggesting that the fall in the former, as shown above, has led to an increase in the unemployment rate in Japan. This can be taken as a justification to the role of industry as the engine of growth because the deceleration in manufacturing employment is seen to raise the unemployment rate. Also, in terms of cross-sectional data at the prefecture level unemployment rate varies inversely with the percentage of manufacturing employment in total work force and so also with respect to per capita gross domestic product (PCI). For most of the two digit groups of industries, Mitra and Sato (2006) noted a positive association among technical efficiency of regions (prefectures), the agglomeration specific variable and the growth index, which in turn show a negative relationship with respect to unemployment rate. All this tends to confirm a positive association between industrialization and employment and so also between industrial performance, growth and employment. However, given the per capita income and the share of manufacturing employment in the total work force, population density (POPDEN), taken as a proxy for demographic pressure including migration, tends to raise the unemployment rate.
Cross-sectional regression:

UMP = 9.32 + 0.0004 POPDEN – 0.0012 PCI – 0.061 MFGEMP
(7.82)* (2.71)* (-2.13)* (-2.20)*

Adj R2 = 0.39; * stands for significance at 5 per cent level.

Factor 2 takes a very high factor loading corresponding to construction sector productivity, which has positive and negative associations with construction sector employment share and unemployment rate respectively, though for the latter two variables the factor loadings are on the low side. However, the policy implication of the study can be drawn from these patterns. In the absence of rise in manufacturing employment it is the expansion of the construction sector and productivity rise in this sector which can generate employment opportunities and help reduce unemployment rate.

Table 19: Results from Factor Analysis

Variable	Factor 1	Factor 2
LFPR	-0.792	0.19
UMP	0.942	-0.263
MFGEMP	-0.964	0.222
CONEMP	0.269	0.137
MFGPROD	0.958	0.151
CONPROD	-0.169	0.871
Eigen Value	3.61	1.22

Total variation explained: 80.5 %

'Freeters' and Jobless Youth

The term 'freeters' commonly refers to young people working in 'arbeit' (temporary jobs) on part-time basis. This has gained currency in Japan in the recent years encompassing around 2.09 million individuals in 2003 (The Japan Institute for Labour Policy and Training, 2004-05). The main reason for the increase in the number of 'freeters' is the narrowing down of the number of new-graduate recruitments by recruiters and the changing employment practices in favour of non-full-time employment styles. All this is pursued in an attempt to introduce flexibility and tackle the situation of uncertainty about future that cropped up during the early nineties. However, other than the demand side factors there are several supply side issues as well. For example, high school and university graduates are not actively undertaking job-hunting activities and also they lack the willingness to work hard unlike the previous generation (Yoshimoto, 2002). In general there are around four types of freeters: (1) the self-actualizing types who have well-established future goals and are working toward them though at present they work as freeters in order to earn income for their daily living expenses, (2) those who have vague goals of becoming regular company employees in the future but making no special efforts, (3) professional freeter who intend to continue in the same status, and (4) others with a goal of becoming full-time housewives (The Japan Institute of Labour, 2000). However, the survey by the Tokyo Metropolitan area in 2000, targeting the high school students, showed that at least half of the freeters had employment ambitions at first, which confirms the phenomenon of 'discouraged dropouts' (The Japan Institute for Labour Policy and Training, 2004-05).

Wages and Living Standards

As per the neoclassical theory of wage determination part of the productivity growth gets transferred to the labourers, and part of it is retained by the entrepreneurs. Given the rapid productivity growth in the manufacturing sector during the nineties, as mentioned above, it is, therefore, very important to examine how much of the productivity growth could actually get transferred to the workers. The rate of growth of real wages, as shown in Table 20 , decelerated considerably over the years. The all-sector combined wage

growth rate of regular employees actually became negative over the period 1995 to 1999, after growing sluggishly at a rate of 0.65 per cent per annum during the first half of the nineties. After 1999, the wage rate has remained virtually stagnant. Based on year to year observations the growth rate of real wages of regular employees at the aggregate level turns out to be 1.66 per cent per annum over the period 1983 to 1992 and only 0.08 over 1992 to 2004. The annual average wages for the period 1983 through 2004 are plotted in figure 2, showing a sharp decline particularly after the mid-nineties.

The wage elasticity of regular employees with respect to productivity at the aggregate level turns out to be 0.44 for the period 1983 through 1992 and subsequently (1993 to 2003) it does not seem to have improved, as seen from the following equation:

LnRW=-1.35 + 0.44 LnAGGDPE + 0.0001 (LnAGGDPE)D

(-1.77)** (7.72)* (0.12)

Adj. R2 = 0.89 where, RW is the real wage of the regular employees and AGGDPE is the aggregate GDP per employee (productivity measure), D is the period dummy with 1992 as the break point and Ln stands for natural log.

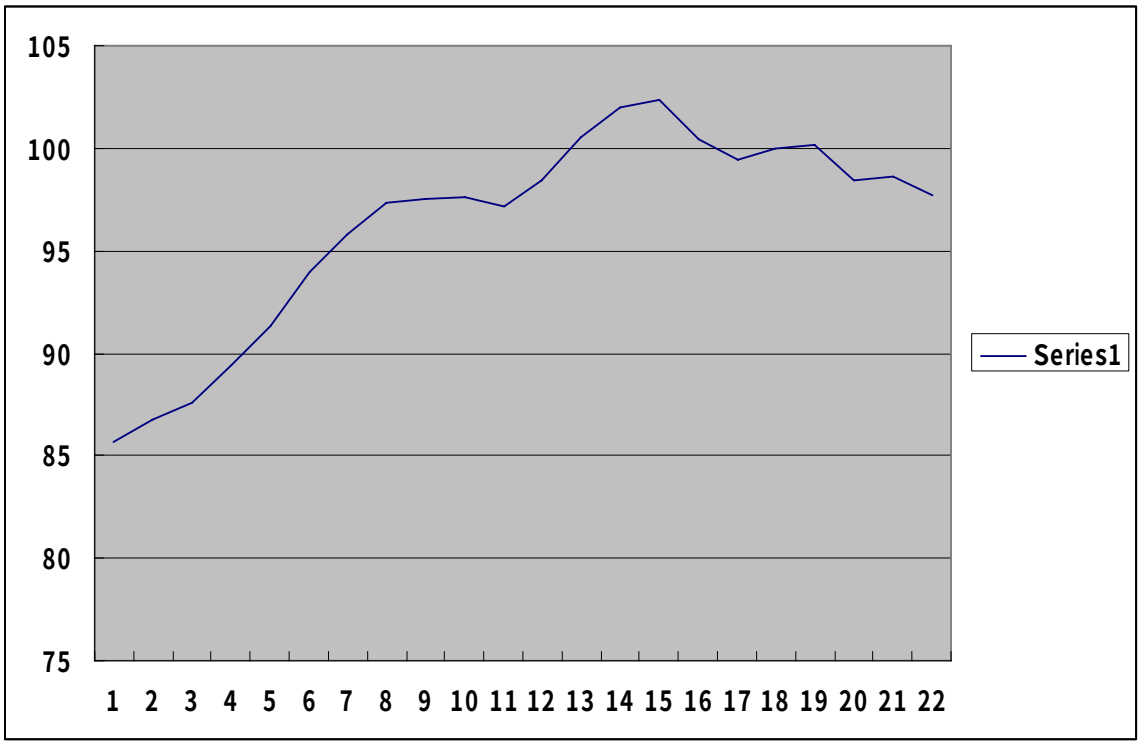
Table 20: Real wage growth of regular employees: construction, manufacturing and overall

Period	Overall wage	Construction Wage	Manufacturing Wage
80-85	0.99	1.52	1.24
85-90	2.12	3.78	2.46
90-95	0.65	1.62	0.76
95-99	-0.23	-1.06	0.28
99– 02	0.003	-0.01	0.01

Note: Based on wage index of regular employees; 2000=100. These are point to point estimates. The exponential growth rate of real wage corresponding to all industry divisions based on year to year observations turns out to be 1.66, 0.08 and 0.74 per cent per annum between 1983 to 1992, 1992 to 2004 and 1983 to 2004 respectively.

Source: Based on Monthly Labour Survey, Statistical and Information Department, Minister's Secretariat, Ministry of Health, Labour and Welfare, Japan. Also see Japan Statistical Yearbook, 2004.

Figure 2 : Real wage : 1983 to 2004 (2000=100)



Source: See Table 20.

In the manufacturing sector, the real wage after experiencing a sluggish growth till 1999 (from 1990), remained stagnant between 1999 and 2002. It is the construction sector wage which grew at 1.62 per cent per annum during 1990 to 1995, but subsequently the growth rate has become negative. All this tends to suggest that in the face of a declining employment and rising unemployment rate, still the wage rate of the regular employees shows no sign of improvement. In other words, the job market is characterized by limited demand to such an extent that labour supply, even when the growth of labour force shows decline, tends to exceed demand thus resulting in wage deflation. Also, in several organizations including the government offices, the policy of wage-cut even for the life-time employees has been introduced, which is possibly reflected in the growth rates of wages. As internal borrowing in Japan has increased tremendously, public sector reforms and privatization have been introduced to reduce fiscal deficits. As a part of these reforms wage-cuts in the public sector are implemented in an attempt to reduce the sectoral (public-private) differences in wage levels (2005 NPA Remuneration Recommendation).[21] The remunerations of the temporary workers are possibly much

[21] The outline of the 2005 NPA Remuneration Recommendation (November 11, 2005) emphasizes that no such reform has been implemented since 1957, or about 50 years. The main features are: (1) the monthly remuneration shall be reduced for the first time since the 2003 remuneration reduction in order to eliminate the "Reverse Differential" between the public and private sector remunerations (through reduction of the Monthly Basic Salary and Reduction of the Family Allowance for a Spouse), (2) the End-of-term and

more precarious than what is seen in the case of the regular employees, given the job market shrinkage, flexibilisation of the labour laws and the change in the role of unions, particularly during the nineties. Companies often prefer to have part-time workers as they cost less (Japan Times, February 2, 2005). Despite the fact that the workers on regular payrolls virtually remained unchanged in 2004, edging up just 0.4 per cent from the previous year to 42.83 million – the marginal increase being first in seven years, possibly due to a pick up in economic activity – the overall average monthly wage for 2004, comprising both regular and overtime pay, fell by 0.7 per cent to 332,485 yen (Japan Times, February 2, 2005). Tochibanaki and Hisatake (1998) showed that the relative importance of seniority-based wage structure differed considerably by industry though in general for blue-collar workers it tended to decline and remained more or less even among the white-collar workers. But in their analysis of all industries including the non-manufacturing ones, the seniority- based wage structure declined even in the banking and insurance industries. It is evident from their analysis that growth and the degree to which the industry followed seniority-based wage structure have a strong positive relationship.

On the other hand, higher is the average wage of an industry the less seniority-based its wage structure tended to be. Though some of the studies in the past showed that education is not an important variable in explaining the wage variations for blue-collar workers (Atoda and Tachibanaki, 1991), Koshal et.al (2004) noted that even in the construction sector experience and education matter in explaining earning gains in Japan. In the face of adverse labour market outcomes, it may, therefore, be important to invest on human capital formation which can then yield higher returns. The state assumes that the principal actors of human resource development in Japan are employers rather than individuals (Sako, 1995). But this assumption, as pointed out by Sako (1995), is valid as long as the employers have sufficient reason to train their employees, and one of the motivating forces is the persistence of life-time employment[22]. The life-time employment is likely to generate company-specific skills, and by rewarding on the basis of seniority (i.e., by paying senior trained employees more than what they can earn elsewhere) the firms actually earn higher profits attributable to the company-specific skills. And once the

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Diligence Allowances (bonus) shall be raised by 0.05 months, (3) Thorough reform of the whole remuneration system including salaries and allowances shall be implemented (by lowering the Basic Salary Level, establishing the Area Allowance, flattening the Basic Salary Curve, and reflecting performance in remuneration).

The Japan Times (October 29, 2005 reported that the wage cut for government workers which includes a 0.36 per cent reduction in monthly pay and a 0.05-month hike in annual bonuses to 4.45 months' worth was approved by the Diet in accordance with recommendations issued by the National Personnel Authority in August, 2005. The wage cuts for government workers would save the government 5 billion yen in spending outlays.

[22] The Japanese employment system, characterized by long tenure and seniority and merit pay, became institutionalized long back. Even in the sixties when rapid growth resulted in labour shortages, large firms did not recruit workers with scarce skills but resorted to training workers in-house. And this created the concept of life-time employment, and received workers' acceptance of the managerial ideology of the firm as family, before the war and as community, after the war (Sako, 1995).

firm establishes its reputation of retaining the senior employees, the wage necessary to pay the novice employees will automatically be pushed down by labour market competition. However, with the changing scenario these underlying rationales too are changing fast.

Recently in January 2006 the spring wage negotiations ("shunto") were effectively launched. But as the chairman of the Japan Federation of Economic Organisations mentioned the prospects of wage increase were rather gloomy despite improved business performances attained through desperate efforts of management and labour (Japan Times, January 12, 2006). As the vice-chairman of the same organization pointed out distinctly some companies may agree to raise wages in response to an upturn in the business but too much focus on performance-based personnel evaluations may not actually allow it to happen. The president of Japan Trade Union Confederation (Rengo), the nation's largest labour organization, also felt that their demand has never been excessive and the willingness to work among the workers cannot be maintained unless profits are returned to wages (Japan Times, January 12, 2006). However, it may be recalled that our estimate of elasticity of wage with respect to productivity did not show any rise in the second period (from 1993 to 2003) notwithstanding rapid productivity growth.

As regards the labour contract law of the Minstry of Health, Labour and Welfare, Rengo refused to accept it for the following reasons: (a) the labour management committee which is different from the trade union, would be consulted for the determination and change of working conditions, and judging rationality of change in working regulations, (b) it would prevent reinstatement of workers who won a ruling that invalidate the dismissal by introducing a system of financial settlement, (c) with an introduction of a system where labour contract can be changed while workers continue to be employed and this would mean that workers have to make a choice between change in working conditions or dismissal, and (d) a principle of working hours encouraging long working hours (September 13, 2005, Japan Times).

It is not only the number of working persons that has been growing sluggishly or declining over the nineties, the average monthly hours worked per regular employee has also fallen both during the eighties and nineties (Table 21). And this decline is evident in construction, manufacturing and at the aggregate level as well. Since regular employees are the long term employees of the firms, this decline would primarily relate to overtime employment. Since the practice of remuneration based on seniority is on the collapse, the decline in overtime employment strengthens further the welfare loss caused to the employees. It is interesting to note that while labour market flexibility and reduction in labour disputes have led to rise in employment growth in India for example, (Hasan and Mitra, 2003), this has not happened in Japan. Despite a substantial fall in the number of enterprises and employees involved in labour disputes since 1980 (Table 22), employment growth slackened over time. To put it differently, the decline in labour disputes etc. could be an outcome of shrinking life-term employment and rising temporary employment, as the temporary workers/employees do not have a strong base to pursue conflicts.

Table 21: Average monthly hours worked per regular employee

Period	Overall	Construction	Manufacturing
1980-85	0.01	-0.02	0.17
1985-90	-0.55	-0.44	-0.35
1990-95	-1.44	-1.38	-1.49
1995-98	-0.53	-0.39	-0.24
1998-2002	-0.004	-0.001	0.002

Source: Same as Table 20.

Table 22: Labour disputes

Year	Enterprises ('000)	Employees Involved ('000)	Emp/Ent.
1980	2549	720	282.4637
85	2057	289	140.4959
90	1591	319	200.5028
95	823	103	125.1519
99	744	70	94.08602
2000	623	63	101.1236
2001	505	51	100.9901

Source: Labour Union Basic Survey (a part of the Survey on Industrial Relations), Statistics and Information Department, Minister's Secretariat, Ministry of Health, Labour and Welfare.

The unpaid overtime workers are sizeable in number: 49.8 per cent among men and 41.0 per cent among women are doing unpaid overtime work. The phenomenon is more prevalent in wholesale and retail industries and in the management and sales, though it has not become an issue yet for all employees. In addition 12.6 per cent of men and 5.9 per cent of women do more than 50 hours of unpaid overtime work per month (JILPT, 2005). The other issue relates to the declining practice of on-the-job training as temporary workers are not nurtured by the employers. Though Japanese Trade Union Confederation is setting up regional unions where part-time workers can join as individual members in prefectural offices re-empowerment does not seem to be simple for labour unions (JILPT, 2005). The recommendation in such a situation is to introduce "short-term-regular employee" which would mean workers would have the same position, responsibilities, and undergo the same applicable skill evaluations as the full-time regular employees but would have shorter weekly scheduled hours of work. With respect to the last attribute though they would not be different from the part-time workers at least they will enjoy the same treatment as full-time regular employees (JILPT, 2005). .

Living Expenditure

Table 23 gives the living expenditure level (general, food and housing) for two-and-more-member households. It seems that over time with 2000 as the base, living expenditure levels corresponding to all the three categories-general, food and housing-

have deteriorated. Even in nominal terms for 2 or more member households living expenses and housing expenses **(**housing includes house and land rent and repairs and maintenance) which increased at 2.87 and 3.96 per cent per annum respectively during the first phase decelerated considerably in the second phase to -0.94 and 0.19 per cent per annum respectively.[23] All this is possibly an outcome of worsening income levels, as reflected partly in the movement of wage rate of the regular employees.

Table 23: Living expenditure level of two or more member households (2000=100)

Year	General	Food	Housing
1985	93.7	105.6	85.4
1990	101.7	108.6	85.9
1995	102.9	103.4	105.8
1996	103.5	103.4	107.9
1997	103.5	103.5	107.2
1998	101.6	102.4	97.8
1999	100.6	101.1	101.2
2000	100	100	100
2001	98.8	98.1	96.9
2002	99.4	99	98.2

Source: Based on the family income and expenditure survey, non-agricultural, forestry and fishery household members with two or more, Statistical Survey Department, Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications.

As regards the single member households the living expenses, food expenses and housing expenses have all shown negative growth rates over the years even in nominal terms (Table 24). Only between 2003 and 2004 total living expenses and food expenses have increased in nominal terms. Housing expenses declined considerably between 2000 and 2002, after that it increased somewhat though between 2003 and 2004 it remained virtually stagnant. Among the worker's households the stagnancy in total wages and salaries is evident over 2002 to 2004. Within the single member households those who are non-workers experienced a negative growth rate between 2002 and 2004, particularly in relation to housing expenses. The workers' households on the other hand show a positive growth of housing expenses over 2002-03 and 2003-04. All this tends to suggest overlaps among joblessness, earnings decline and deterioration in living conditions, including housing. Among the single member households the worse sufferers are the non-workers compared to the workers.

[23] Source: Annual Report on the Family Income and Expenditure Survey, 1995, 2003 Statistics Bureau, Management and Coordination Agency, Govt. of Japan.

Table 24: Growth Rates in nominal living expenses of single member households

HH Type	Item	2000-01	2001-02	2002-03	2003-04
All HH	Living Expenses	-2.84	-1.04	-1.68	1.46
All HH	Food	-4.06	0.65	-4.58	3.31
All HH	Housing	-2.06	-7.82	1.68	0.11
Workers' HH	Wages			0.63	0.51
Workers' HH	Living Expenses			-1.45	2.56
Workers' HH	Food			-8.45	6.66
Workers' HH	Housing			3.69	1.50
Other HH	Living Expenses			-1.78	0.08
Other HH	Food			0.97	-1.19
Other HH	Housing			-1.32	-1.93

Source: Annual Report on the Family Income and Expenditure Survey, 2002, 2003, 2004, Income and Expenditure (One person households and total households), Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications, Japan.

Corresponding to the total households (single member plus two and more member households) this decline in housing expenses is evident among both the type of households: workers and others. Over 2002-03, though the workers' households did not show any decline in nominal terms the other households registered an almost 5 per cent decline (Table 25). However, over 2003-04, the workers' households experienced a sharper fall of nearly 4 per cent while the households other than workers experienced a fall of only 1 per cent. Hence, other than the single member households the larger households have also been affected in the process of globalization and macro-economic changes, which are reflected in their living standards. A very significant proportion of households have been lying below the targeted housing standards: nearly 62 and 47 per cent in the urban and rural areas respectively in 1998[24]. Nearly 5 per cent of the total households did not have any bathing facility in 1998. The percentage of households without land was around 46 in the same year. Among the self-employed households while the percentage was around one-fourth, among employees and those without occupations it was 47.5 and 42 per cent respectively. All this tends to suggest that joblessness has a high probability of raising the homeless population even in a highly developed country like Japan.

[24] Data are based on the Housing and Land Survey, Statistical Survey Department, Statistics Bureau, Management and Coordination Agency.

Table 25: Growth rates in nominal living expenses of total households

HH Type	Item	2002-03	2003-04
All HH	Living Expenses	-1.27	0.05
All HH	Food	-2.18	0.19
All HH	Housing	0.70	-2.71
Workers' HH	Wages	-1.96	1.44
Workers' HH	Living Expenses	-1.30	1.53
Workers' HH	Food	-3.69	1.63
Workers' HH	Housing	4.30	-3.57
Other HH	Living Expenses	-0.96	-0.08
Other HH	Food	0.07	-1.64
Other HH	Housing	-4.90	-0.75

Source: Annual Report on the Family Income and Expenditure Survey, 2002, 2003, 2004, Income and Expenditure (One person households and total households), Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications, Japan.

4. Labour Market Changes in India: Empirical Analysis

The concept of pro-poor growth envisages acceleration in economic growth with concomitant growth in employment opportunities for the poor. This can be achieved when productivity growth, employment growth and rise in real wages take place simultaneously. Growth in labour productivity in the face of sluggish employment growth can result from rise in capital intensity without any improvement in the level of technology or rise in organizational/managerial efficiency. On the other hand, productivity growth without a rise in real wages is indicative of the absence of productivity gains being transferred to labour. In the light of the objective of attaining pro-poor growth, it would be interesting to examine the broad patterns of changes in sectoral composition of value added and work force occurring in the process of development of the Indian economy.

The development process of the present day developed countries by and large suggested a shift away from agriculture towards industry and then towards tertiary sectors both in terms of value added and work force distribution. It is only at a very high level of per capita income, much of the economic growth seems to have originated from the tertiary sector, after industry has had a key role in the growth process. In the Indian context, the share of agriculture and allied activities in total GDP dropped from 42 per cent to around 26 per cent over the twenty-year period: 1981-2001 (Table 25). However, the share of manufacturing, utilities and construction improved nominally from one-fifth

of GDP to one-fourth over the same period, implying that the bulk of the shift took place in favour of the tertiary sector. In terms of growth rate also there has been a deceleration in the industrial value added particularly during 1995-96 through 2000-01 compared to the second half of the eighties or the first half of the nineties.

While the value added composition has changed over the years away from agriculture, the structure of the work force is still dominated by agriculture, and secondly even the shift that has occurred away from agriculture is more towards tertiary than industry (Table 26). In 1999-2000 the share of agriculture and allied activities in the total work force was 59.9 per cent, and that of secondary (manufacturing, electricity etc. and construction) and tertiary activities was 17 per cent and 23 per cent respectively. Excluding construction and electricity etc. the share of manufacturing and repair services in total work force was only 11.35 per cent in 1993-94, which rose marginally to around 12.1 per cent (Table 2). This mismatch between the shifts in the value added structure and the work force structure means growing productivity differentials across sectors. The differences in the value added per worker between the agriculture and non-agriculture sectors seem to have increased considerably over the years.

Table 25: Percentage share and annual rate of growth of sectors in value added (1993-94 Prices)

Years	Agriculture and Allied Acivities and Mining	Manufacturing, Utilities, and Construction	Trade, Transport, Storage and Communication	Financing, Insurance, Real Estate etc.	Public Administration, Defence and Other Services
1980-81 (%share)	41.8	21.6	18.4	6.5	11.65
1985-86 (%share)	38.6	22.5	18.98	8.0	11.9
1990-91 (%share)	34.9	24.5	18.73	9.67	12.18
1995-96 (%share)	30.6	25.5	20.9	11.4	11.6
2000-01 (%share)	26.55	25.0	22.35	12.57	13.54
1980/81-1985/86 rog p.a.	3.35	5.79	5.57	9.05	5.41
1985/86-1990/91 rog p.a.	3.98	7.66	5.71	9.76	6.40
1990/1-1995/96 rog p.a.	2.57	6.00	7.43	8.57	4.24
1995/96-	2.83	5.29	6.98	7.55	8.76

2000-01 rog p.a.					

Note: Growth rates are point to point estimates. Figures for 2000-01 are quick estimates. The first five rows of figures in the table give the percentage shares while the last four rows give the rate of growth per annum for different sectors/activities.

Source: Growth rates computed from figures based on National Accounts Statistics, Central Statistical Organisation, cited in Economic Survey, 2001-02, Government of India.

Table 26: Percentage distribution of all workers (UPSS)

Sectors	Percentage Distribution of Workers **(UPSS)**		
	1983	**1993-94**	**1999-00**
Agriculture and Allied Activities	68.45	63.45	59.84
Mining and quarrying	0.58	0.72	0.57
Manufacturing	11.24	11.35	12.09
Electricity, Gas etc.	0.28	0.36	0.32
Construction	2.24	3.12	4.44
Trade, hotel, etc.	6.35	7.42	9.4
Transport etc.	2.44	2.76	3.7
Financial Services	0.56	0.94	1.27
Community, Social and Personal Services	7.86	9.37	8.36
Total	302.76 million (100)	374.45 million (100)	397 million (100)

Note: UPSS stands for usual principal-cum-subsidiary status workers. The usual activity status relates to the activity status of a person during the reference period of 365 days preceding the date of survey. The activity status on which a person spent relatively longer time (i.e., major time criterion) during the 365 days preceding the date of survey is considered as the principal activity status of the person. If a person spent his major time as working in an economic activity, he is said to be a worker on the basis of principal status. If he pursued some economic activity spending only minor time during the reference period of 365 days preceding the date of survey, he is said to be a subsidiary status worker.

Source: Planning Commission estimate based on National Sample Survey data, cited in Economic Survey 2001-2002, Government of India.

Total employment growth in terms of total usual principal-cum-subsidiary status workers decelerated to 0.98 per cent per annum during 1993-94 through 1999-2000 compared to 2.04 per cent per annum between 1983 and 1993-94 (Table 26). Activities such as construction, trade and transport registered an increase in the growth rate of employment

in the nineties compared to the eighties. In the case of manufacturing, on the other hand, the growth rate fell, marginally though, in the second sub-period compared to the first (see Table 27).

Table 27: Rate of growth of workers (UPSS) in rural and urban areas (per cent per annum)

	Rural		**Urban**		**All Areas**	
Activity	**1983 to 1993-94**	**1993-94 1999-2000**	**1983 to 1993-94**	**1993-94 1999-2000**	**1983 to 1993-94**	**1993-94 1999-2000**
Agriculture and Allied Activities	1.38	0.18	1.54	-3.4	1.39(1.38)	0.05(-0.15)
Mining and quarrying	3.84	-2.28	4.15	-3.71	3.95(4.16)	-2.78(-2.85)
Manufacturing	2.14	1.78	2.21	1.83	2.17(2.14)	1.80(2.05)
Electricity, Gas etc.	4.70	-5.65	4.46	-4.19	4.56(4.5)	-4.77(-0.88)
Construction	5.18	6.43	6.20	6.26	5.60(5.32)	6.36(7.09)
Trade, hotel etc.	3.72	1.81	3.94	5.54	3.84(3.57)	3.99(5.04)
Transport etc.	4.58	7.29	2.90	3.91	3.53(3.24)	5.31(6.04)
Financial Services	5.99	2.51	5.63	7.05	5.71(7.18)	6.07(6.20)
Community, Social and Personal Services	3.13	0.32	4.16	0.13	3.69(2.90)	0.21(0.55)
Total Non-Agriculture	3.23	2.31	3.54	2.95		
Total Workers	1.75	0.66	3.27	2.27	2.06(2.04)	1.02(0.98)

Source: Employment growth rates are reported from Chadha (2003) based on NSS rounds. Growth rates in parentheses are taken from the Economic Survey, 2001-02 citing the Planning Commission estimates. (Differences exist between the two estimates because absolute number of workers obtained by applying NSS work force participation rates to projected/interpolated population are different.

As far as the rural-urban differentials in the work force growth are concerned, urban India recorded a growth rate of 2.27 per cent per annum between 1993-94 and 1999-2000, which was lower than what was experienced (3.27 per cent per annum) in the previous period, 1983-84 to 1993-94 (Table 27). Population growth in urban India has been higher than the employment growth during the nineties (population growth is estimated at 3.05 per cent per annum between January 1,1994 and January 1, 2000 as per Sundaram, 2001

and 2.71 per cent per annum between 1991 and 2001 as per the population census). Employment growth in the rural areas too decelerated considerably from 1.75 per cent per annum in the first sub-period to 0.66 per cent per annum in the second sub-period (Table 27). And population growth, which was recorded at 1.51 per cent per annum between 1994 and 2000 as per Sundaram (2001) and 1.65 per cent per annum between 1991 and 2001 as per population census in the rural areas, exceeded the employment growth rate over the same period.

The employment growth rate in the manufacturing sector dropped, marginally though, to 1.78 and 1.83 per cent per annum in rural and urban India respectively in the nineties compared to a growth rate of 2.14 and 2.21 per cent per annum between 1983 and 1993-94 (Table 27). In Urban India several tertiary activities such as trade, transport and finance recorded acceleration in the employment growth rate though it has not been witnessed in the case of rural areas except transport and construction (see Table 28). The category of community, social and personal services, which comprises public administration, experienced a major decline in the growth rate in both rural and urban India in the nineties compared to the eighties. On the whole, in addition to the decline in the agricultural employment, the non-agricultural employment growth rate too dropped in both rural and urban areas in the nineties compared to the eighties[25].

The employment elasticity defined as the annual rate of growth of employment (UPSS) relative to the annual rate of growth of gross value added (at factor cost) turns out to be extremely low at the aggregate level, (Table 28). In fact it declined from 0.40 in the first period to 0.15 in the second period. Agriculture and allied activities recorded negative employment elasticity in the nineties because employment fell in absolute terms in these activities. Similarly in mining and utilities too the negative figure is evident. Manufacturing registered an elasticity of barely 0.29 in the second period declining from 0.37 in the first period. Construction, trade, transport and financial services experienced relatively higher employment elasticity, and among them except trade all other activities either registered constant or increasing employment elasticity in the second period relative to the first. Interestingly, despite the decline the employment elasticity in trade, hotels etc. still turns out to be relatively high (0.57).

[25] From Economic Census data the deceleration in the growth rate in the nineties compared to the eighties, is again evident in both rural and urban areas (see Appendix). Rural agricultural employment growth rate fell to 4.71 per cent per annum during 1990 to 1998 from 5.63 per cent per annum between 1980 and 1990. Urban non-agriculture employment growth rate dropped to 1.33 per cent annum in 1990s from 2.81 per cent per annum during the 1980s. Also from the decennial population censuses it may be noted that the growth of main workers decelerated significantly from 2.34 per cent per annum during the eighties to 0.81 per cent in the 1990s (Economica India Info-Services). However, the population census data upholds a picture, which is quite different from that of the economic census data. While the urban areas reported a growth rate of 2.66 per cent per annum in terms of the main workers, between 1991-01, the rural areas revealed a picture of pure stagnancy. On the other hand, economic census data show a brighter picture corresponding to the rural areas compared to the urban areas in the nineties.

Table 28: Rate of growth of gross domestic product and employment elasticity

	Rate of Growth of GDP (% p.a.) (at 1993-94 Prices)		Employment Elasticity	
	1983 to 1993-94	1993-94 to 1999-00	1983 to 1993-94	1993-94 to 1999-00
Agriculture and Allied Activities	2.82	2.84	0.49	-0.05
Mining and Quarrying	6.02	5.09	0.69	-0.56
Manufacturing	5.79	7.08	0.37	0.29
Electricity, Gas etc.	8.07	6.71	0.56	-0.13
Construction	4.76	6.16	1.12	1.15
Trade, hotel, etc.	5.43	8.77	0.66	0.57
Transport etc.	5.91	8.97	0.55	0.67
Financial Services	9.63	8.03	0.75	0.77
Community, Social and Personal Services	5.17	8.22	0.56	0.07
Total	5.05	6.42	0.40	0.15

Note: Sectoral and aggregate GDP and employment growth rates are point to point estimate (exponential). Employment elasticity is defined as the ratio of the rate of growth of employment to the rate of growth of GDP. For calculating the employment elasticity the employment growth rates are calculated from the figures based on the Planning Commission's estimate given in parentheses in Table 26.
Source: Based on the CSO estimates of GDP and NSS figures on employment.

Since employment growth decelerated in agriculture, mining and utilities in the nineties compared to the eighties, the rapid productivity growth in these activities in the second period is obvious (Table 29). Similar is the case with community, social and personal services. What is interesting to note is that activities like trade, transport and financial services, which experienced a rise in the employment growth rate, also reported a rise in productivity growth in the nineties relative to the eighties. Even in manufacturing, where the employment growth rate declined marginally in the second period compared to the first, productivity growth accelerated from 3.40 to 5.05 per cent per annum. It is only in construction activity productivity growth has been negative in both the periods despite positive growth rates both in terms of value added and employment (Table 5).

Table 29: Labour productivity (Rs) and growth rate (% p.a.)

Activity	Productivity 1983	Productivity 1993-94	Productivity 1999-00	Growth Rate 1983 to1993-94	Growth Rate 1993-94 to 1999-00
Agriculture and Allied Activities	8806.15	10104.69	12080.44	1.31	2.98
Mining and Quarrying	62699.03	74414.81	120127.8	1.63	7.98
Manufacturing	20659.87	29527.76	39976.25	3.40	5.05
Electricity, Gas etc.	99914.12	140622.2	221882.8	3.25	7.60
Construction	37181.74	34754.28	33337.12	-0.64	-0.69
Trade, hotel, etc.	30015.72	35769.98	45069.4	1.67	3.85
Transport etc.	38318.24	49497.58	59637.85	2.44	3.11
Financial Services	202842.2	255920.5	288837.6	2.21	2.02
Community, Social and Personal Services	22623.92	26653	46198.49	1.56	9.17
Total	155881.38	20866.47	28926.15	2.78	5.44

Source: Based on CSO's estimate of value added and NSSO's estimate of employment.

On the whole, while total employment growth rate decelerated from 2.04 per cent per annum between 1983 and 1993-94 to 0.98 per cent per annum between 1993-94 and 1999-00, the organized sector employment grew at 1.20 and 0.53 per cent per annum over the eighties and nineties respectively. The decline in the organized sector employment is understandable as public sector accounts for a large majority of the employment within the organized sector (around 70 per cent), and the downsizing of the public sector has been an important objective of the government as a part of the reform process. What is surprising is that the unorganized sector employment - defined as the total employment (UPSS) minus the organized sector employment too decelerated from 2.19 per cent per annum during the eighties to around 1 per cent over the nineties.

The overall deceleration in the employment growth rate in the organized sector, has been accompanied by a rise in the relative size of casual employment. Self-employment is usually seen to generate lower earnings compared to regular wage or casual employment, and in the process of development it is expected that household based activities will expand to become commercial units with hired workers[26]. Among the rural males the

[26] In the case of unorganized manufacturing Acharya and Mitra (2000) noted that the earnings of the own account enterprises were lower than those of the non-directory and directory manufacturing enterprises.

share of self-employment fell over time between 1972-73 and 1999-2000 (Table 30). But the relative size of regular employees has been steadily declining between 1972-73 and 1987-88, and also fell in 1993-94. However, after that it shows a mild increasing tendency from 8.3 to 8.8 per cent between 1993-94 and 1999-2000. On the other hand, the percentage share of casual employees increased to around 36 per cent in 1999-2000 from 22 per cent in 1972-73. Between 1993-94 and 1999-2000, however, it rose only by two percentage points.

In the urban areas, males reported a slight increase in self-employment over the period 1972-73 through 1999-00, though during the nineties it remained virtually constant. The decline in the case of self-employment in the rural areas and a marginal rise in the urban areas may be interpreted partly as an outcome of reclassification of rural areas as urban (see Acharya and Mitra, 2000). The relative size of casual employment for urban males rose to 16.8 per cent in 1999-2000 from 10.1 per cent in 1972-73. However, between 1993-94 and 1999-00 there is no evidence of any significant rise in casualisation.

Among rural females, on the other hand, while the percentage of casual employees increased marginally between 1993-94 and 1999-2000, it dropped considerably in the urban areas. Though it does not seem to be justified to conclude that reforms initiated casualisation on a large scale, the phenomenon of contractual employment, which would still be a part of regular wage or salaried employment in this kind of classification, is on the rise. Needless to add that the contractual employees are deprived from several benefits relating to health, leave and retirement, even in the organized sector. In fact a large component of the salary of the contract labour is expropriated by the new intermediary class of contractors that has been created. It tends to suppress the share of labour in the growth process.

Table 30: Composition of workers (usual principal and subsidiary status) by sex and rural-urban residence: NSS Data 1972-73/1999-2000: All India (per cent**)**

			Self-Employed	**Regular employee**	**Casual Labor**
Rural	Male	1972-73	65.9	12.1	22
		1977-78	62.8	10.6	26.6
		1983	60.5	10.3	29.2
		1987-88	58.6	10	31.4
		1993-94	57.9	8.3	33.8
		1999-00	55	8.8	36.2
Rural	Female	1972-73	64.5	4.1	31.4
		1977-78	62.1	2.8	35.1
		1983	61.9	2.8	35.3
		1987-88	60.8	3.7	35.5
		1993-94	58.5	2.8	38.7
		1999-00	57.3	3.1	39.6

Urban	Male	1972-73	39.2	50.7	10.1
		1977-78	40.4	46.4	13.2
		1983	40.9	43.7	15.4
		1987-88	41.7	43.7	14.6
		1993-94	41.7	42.1	16.2
		1999-00	41.5	41.7	16.8
Urban	Female	1972-73	48.4	27.9	23.7
		1977-78	49.5	24.9	25.6
		1983	45.8	25.8	28.4
		1987-88	47.1	27.5	25.4
		1993-94	45.4	28.6	26
		1999-00	45.3	33.3	21.4

Note: The combined figures for both the sexes and all areas are taken from Sundaram (2004):

	Self-employed	Regular Wage	Casual
1983	57.28	13.85	28.87
1993-94	54.54	13.66	31.98
1999-00	52.20	14.70	33.10

Source: Employment and Unemployment situation in India 1999-2000, Key Results, Report No. 455(55/10/1) and Part-I, Report No.458, National Sample Survey Organisation, NSS 50th Round Report No.409 and Sarvekshana, Sept. 1990.

Finally, with respect to unemployment there have been some changes in the 1990s. The open unemployment rate (defined as those not working but seeking or available for work on UPSS basis, as a percentage of labour force) has neither been generally high on an average for all sections of the population nor has it increased considerably over the years; rather in the nineties it shows a declining tendency both in the rural and urban areas corresponding to both the sexes (Table 31). Those usually unemployed in terms of the principal status constitute only 2 and 1.5 per cent of the male and female labour force respectively in the rural areas in 1999-00. And in the urban areas the corresponding rates were 4.8 and 7.1 per cent, indicating a high incidence of unemployment among the urban females. However, unemployment is much higher among the urban-based educated youth as they can afford to remain unemployed for long spending time on job search. The proportion of educated among the unemployed was 59 and 74 per cent among males and females respectively in the urban areas (63 per cent for both the sexes). Even in the rural areas educated accounted for 55.2 and 62.7 per cent of the male and female unemployment respectively (57 per cent for both the sexes)[27]. Among the unskilled and

[27] NSS Report No. 455, Employment and Unemployment in India 1999-2000.
Unemployment Rate (Usual Principal Status) by Education

Secondary and above		Graduate and above	
Male	Female	Male	Female

semi-skilled labor force it is the category of "working poor" which is dominant, and hence ways and means of improving productivity and earnings corresponding to activities they are engaged in, need to be an important policy focus. The current daily status unemployment rate, which in addition to open unemployment also captures underutilization of labour time of those who are already employed, was around 7 per cent among rural and urban males and rural females too in 1999-00 (Table 31). Among the urban females it was even higher: slightly above 9 per cent in 1999-00. Within the organized sector since the public sector is not in a position to expand and offer employment on a large scale due to resource crunch, it is the organized private sector, which is expected to grow rapidly and generate productive employment opportunities.

Table 31: Unemployment rates during 1977-78 to 1999-2000 in different NSS rounds

	Round/Year	Male US	Male CWS	Male CDS	Female US	Female CWS	Female CDS
Rural	55(1999/00)	2.1	3.9	7.2	1.5	3.7	7.0
Rural	50(1993/94)	2.0	3.1	5.6	1.3	2.9	5.6
Rural	43(1987/88)	2.8	4.2	4.6	3.5	4.4	6.7
Rural	38(1983)	2.1	3.7	7.5	1.4	4.3	9.0
Rural	32(1977/78)	2.2	3.6	7.1	5.5	4.1	9.2
Urban	55(1999/00)	4.8	5.6	7.3	7.1	7.3	9.4
Urban	50(1993/94)	5.4	5.2	6.7	8.3	7.9	10.4
Urban	43(1987/88)	6.1	6.6	8.8	8.5	9.2	12.0
Urban	38(1983)	5.9	6.7	9.2	6.9	7.5	11.0
Urban	32(1977/78)	6.5	7.1	9.4	17.8	10.9	14.5

Note: US stands for usual status; CWS for current weekly status and CDS for current daily status. Usual status uses the reference period of 365 days preceding the date of survey, current weekly status uses the reference period of 7 days preceding the date of survey and current daily status takes into account the day to day labour time disposition of the reference week.

The usual status unemployment rate among all persons of all areas (rural and urban combined) was 2.8 per cent for the year 1999-00. (Ghose, 2004).

Source: NSS Report No. 455: Employment and Unemployment in India, 1999-2000, Key Results.

Notwithstanding the decline in the open unemployment rates in the nineties the employment scenario on the whole does not seem to be bright, provoking some to term it

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Rural				
1993-94	8.9	24.3	13.4	32.3
1999-00	6.9	20.4	10.7	35.1
Urban				
1993-94	6.9	20.7	6.4	20.5
1999-00	6.6	16.3	6.6	16.3

Ghose (2004) also shows a direct relationship between the years of education and the rate of unemployment.

as “jobless growth” as the data show a sharp slow down in the average annual increments to work force during this period compared to the eighties. While it is understandable that the concept of jobless growth is an exaggeration of the differential between the realized and expected outcomes of the reform process on the employment front, casting it as a bright reality, as done by Sundaram (2004) is equally erroneous. The rise in the average annual increment in the number of regular wage/salaried jobs between 1993-94 and 1999-00 compared to that between 1983 and 1993-94 did not compensate for the decline in the average annual increment in the number of self-employed and casual workers in the nineties compared to the eighties. Furthermore the regular salaried/wage employment includes contractual employment, which is on the rise. And it is widely known that contractual employees are outside the domain of several wage and non-wage benefits compared to those who fall into the category of regular wage/salaried employees directly employed by the employers. To conclude, the over all growth rate in employment dropped during the nineties compared to the eighties, and this was mainly because the non-agriculture sector could not compensate for the fall in employment in the agriculture sector.

5. Homeless Population in Japan

As Clinard (1970) pointed out, a slum involves much more than the elements of inadequate housing, deficient sanitary and hygienic facilities, over-crowding and congestion by which it is generally characterized. “Sociologically it is a way of life, a subculture with a set of norms and values which is reflected in poor sanitation and health practices, deviant behaviour and characteristic attributes of apathy and social isolation,” (Clinard, 1970). A similar idea is reflected in the views of a Japanese artist (Ogawa) who runs a cafe with his friend for the homeless persons in a park in Shibuya ward, “There used to be a community of homeless people here who related to each other warmly and naturally, respecting each other’s independence. Though homeless people have been stigmatized by society in Japan, I thought the park was a focal point for that culture,” (Matsubara, 2006). However, the sociological issues are beyond the scope of our study, and hence, we will focus only on the economic aspect, highlighting the links between labour market outcomes and homelessness. In the preceding sections we have shown the labour market adversities which grew particularly after the burst of the bubble economy, and these outcomes are indicative of a deterioration in the living standard and a possible rise in the number of homeless population. In this section we focus directly on the homeless population based on the survey done by the Ministry of Health and Labour in 2003 for the whole of Japan and also, in particular, the Sinjuku ward. The analysis also refers to selected interviews we had conducted with homeless persons, NGOs, activists and employees of government organizations like Tokyo Metropolitan Government.

In September 2001 there were around 24,090 thousand homeless people in Japan, of which Tokyo and Osaka alone accounted for 23.25 and 35.7 per cent respectively. By 2003 the number increased to 25296 thousand in Japan, implying a growth rate of 2.44 per cent per annum, which is phenomenal in comparison to the growth rate of population or labour force. In Tokyo area homeless population grew at a rapid rate of 2.84 per cent per annum during the same period. The five big cities (Tokyo, Yokohama, Kawasaki,

Nagoia and Osaka comprised nearly 62 per cent of the total homeless population in 2003. It is quite evident from Table 32 that the gender ratio in the world of homeless persons is highly tilted towards males (i.e., females are usually very few in number compared to males).

It may be suggested here that given the social system in urban Japan that the joint family system is disappearing fast and the male member is the principal earner with a high sense of dignity, the respect to which from others within the household lasts as long as he is able to provide for the rest, job-loss and the inability to find immediately an alternative source of living at the stage of his mid-career compel the male in the face of high cost of living to leave the family, surrendering the immobile property to his spouse and children. Those who reside in rented apartments are more vulnerable as in the face of unemployment, the heavy cost of housing remains absolutely unaffordable. Not necessarily these people are old; younger people affected by the changing economic structure, widening income gap and a dire employment situation also fall into the homeless category (Matsubara, 2006)[28]. However, the set of homeless population also includes migrants who escaped from the rural society after committing crimes and rural migrants in search of jobs during the agricultural slack seasons but got involved in gambling and the like in the city with no hope to return as the rural society with high social norms is not open to the way-words. The other categories encompass construction workers and other manual workers who do not have adequate saving and are unable to pursue physical work after a certain age, those who strive hard to seek regular sources of earnings but cannot find avenues that offer them a decent living and finally the impoverished working class who keep alternating between flophouses of working class quarters (yoseba) and isolated construction sites, temporary dormitories (hanba) and at times parks and streets when completely without jobs (Fowler, 1996, Nasubi, 2005, Matsubara 2006).

Table 32: Homeless population in large cities

City	Homeless Population In 2003	Growth in Homeless Population (2001-03) per cent per annum	(F/M)*1000 in 2003
Tokyo	5927	2.84	-
Sappro	88	12.89	31.746
Sendai	203	21.90	51.813
Chiba	126	1.20	16.129
Yokohama	470	-12.38	21.739
Kawasaki	829	-4.16	8.516
Nagoya	1788	15.25	32.999

[28] In several interviews of our survey also we noted that respondents believe globalization has caused joblessness and homelessness.

Kyoto	624	11.88	36.697
Osaka	6603	-13.56	18.769
Kobe	323	-2.71	29.197
Hiroshima	156	-14.14	26.316
Kitakyushu	421	37.97	60.172
Fukuoka	607	28.83	99.048
Total Japan	25296	2.44	36.252

Source: Ministry of Health and Labour, Japan 2003.

One major survey focusing on various aspects of the homeless population was carried out by the Ministry of Health and Labour in 2003. The number of homeless population covered in the sample was 2163, comprising around 8.5 per cent of the total homeless population in the country. Around one-fourth of the sample (507) was taken from Sinjuku ward in Tokyo. We present below some of the results from this survey.

The age composition of the homeless population shows that those aged 55 and above constituted a relatively higher (58.8) percentage of the total. However, the presence of the relatively younger ones is not negligible either. Hence, the basic hypothesis of our analysis that labour market outcomes are also responsible for homelessness seems to have relevance. Also, it is true as Fowler (1996) pointed out, men who worked as daily labourers when they were younger and healthier come to street to live when they grow old and take sick due to a virtual absence of safety net for them. We will, however, return to the issue of safety net later in the text.

As shown by the Ministry of Health and Labour data (2003) a very significant percentage of the homeless population resides in parks (40.8 per cent), at riverside (23.3 per cent), and along the street (17.2 per cent). The rest find shelter in stations and other places[29].

[29] From the interview at the Tokyo Metropolitan Government Office it is evident that usually two types of homeless population are seen:

1. Permanently stable homeless, for whom the age cohort is relatively high. They live in parks, on the river bank. Some of them earn money. For a long time they have established themselves there and have accepted that that is their way of life. Some of them have accumulated household-goods and some live on abandoned food.
2. Moving Homeless: They are homeless for relatively shorter time. The day they find a good job they shift to capsule hotel/internet cafe etc. and when they are unable to find a job that can afford this, they sleep in the street under the blue sheets etc. Some of them are construction workers, others work as transport workers in companies which work as movers, helping households/offices to shift from one place to another. But none of them is able to earn for a long time.

Another source of the supply of homeless population is due to unstable job. Many of them are working as distributors of news papers and security guards, and there exists some studies which relate homeless population to the globalisation process (Nasubi, 2005). Also the percentage of population/work force earning low income is increasing in Japan. However, the interview with NGO (Sanyukai) at San'ya Nov. 29, 2005, pointed out that even in good economic conditions, before the bubble economy burst, homeless population existed.

Conforming to the pattern observed for the total homeless population in the country, a large majority of the sample respondents (84.09 per cent) also said that they resided in parks, riverside, roads and station. It is also important to note that nearly 55 per cent of the respondents have been staying in the same place for at least one year and those with three years and more account for 28 per cent of the total. The most astounding part is the response to the question for how long they have been living as homeless: nearly 37 per cent of the respondents confirmed that they have been homeless for more than five years. Since several workers often move on and off the street depending upon the availability of jobs, it is important to find out for how long they have been in the present status in a continuous manner. Around 44 per cent of the total agreed that they were living as homeless for at least three years in a continuous manner. This shows that homelessness is not a purely transitory phenomenon, and moreover, once a person becomes homeless the possibility for him to return to normalcy is quite low in a society that offers no second chance to failures (Fowler, 1996).

Nearly 65 per cent of the homeless have been literally in the street, living under blue tarpaulin sheets or in card board boxes etc., while the rest find shelter in temporary accommodation offered by the construction companies, hospitals, cheap hotels, and dormitories etc. More than 77 per cent of the sample population agreed to have been residing alone, while only 17 per cent lived with friends and 5 per cent with spouse. The dominance of the single member households given the age profile which is tilted towards higher age brackets is indicative of links between job-loss and family break-up, leading to social isolation/exclusion. In this respect the Indian slums are very different not only to suggest that they are family slums but also their emergence does not reflect downward social mobility, as seen in Japan (Mitra, 1988).

The employment profile of the street dwellers bring out certain interesting features. Though nearly 65 per cent of them confirmed that they were engaged in certain activities to earn an income, a large majority of the activities did not seem to be gainful. Around 16 per cent worked as daily wage labourers in the construction sector, a little above 68 per cent depended on collecting trash, tins and cans for a livelihood, and 2 per cent were engaged as drivers on daily wage basis (Table 33). The fact that a large majority of them were engaged in marginal activities like collecting recyclable garbage to earn a living tends to indicate considerable overlaps between marginal employment and homelessness[30].

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[30] Tins and cans sell for 80 to 90 yen a kilo, as reported by our interviewees. Hence those engaged in recyclable goods collection end up with very low earnings. Even those who said in our survey that they were working with a license for almost 10 hours a day as wielding machine operators, earned only 3000-3500 yen a day. Construction jobs though fetch higher incomes, they are not available adequately. Sometimes in cleaning activities and the like the respondent said that he is able to earn (800 yen per hour) more than the minimum wage (662-682yen per hour in Chiba area), but the number of hours per day he has to work for this part time job is too small.

Table 33: Employment profile of those Engaged in income earning activity

Activity	% Distribution
Daily Wage Worker in Construction	15.7
Collecting Trash, Tins, Cans etc.	67.9
Drivers on Daily Wage Basis	2.0
Others	1.5
Others (Unspecified)	12.8
Total	100.0

Source: Survey on Homeless Population, 2003, Ministry of Health and Labour.

The monthly income profile based on the three-monthly average figures quoted by those who agreed to be earning income (63.2 percent of the respondents) shows that around 25 per cent received less than 10, 000 yen per month. On the whole, nearly 80 per cent earned less than 50,000 yen a month. All this would compare well if we cite the official minimum wage which is around 662 and 712 yen per hour in Chiba and Tokyo respectively, with variations across prefectures[31]. More than 85 per cent of the total respondents did not have any income other than the job-income, and among those who had income other than the job-income nearly 65 percent earned less than 30,000 yen a month. To emphasize the seriousness, it may be cited that around 40 per cent of the sample did not seem to be having enough food for consumption, (nearly 17 per cent consumed food once a day and another 46 per cent twice a day.) All this tends to imply bleak prospects for generating adequate saving to experience upward mobility in terms of better living conditions, unless there is any government or non-government intervention in a major way.

The most important information in the context of downward mobility of the homeless population is reflected in the occupational structure that they experienced before coming to the street. As shown in Table 34 the earlier occupational structure was quite diverse and did not reveal that they were largely engaged in petty activities. Only around 3 per cent of the total homeless were engaged previously in cleaning streets and collecting garbage and other recyclable goods. Another 2 per cent did not have job, i.e., remained unemployed before moving into the street. On the other hand, more than 10 per cent of the homeless population had an employment in manufacturing activities earlier. Even some of the homeless population worked as skilled employees in technological jobs and as managers and supervisors and clerks (total 3 per cent). Nearly 20 per cent were engaged as skilled workers and 34 per cent as unskilled workers in construction. Even to the question which job they pursued for the longest time, 17 per cent of the total responded that they were engaged in manufacturing and 20.4 and 21.9 per cent in unskilled and skilled construction activity respectively. This tends to provide support to the proposition that deceleration in manufacturing employment accompanied by decline

[31] Also wage-variations exist across activities: for retailer it is 755 and in steel manufacturing 800 yen per hour in Chiba area.

in construction activities in the nineties led to a rise in unemployment and subsequently marginal employment and thus homelessness. Also, as mentioned above, it could be true that those once engaged in construction activity (possibly at a relatively younger age) are likely to move into streets as they grow older and lose the ability to pursue labour-intensive activity.

Table 34: Occupations pursued before becoming homeless

Activity	% Engaged just before becoming homeless	% Engaged for the longest period
Professional and Technical Jobs	1.0	1.4
Managers and Supervisors of Employees	0.8	1.3
Clerical	1.1	2.4
Sales Worker in Shops	4.2	5.7
Service Workers	8.6	11.7
Security Workers	2.6	1.4
Agriculture and Fisheries	0.6	1.4
Transport and Telecommunication	3.6	5.0
Mining	0.0	0.1
Manufacturing	10.2	17.0
Printing	0.9	1.2
Skilled Workers in Construction	19.7	20.4
Unskilled Workers in Construction	33.9	21.9
Transporting Goods	3.0	2.7
Cleaning Street and Collecting Recyclable Goods	2.8	1.4
Other	4.2	4.2
Without Any Job Earlier	2.0	0.4
Not Answered	0.8	0.4
Total	100.0 (2163)	100.0 (2163)

Source: Same as Table 33.

Even in terms of the nature of employment it may be verified from Table 35 that not necessarily most of them were employed earlier as daily wage workers. As can be seen from Table 35 the percentage of regular employees was nearly 40 per cent, while part time and daily wage workers together accounted for around 48 per cent of the total. Even in the jobs that they held for the longest time the proportion of regular employees to total

was 56 per cent, while daily wage and part-timers comprised only 8 and 23 per cent respectively.

Further, around 36 per cent of the total responses agreed that they became homeless because of the closure of the units and/or business failure (Table 36). Another 33 per cent also indicated job-loss and insolvency as the prime cause of their movement into the streets. However, this is not to deny the fact that family problem, alcoholism and gambling did not aggravate the situation. But their relative importance is much less (around 13 per cent of the total responses) than what is commonly believed in Japan[32].

Table 35: Nature of employment before becoming homeless

Status of Employment	% Engaged Just Before Becoming Homeless	% Engaged for the longest period
Directors	2.1	3.1
Family Business	3.8	6.1
Regular Workers	38.6	55.8
Part-time Workers	13.5	7.7
Daily Wage Workers	35.0	23.0
Others	4.0	2.9
Unspecified	0.9	0.8
Without Job	2.1	0.6
Total	100.0 (2163)	100.0 (2163)

Source: Same as Table 33.

Table 36: Reasons for becoming homeless

Reasons	No. of Responses	As a % of Total Sample Population
Insolvency, Job Loss etc.	708	32.9
Company Closed, Business Failed etc.	768	35.6
Old Age, Accidents, Unable to Continue	406	18.8
Fall in Income	354	16.4
Unable to Pay Loans	49	2.3
Unable to Pay House Rent	327	15.2

[32] Some are homeless by choice: in Japan, for example, some of our interviewees explained that there is a growing tendency among some individuals to move away from the city life and stay as homeless in secluded places and lead a simple life. Wandering monks in India and hippy in USA are other examples of homeless wanderers by choice.

Unable to Pay for Hotels	177	8.2
Renewal of the old buildings where they stayed	22	1.0
To Avoid the Lender	92	4.3
Legally thrown out as could not pay loan	12	0.6
Stayed in Hospitals, Dormitories, Public Houses	41	1.9
Family Problem	160	7.4
Alcoholic and Gambling	126	5.8
Other	416	19.3
Without Reason	32	1.5
Total	3690 responses of 2155 individuals, comprising 99.6% of the sample population	

Note: Percentage figures do not add up to 100 as individuals gave more than one responses.
Source: Same as Table 33.

While a little less than one-tenth of the total respondents said that they lived in their own houses before becoming homeless, around 37 per cent reported to have stayed in private apartments. Another 14 per cent lived in houses offered by companies. The temporary accommodation offered by construction companies comprised only 14 per cent of the total. Though this latter category is more susceptible to become homeless it is important to note that individuals who lived in their own houses and private apartments have emerged as pavement dwellers. In terms of payment of rent while 23 per cent of the population did not pay any rent, nearly 22 per cent paid a rent of more than 50,000 yen a month before becoming homeless. All this is supportive of a strong economic set-back that affected not only those at the lower echelons in terms of labour market status but also those who were relatively better-off, thus confirming a great deal of welfare loss over time. This has also led to inter-spatial migration, as around one-third of the sample indicated at the time of the survey that they belonged to different prefectures. Migration to different prefectures makes implementation of several welfare programs difficult as they are meant for the residents of specific prefectures[33].

Though nearly half of the sample population reported to be unwell, not too many (only 33 per cent of the total) actually visited the welfare office. The purpose of the visit was

[33] The NGO (Sanyukai) in Sanya area pointed out that the number of homeless people has become so large that the government cannot afford to pay the assistance. Secondly, if a person belongs to a particular district then he can be covered under the public assistance provided he becomes homeless in the same area. But if he belongs to a particular prefecture and becomes homeless elsewhere then he is not entitled to the assistance.

diverse, ranging from medical facility and food to housing. However, only around 7 per cent of those who went to the welfare office could access the housing offered by government. Our interviews with pavement dwellers also indicate that they have little expectations from these welfare offices. Among the rest 67 per cent of the respondents who did not visit the welfare offices nearly 55 per cent reflected their disinterest when they were asked the question if they would like to visit these places in future. Even with respect to the emergency shelter around 61 per cent revealed their reluctance to access them. Too many interruptions, unsuitable terms and conditions, lack of privacy were some of the reasons of the lack of willingness to use the emergency shelter. The lack of faith in government sponsored schemes is greatly evident as 61 per cent of the total sample expressed their unwillingness to visit a centre that would help them lead a normal life. One of the main reasons of this was the limited possibility of job opportunity at the place of rehabilitation. In other words, trade-offs between decent living conditions and accessibility to jobs in that locality are quite sizeable. Further, the limited job possibilities at the rehabilitated place are likely to reduce their ability to keep up their access to the facilities provided, as none of these facilities comes free of cost indefinitely.

Only 24 per cent agreed to have ever used the government welfare scheme for better living conditions. Among those who said that they used these schemes ever in life, hospitalization, accessing dormitories and apartments appeared as the main reasons. While residing as pavement dwellers many of them, however, reported to have received help in terms of food, clothing etc. which are sponsored by several voluntary organizations and educational and religious institutions though these support facilities have not been adequate, i.e., 67 per cent agreed that more help would be useful.

When the homeless people were asked as to what kind of living they like, around 47 per cent of them indicated the importance of proper job. Only 7.2 per cent wanted welfare grant for ever as they could not work due to illness or old age. Almost 32 per cent of the total sample confirmed that they were seeking jobs, and another 26 per cent agreed to do so in future though at the time of the survey they did not participate in the job search process actively. Among those who said that they were not looking for jobs or they were not interested to do so in the future, 22 per cent were actually awaiting jobs and 12 per cent were already engaged in jobs in which they were quite satisfied. Almost 13 per cent pointed out that they were not able to look for jobs due to the lack of an identity or proper address. On the whole, a very large percentage of the homeless population seemed to have interest in pursuing work, which goes against the common belief that they are homeless because they are not interested in work. It is rather important to note that even after pursuing some activity they remained homeless. All this is indicative of the overlaps between homelessness and working individuals without adequate earnings, which rose in the process of economic deceleration. This is however, not to deny the existence of those who could not work due to old age, illness, physical problems and weakness- accounting for 31 per cent of those who said that they were not looking for jobs.

Unlike the developing countries where the job-search process is largely based on informal channels of information flow, more than half of the job-seekers used employment offices run by the Ministry of Labour and others and news papers. Almost 21 per cent of the job-seekers were looking for skilled jobs in manufacturing and construction, another 3 per cent in transport and telecommunication, other skilled, and

clerical and managerial jobs, implying again that these workers were possibly the ones who lost their jobs in the process of adjustment, following the burst of the bubble economy. Almost 94 per cent of the sample agreed that they required assistance to find a job and among their responses nearly 22 per cent wanted easy access to job and training to get specific occupations. Another 40 per cent wanted the employers and the society to remove prejudices against employing them and to offer them an identity by becoming their guarantee. Many of them (a little less than half of the sample population) had requisite licenses for even more than one activity such as driving, usage of construction machine, working in factories, cooking and other personal services. Needless to add that many of these licenses were still valid at the time of survey. Around 90 per cent of the sample responded to the question, asking them to indicate their request for the city administration office, and among them the most dominant one turned out to be the request for job.

Around 63 per cent of them had identity at the municipal level, implying that the rest came from other prefectures, and hence may not be entitled to benefits, if any, provided by the local government. Almost 99 per cent of the sample responded to the question that asked them to specify if they had any request for the Human Right's Office. At least 15 per cent of the responses confirmed harassment, caused by neighbours, and violence, shown by others, particularly youngsters[34]. However, the sense of dignity is unique to the Japanese; even among the homeless persons it is seen that they are keen to become self-sufficient and help others rather than becoming a burden on the government.

Sinjuku Survey

As mentioned above, the same survey on homeless population (2003) was also conducted for the Sinjuku-ward in Tokyo and around one-fourth of the sample for the whole of Japan came from this area. Some of the information for Sinjuku-ward has been given with greater details. It would be, therefore, interesting to analyze some of these results in addition to the findings cited at the national level. However, the tabulation plan and the categories in various tables for Sinjuku do not match exactly with those for the whole of Japan. Hence, the information could not be compiled in one set of common tables, and so we prefer to present some of the results separately for Sinjuku.

Nearly 60 per cent of the Sinjuku sample belonged to the age group of 40 to 59, which is relatively younger than what was seen at the national level. Matsubara (2006 Asahi, January 30) based on the information collected from a Tokyo-based non-profit Furusato-no-kai group, which operates welfare facilities for people who were formerly homeless, also opines in this direction. According to this view homeless population earlier used to comprise mostly former day labourers aged 50 or more but now includes many younger people, mainly because of the changes in the economic structure, which have brought about a widening income gap and a dire employment situation. In terms of the place of

[34] This is the reason why they prefer to stay in groups, as revealed by them in the interviews we conducted. In certain secluded places they are scared to stay as they may be attacked by others. In market places in or around the stations where they sleep, the police is vigilant in the day time but not in the night.

origin of the homeless population four areas of Japan which had a share of around 10 per cent or more in the total are Tokyo (16.4), Kanto2[35] (8.5), Hokkaido (8.7) and Tohoku (17.2). Another 16 per cent came from other places which were not mentioned specifically. All this implies large scale inter-spatial migration (more than 80 per cent), possibly due to the changes taking place in the economy.

Quite a sizeable proportion of the homeless (23.5 per cent) lived in private apartments before becoming homeless, which implies that they were able to pay for the cost of accommodation at one point of time. Nearly 18 per cent stayed in temporary accommodation provided during the time of construction. This category was susceptible to homelessness due to the decline in the demand for construction activity in the economy, which started even before the collapse of the bubble economy, prompted by the change in the mode of employment in the construction sector from daily based work and payment to contract based work and payment, and substitution of technology for labour.[36]

A little above 46 per cent of the Sinjuku-sample worked in construction and public work programmes before becoming homeless, and possibly they were the ones who were affected directly by the recession of the nineties resulting in deceleration of several activities including construction. What is important to note is that the proportion of those who were purely unemployed before becoming pavement dweller is less than 3 per cent. Hence, the overlaps between job-loss and homelessness are very much evident. Job retrenchment (21.5 per cent), getting fired (11.3 per cent), voluntary retirement (15.6 per cent), and end of short-term contract (8.1 per cent) were seen as some of the main reasons of job-loss and becoming homeless. Retirement and sickness accounted for another 12 per cent of the respondents. Interestingly, around 13 per cent were still working, indicating their inability to afford better living conditions at the income levels earned during the time of survey. However, as a response to the question how did they earn an income, almost 63 per cent of the total sample agreed to be having income while residing in the city as homeless, and among them nearly 58 per cent agreed to be accessing daily wage employment in construction, transport etc. Also, a sizeable percentage of those who agreed to be pursuing some activity for earning an income, were engaged in collecting

[35] Kanto2 includes three prefectures, namely Ibaraki, Tochigi, Gumma, which are northern part of Kanto area.

[36] This point was highlighted in some of the interviews that we conducted. Also it is noted that during the peak of the bubble economy the demand for tehaishi (daily wage workers) increased, especially in construction activity. There was no job placement cell. The workers used to assemble in the street, and companies would pick them up from the street for daily wage employment. So people started staying in Sanya area which was a major centre of labour recruitment, in cheap accommodation. But after the bubble economy burst, the demand for labour declined considerably, as the companies have adopted machinery to replace labour in an attempt to minimize cost by substituting technology for labour.

Because of less demand for labour, wages are falling. Hence, workers are not even able to afford the cheap accommodation. Some of these facilities have remained under-utilized. Some of the cheap-accommodation providers have gone bankrupt. Some shops which mainly catered to the workers have gone bankrupt too.

old books for resale (14.2 per cent) and black-marketing of job-tickets (12.6 per cent)[37]. Possibly, as noted in our interviews, the number of days for which the daily jobs are available per person is too less to provide a decent living. This is also evident from the responses cross-classified by the number of days that they reported to be working per month and monthly income (Table 37). However, only 58 percent of the sample is captured here, though a little more than this (63 per cent), as mentioned above, agreed to be having income. More than half of the respondents (295) could work only for less than fifteen days a month, i.e., 8.1 per cent work for less than 3 days, 30.5 per cent 4-9 days and 14.6 per cent 10-14 days. In terms of income while only 21 per cent of the respondents earned more than 90,000 yen a month, nearly 20 per cent belonged to the income size class of less than 30,000 yen a month (see Table 37).[38]

Table 37: Respondents by the number of days worked and monthly income

Monthly Income (Yen)	Worked up to 3days	Worked for 4 to 9 days	Worked for 10 to14 days	Worked for 15 to 19 days	Worked for 20 days and above	Unknown	Total
Less than 3000	20.0	0.0	20.0	0.0	0.0	60.0	100 (1.7)
3000-5000	33.3	33.3	0.0	0.0	0.0	33.4	100 (2.0)
5000-10,000	25.0	25.0	12.5	0.0	0.0	37.5	100 (2.7)
10,000-30,000	32.4	32.4	0.0	2.7	13.5	19.0	100 (12.5)
30,000-60,000	5.3	80.7	1.8	1.8	3.5	6.9	100 (19.3)
60,000-90,000	3.1	43.8	31.3	6.3	12.5	3.0	100 (10.8)
90,000 and above	0.0	9.8	39.3	16.4	26.2	8.3	100 (20.7)

[37] Fake job-tickets with the seal of a company and the date of work are sold in the black market, which are bought to access public unemployment assistance.

[38] Our interview with Tokyo Metropolitan Government Official suggested that among the homeless population around 10 per cent earn around 180,000 to 200, 000 per month. On the other hand, 10 to 15 per cent earn nothing. They survive on the food distributed by NGOs and the food abandoned by convenient stores. The rest 60 to 70 per cent earn 30,000 to 100,000 per month. But there is a concentration of population in the income bracket of 40,000 to 50,000 per month. They work 5 to 7 days a month earning about 8,000 to 9,000 per day. Also the percentage of population/work force earning low income is increasing in Japan.

Unknown	3.4	9.0	6.7	4.5	2.2	74.2	100 (30.2)
Total	8.1	30.5	14.6	6.1	9.8	30.9	100 295

Note: Percentage figures are given relative to the row total. Figures within the parentheses in the last column give percentages relative to the column total. The respondents for this question are 295.
Source: Same as Table 33.

Though around 27 per cent of the homeless came to Sinjuku in search of jobs from outside, their venture to move upward remained unsuccessful. Even a place to reside in parks on a regular basis could not be accessed by nearly half of the homeless population (44.4 per cent). This is possibly because of the restrictions imposed by the local government. Our interviews and the recent Osaka violence (Japan Times, January 30 and 31) are testimony to this phenomenon. Only 31.4 per cent could afford a living under the blue-tarpaulin, while the rest still slept inside card board boxes, folding boxes or under the blanket.

Table 38 gives the cross classification of those engaged in income earning activity and the reasons for moving to Sinjuku. It may be noted from this table that initially employment was not a major reason of migration (only 12.3 per cent) among those who are presently engaged in activity. However, many of them subsequently joined the labour market. Daily work in construction is a dominant activity across most of the categories of reasons for migration. Interestingly, those who came specifically for employment seem to have a relatively more diversified employment pattern- daily work in construction accounted for 31 per cent only.

Table 38: Current job by the reason for coming to Sinjuku

Reason	Daily Work in Const.	Daily Work in Trans.	Other Daily Work	Collecting Recyclable Goods	Selling Food in the Street	Collecting Books	Buying Ticket	Other	Unknown	Total
Place of origin	42.9	0.	0	0.0	0.0	14.3	0.0	42.8	0.0	100 (2.2)
Knew about the place	61.3	2.8	13.2	1.9	0.9	10.4	0.9	5.7	2.9	100 (33.3)
Employ-ment	30.8	2.6	12.8	2.6	2.6	20.5	2.6	15.4	10.1	39 (12.3)
Previous residence Close to this place	78.3	3.3	6.7	0.0	0.0	3.3	3.3	3.3	1.8	100 (18.9)

with work										
Since pavement dwellers have already been residing here	33.3	0.0	16.7	0.0	16.7	33.3	0.0	0.0	0.0	100 (1.9)
Distribu-tion of hot food	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 (0.0)
Food	75.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	100 (1.3)
Others	34.3	0.0	0.0	0.0	8.6	22.9	2.9	28.6	2.7	100 (11.0)
Unknown	34.4	1.6	1.6	4.9	3.3	21.3	1.6	21.3	10.0	100 (19.2)
Total	51.9	2.2	7.9	1.9	2.5	14.2	2.2	12.6	4.6	100 318

Note: Percentage figures are given relative to the row total. Figures within the parentheses in the last column give percentages relative to the column total. The respondents for this question were 318.
Source: Same as Table 33.

As Table 39 reconfirms, more than half of the homeless workers (318, i.e., 63 per cent of the sample) in their current employment were able to get job only for less than fifteen days a month. Among those who worked for only 4 to 9 and 10 to 14 days a month the daily workers in construction accounted for a large percentage (more than 65 per cent). This tends to indicate that even the construction sector, which happened to be Japan's one of the largest sectors for daily wage workers at some point of time, later could engage job-seekers only for a few days a month. Our interviews as well as Fowler's study (1996) bring out certain reasons, which reduced the accessibility to these jobs in the face of shrinking job supplies due to macro economic deceleration. One is the emergence of too many intermediaries in the construction sector (see appendix 1). Given the population ageing phenomenon, the construction sector is quite averse to employ older job-seekers: with slight illness the probability of getting job in the construction sector declines as the employers or the contractors have to pay high insurances[39]. Also, the change in the mode of employment and payment from daily basis to work (contract) basis has reduced the number of jobs in this sector. Besides, as mentioned above, at the aggregate economy

[39] From our interviews we noted that in the early morning hours at the time of recruitment certain medical tests are performed. If the blood pressure is found to be slightly high the appointment is cancelled.

level, there has been substantial decline in construction activity, for which it is becoming increasingly difficult to absorb labour in this sector. The government sponsored job welfare centers provide only two days of employment per person per month. Some of the schemes relating to unemployment benefit are based on the principle that if they work for at least half a month the government provides support for another half. But in reality locating employment for half a month is becoming increasingly difficult and hence, sale and purchase of employment tickets in the black-market have increased considerably[40].

Table 39: Present occupation and number of days of work

No. of Days Work-ed	Daily Work in Const	Daily Work in Trans	Other Daily Work	Collecting Recyclable Goods	Advertising with Pla-ards	Sell-ing Food in the Street	Coll-ecting Old Books	Buy-ing Tic-kets	Other	Unk-nown	Total
< 3 days	37.0	7.4	18.5	0.0	0.0	0.0	14.8	11.1	3.7	7.5	100 (8.5)
4 to 9 days	66.0	4.1	9.3	0.0	0.0	3.1	6.2	0.0	8.2	3.1	100 (30.5)
10-14 days	66.7	0.0	2.2	0.0	0.0	4.4	4.4	2.2	17.8	2.3	100 (14.2)
15-19 days	42.9	0.0	19.0	4.8	0.0	0.0	14.3	0.0	19.0	0.0	100 (6.6)
20 and above	36.7	0.0	6.7	0.0	0.0	0.0	33.3	0.0	23.3	0.0	100 (9.4)
Unknown	41.8	1.0	4.1	5.1	0.0	3.1	20.4	3.1	12.2	9.2	100 (30.8)
Total	51.9	2.2	7.9	1.9	0.0	2.5	14.2	2.2	12.6	4.6	100 318

Note: Same as Table 38.
Source: Same as Table 33.

As already mentioned, nearly 63 per cent of the sample agreed to be having income and it is interesting to note that a large majority of the relatively high income jobs are concentrated in the construction sector (Table 40). However, the construction sector has both high and low income jobs, indicating the differences in tasks assigned, which in turn depends on skill, age etc. As regards other activities, some of the low income jobs relate to collection and resale of old books as shown in Table 40. However, it may be verified from Table 39, which gives the cross-classification of jobs and the number of days worked, that in these jobs (collecting old books etc.) some of the homeless workers have been struggling for more than 20 days or so in a month to earn a livelihood. In other words, the earnings in these activities are so low that even after working for a large

[40] False tickets giving information on the date of work and company name are sold at a certain price, which unemployed and homeless buy to receive unemployment benefit.

number of days in a month, individuals are not able to sustain themselves, suggesting that the phenomenon of working homeless is evident. In our interviews also we noted individuals working for long hours in collecting recyclable goods including tins and cans end up with meager incomes. This is also evident from Table 40 showing the absence of definite incomes earned by those engaged in collecting recyclable goods.

Table 40: Present Job and Monthly Income

Monthly Income	Daily Work in Const.	Daily Work in Trans-Port	Other Daily Work	Collecting Recyclable Goods	Selling Food in the Street	Collecting Books	Buy Tickets	Others	Unknown	Total
Up to 3000	60.0	0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	100 (1.6)
3000-5000	14.3	0	0.0	0.0	0.0	28.6	14.3	28.6	14.2	100 (2.2)
5000-10000	2.5	0	12.5	0.0	0.0	37.5	12.5	0.0	12.5	100 (2.5)
10000-30000	37.5	5.0	10.0	0.0	2.5	35.0	5.0	2.5	2.5	100 (12.6)
30000-60000	60.3	6.3	12.7	0.0	1.6	4.8	0.0	12.7	1.6	100 (19.8)
60000-90000	63.9	0.0	5.6	0.0	2.8	11.1	2.8	13.8	0.0	100 (11.3)
More than 90000	65.6	0.0	8.2	0.0	3.3	4.9	0.0	16.4	1.6	100 (19.2)
Unknown	43.9	1.0	5.1	6.1	3.1	14.3	2.0	14.3	10.2	100 (30.8)
Total	51.9	2.2	7.9	1.9	2.5	14.2	2.2	12.6	4.6	100 318

Note: Same as Table 38.
Source: Same as Table 33.

A large majority of the respondents (62.7 per cent) expressed their unwillingness to seek any help from emergency shelter and self-assistance centre[41]. Whether one was having income by doing work or no access to income the percentage of not using the emergency shelter turned out to be as high as 64.1 and 60.8 per cent respectively (Table 41). Even among the pensioners 70 per cent refused to be using the facility. Another additional 5

[41] These are different from the welfare schemes of the government or the local authorities.

per cent each among those with no income and the pensioners could not use it because they had used it in the past.

Table 41: Whether using emergency shelter by source of income

Source of Income	No	Yes	Lottery Failed	Used it before	Unknown	Total
No Income	60.8	17.5	4.2	4.8	12.7	100 (32.54)
By Doing Work	64.1	21.4	3.1	1.4	10.0	100 (57.8)
Pension	70.0	15.0	0.0	5.0	10.0	100 (3.9)
Transfers from others	50.0	12.5	0.0	0.0	37.5	100 (1.6)
Other	45.5	22.7	0.0	0.0	31.8	100 4.1)
Total	62.7	19.5	3.2	2.6	12.0	100 507

Note: Percentage figures are given relative to the row total. Figures in parentheses are relative to the column total.
Source: Same as Table 33.

The cross classification of respondents by whether they are using emergency shelter and future hope for living style brings out certain interesting results (Table 42). Among those who wanted to be financially independent or wanted to be employed in future nearly half of the respondents refused to be using these facilities. Another 4 to 5 per cent could not use it as the lottery failed. Surprisingly even those who said that they would depend entirely on the government support in future nearly 78 per cent were not using the facility at the time of survey. For those who visited the emergency centre, emergency food, medicine and dormitories turned out to be the important reasons. That these facilities are not used extensively may depend partly on the place where they are available. For the daily wage earners the location for night shelter is usually preferred near the work place or the daily recruitment place or the station[42].
However, what is interesting to note from this table is that more than 50 per cent of the sample wanted to be financially independent or employed in future. And from this point of view the Japanese homeless stand in sharp contrast to the rest of the world: even at the lower echelons of the socio-economic ladder the sense of dignity is strongly evident. It would, indeed, be interesting to examine in a binomial/multinomial logit framework to examine the differences in the responses relating to future hope for living style in terms

[42] In the interview with the person, who sells Big Issue magazine near Funabashi station and who is relatively young (35 years) we noted that he sleeps near a department store after it closes in the night, as he catches the early morning train to attend his first job of the day that involves cleaning before he pursues the second job of selling magazines.

of age and many other factors like the nature of previous job, the nature of present job, skill, license and the health status. This would indirectly reflect the probability of moving upward in the future. However, due to the lack of data at the individual level such estimation could not be carried out.

Table 42: Whether using emergency shelter by future hope for living style

Future Hope for Living Style	No	Yes	Lottery Failed	Used it before	Unknown	Total
Financial Independence/Self-sufficiency	51.8	31.0	3.6	4.2	9.4	168
Employment	52.5	29.7	5.1	1.7	11.0	118
Half Employment and Half Social Welfare Benefit	44.4	22.2	11.1	0.0	22.3	9
Government Support	78.0	2.4	2.4	4.9	12.3	41
Not Sure	69.8	7.0	0.0	0.0	23.2	43
Not same in future	87.2	2.6	1.3	0.0	8.9	78
Others	70.0	8.0	2.0	4.0	16.0	50
Total	62.7	19.5	3.2	2.6	12.0	507

Source: Same as Table 33.

Like the emergency shelter the welfare office of the government also does not seem to be very popular among the homeless. A little above 38 per cent refused to have visited the welfare office ever in the past, and at the time of survey almost 70 per cent were not in touch with the welfare centers. Table 43 gives the cross-classification of the sample by the purpose of using the welfare office by the type of living in future. It is evident that for those who have been using the welfare centre, health and illness and emergency food are some of the important reasons. Also, some of them have been using the dormitory facilities available at the welfare centre though all this is based on lottery system. The pattern does not show much variations across categories formed on the basis of future hope for living style.

Table 43: How they use the welfare office by future hope for living style

Future Hope for Living Style	No	Medical Reason	Emer-gency Food	Cloth-ing	Sho-wer	Lottery for using Dorm-itory	Others	Unknown	Total
Financial Independence /Self-sufficiency	74.9	7.0	11.1	0.0	0.0	4.7	1.2	1.1	171
Employ	65.6	6.4	15.2	0.0	0.8	6.4	0.0	5.6	125

Ment									
Half Employment and Half Social Welfare Benefit	44.4	11.1	33.3	0.0	0.0	11.2	0.0	0.0	9
Govern Ment Support	48.8	20.9	11.6	2.3	0.0	0.0	7.0	9.4	43
Not Sure	77.3	4.5	4.5	0.0	0.0	2.3	0.0	11.4	44
Not same in future	76.9	9.0	6.4	0.0	0.0	1.3	0.0	6.4	78
Others	69.2	13.5	5.8	0.0	0.0	0.0	5.8	5.7	52
Total	69.9	8.8	10.7	0.2	0.2	3.6	1.5	5.1	522

Note: As there are overlapping categories the number of responses exceed the number of sample population.
Source: Same as Table 33.

The reasons for not visiting the emergency centers were quite varied. At least one fifth of those who did not visit replied that they did not want to stay with others. Also some did not find these places convenient either because of inadequate space for baggage or rumors etc. But the most striking part is that nearly 30 per cent of them indicated the inadequacy of job-accessibility as the main reason for not moving to these centers. In other words, many of them have not given up their pursuits in earning a livelihood. Since government support is only temporary in nature the concern to lose the job market accessibility is indeed genuine. Of course the lack of freedom in the rehabilitated places is possibly a factor that hinders the success of some of the welfare schemes initiated to encourage upward mobility. But transcriptions from our interviews show that it is not a significant cause. It is more of a belief reflecting biases of the rest of the society against homeless population than a reality. The lack of job prospects or possibility for daily recruitment is one of the important causes of such refusal to rehabilitation centers. Some of the recruitments take place early in the morning at certain specific localities, and the distance between the residence and these job negotiation centers is too large. These days some of the jobs are fixed over the telephones. Some of the homeless persons who are pursuing economic activity confirmed in the interviews conducted by us that a large part of their earnings is spent on mobile phones for job fixations and other related matters. (Also, expenditure on transport is substantive in magnitude.) As much of their saving is spent on these items in the absence of any residential address, which is essential to register at any job welfare centre/employment exchanges to receive offers, the future possibility to gain any social upward mobility rather looks bleak. The recent implementation of housing schemes through NGOs, as discussed below, has been quite successful and there has not been any major complain from the other residents in the locality against the beneficiaries.

Policy Measures:

The issue of homeless is serious in many ways: a person cannot exercise the right to vote or receive welfare, including pension and health insurance, without a residential registration, which means he cannot lead a decent life as a citizen (Japan Times, January 28, 2005)[43]. After analyzing the economic profile of the homeless population we now turn to some of the important steps that have been undertaken in this direction to reduce the vulnerability of the homeless population. One important policy (safety net) that can reduce the number of homeless population to some extent is the Public Assistance Law[44]. But the central issue is that there are unskilled people, who do not have job with enough earning, and are neither covered by the Public Assistance Law nor entitled to pure unemployment doll.

Labour and social insurance systems include (a) workers' accident compensation insurance, (b) employment insurance, (c) health insurance and nursing care insurance and (d) employees' pension insurance. To qualify for employment insurance part-time workers' prescribed working hours must not be less than 20 hours per week, and they must not be employed for less than a year. Benefits are paid for a predetermined period when the insured worker leaves his/her job, and the amount of benefits is determined

[43] Definition: People who do not have a stable address and stay outside home, are called the homeless population. After a litigation being filed, the Osaka District Court ruled that a homeless man should be registered as a resident of a public park in the ward office as that is his residence (Japan Times, January 28, 2006).

In the context of USA the most commonly cited definition of a homeless person is from Section 11302 of the McKinney-Vento Homeless Assistance Act. That act defines a homeless person as an individual who lacks a fixed, regular, and adequate night time residence or a person who resides in a shelter, welfare hotel, transitional prograame, or place not ordinarily used as regular sleeping accommodations, such as streets, cars, movie theatres, abandoned buildings, etc. (Institute for the Study of Homelessness and Poverty, 2004).

[44] The interview that we conducted at Tokyo Metropolitan Government Office (Nov. 22, 2005) brings out certain interesting policy issues. The Public Assistance Law (25th Chapter of Japanese Constitution) provides the minimum standard of living to those who cannot afford it but the beneficiaries have to be aged, sick and disabled. Those who are in forties or fifties and those who can work, are not covered by this law. With a certificate showing his/her inability to work and an income support beneficiary card one can receive 120,000 yen per month, which has been reduced by 10,000 yen by Taito-ku government as income support beneficiaries spend a large component of this income on alcohol consumption (as revealed by one of our interviewees). In Taito-ku area (where Sanya is located) there are around 5,000 homeless income support beneficiaries covered by the public assistance law. The magnitude of support, however, differs across beneficiaries depending on his/her health conditions, capability to work and the like. Once San'ya was known as 'the town of daily workers', but now it is known as 'town of social welfare-receivers.' The old people are expected to receive public assistance from government, which is shared by the central government as well as the local governments. Given the inadequacy to cover the beneficiaries the local governments are expected to contribute a lot. But the number of homeless people has become so large that the government cannot afford to pay the assistance.

according to the reason for leaving the job, the length of time for which the insured party was covered and the insured party's age etc.

In this context it is important to note that Self Reliance Support for homeless population has been established recently, which in turn has established a job placement cell along with provision for accommodation.[45] Run by the metropolitan government with the assistance from the national government this project is implemented mainly in big cities in Japan as the local governments in big cities have greater power. This project has been in practice in some of the cities like Tokyo, Nagoya, Osaka, Kitakyushu, Yokohama, Sendai etc. In Tokyo it is applicable only in five parks.

Tokyo metropolitan government has 10 cells for job placement and accommodation. They are of two types, though in other cities it is not so. Five of them provide only accommodation for one month restoring their physical and mental abilities. A maximum of 654 beds are available here at a point of time. At the second stage 354 beds are available with the other five cells where the occupants have to find jobs. After the workers start working and generate savings they hire an apartment for themselves and experience an upward mobility. From the first stage around 50 per cent move to the second and from the second stage around 50 per cent find jobs and become self-sufficient, and thus move out of these cells. What happens to those who are not able to move to the second stage or fail at the second stage to become self-sufficient? Some, of course, become senior citizens and get entitled to receive benefits on the basis of the Public Assistance Law[46]. And the rest return to the streets.

Only 1/3 rd of the homeless population in Tokyo are willing to join this system but the rest 2/3rd are not willing as they are not confident of finding a job/permanent job, which they have to get at the second stage of their participation in this programme (Self Reliance Support System). There are some people who can be covered by the Public Assistance Law. But in between there are some who are not covered by the Public Assistance Law and are not able to be successful or think to be successful through Self Reliance Support System. They are the ones who come back to the streets.

For them, Tokyo Metropolitan Government started a third project ("homes for the homeless") in 2004, when their number climbed to 5500 in Tokyo. The aim is to offer apartment to the homeless population. Since the private owners will not like to let out their apartments directly to the homeless population, the government co-ordinates with the NGOs and they make contract with the landlords and the homeless population,

[45] About fifteen years back government started paying attention to the problem of homeless population. Particularly when the bubble economy burst, the problem became serious and drew the concern of the government. Even before that people were flocking around in the city without a permanent address. But the government started paying attention only 15 years back. In 2000 there were about 5700 homeless persons in Tokyo (23 districts of Tokyo). The number has remained more or less stable over the years because some factors tend to raise the number while some other tend to reduce them.

[46] As beneficiary of income support scheme for those who cannot work (with some physical disability), one of our interviewees receives 120,000 yen a month, and hence he is not a homeless right now.

subletting the accommodation to the latter. They pay only 3000 yen per month though actually the rent is around 50,000 yen per month[47]. So the rest of the amount is borne by the government. In October 2004 around 888 shifted to apartment supported by this third system. By the end of March 2006 around 1200 people would have moved to the apartment and the number of the homeless in Tokyo was expected to drop to 4000[48].

The government focuses on homeless mainly in five parks. The project is initially explained to the people. 70 to 80 per cent in each park are interested to use this project. Some people criticize this project by saying that it is not possible to find apartment for them. And some argue that the residents may be thrown out by the landlords as they are alcoholic and may create violence. But among the 888 persons who have got apartment last year (2004-05) only 1 per cent could not adjust to this life. As per the Public Assistance Law the minimum standard of living is 80,000 yen per month. The main problem is many of those who shifted to the apartments do not have this magnitude of income. However, they try hard to retain the housing they have been provided with, as they do not want to lose this opportunity and go back to the streets. Around 60 per cent of the decrease in the number of homeless population between 2004 and 2005 is because of the implementation of this project. Also it is important to note that over time the average age of the population using the project has been declining.

Our transcriptions based on the interview with a NGO[49] confirmed that the Tokyo Metropolitan Government Project is more or less successful. San'ya as a target area was designated in April, 2005 and the number of homeless population in that area has declined thereafter. Still homeless population is found in this area because some of them cannot stay in apartments. As they cannot communicate with others in those apartments they return to the parks. Some who commit crime in villages cannot go back and hence, continue to stay in parks as homeless. Other than the government sponsored programmes there are several NGOs which have been working for the homeless, particularly in San'ya area, which happened to be one of the biggest centers of homeless population once in the past[50]. Besides the role of NGOs and activist groups the informal support mechanisms –

[47] As one of our interviewees mentioned, these days the main topic is 3,000 yen/month apartment-cum-short-term work scheme for the homeless provided by the Tokyo metropolitan government, which has a large number of problems at the implementation level.

[48] News paper article (Asahi, October 2005) reported that by paying 3000 yen per month they can stay in houses but only for two years. The government shifts the homeless population from different areas (including those residing on the bank of Sumida river), to some apartments which government hires and charges 3000 yen per month. This project started in September 2004 and around 800 residents had already shifted to apartments when the article was written. Also see Matsubara (Asahi, January 30, 2006).

[49] Interview with Sanyukai working in San'ya area, Nov. 29, 2005.

[50] The main objective of this NGO, Sanyukai, is to provide health services to the residents so that there is no death. Initially it was started by the Catholic Fathers. But now it is not governed by them any more. The NGO receives help from all quarters including church, Buddhist Organisations and many other organization and individuals. Initially the objective was to build a place where sick people could live. But since that was difficult

which we define later in the next section as 'social capital' - are also important in providing job contacts, emotional support and security to each other, and in developing community-feeling and pursuing activities jointly by following the rule of division of labour.[51]

The limitations of the government programmes are noteworthy. The welfare centres are not adequately equipped to provide for the homeless. For aged homeless population there are welfare centers offering jobs: they arrange jobs offered/sub-contracted by Tokyo Metropolitan Government. Such jobs involve mainly cleaning of graveyards and parks etc. and offer a wage rate of 8000 Yen per day. The seekers have to register first with the job-welfare centres, and each person is given a number. Then on the basis of lottery their numbers are displayed on the board. On an average each person gets a job twice a month. However, sometimes they get none though towards the end of the fiscal year there is a large demand for labour in these jobs as organizations grow desperate to spend the sanctioned grants.

The health care facilities provided by the government are highly inadequate and often involve long waiting hours. Besides the unavailability of support for illnesses other than the common ones (like stomach ache, cold, headache etc.) is quite a serious issue. As mentioned above, the job welfare centers run by the government, for example, are able to find employment only for two days a month per person[52]. Secondly, some of the programmes are meant for the original residents (natives) of a particular prefecture, and not for the migrants from other prefectures. Thirdly, the temporariness of the support measures is another dimension of the problem. Particularly for the old, and those not able to pursue employment, these programmes do not seem to have much relevance in the

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the objective was changed to provide free medical (clinical facilities), and also to provide help for their living.

Free food distribution takes place in the San'ya area. Everyday one/two NGOs distribute food. The NGO, Sanyukai, distributes food every Tuesday for around 500 homeless persons. Charles E. Mcjilton who initially worked in American Navy runs an organization called Food Bank Japan) and sends food boat to this NGO. (Mainly bread, mostly crossed the expiry date, is received). Volunteers from America, France etc. are working in this area. People from YMCA and also one Buddhist Association from Taiwan distribute food (once in a month) in this area.

[51]Division of activities, as seen in our personal visits and survey, enables the relatively younger ones to pursue work while the older ones take the responsibility of cooking. Sometimes community-sharing is also noted. If one person gets a job, he shares his income with others. The reason for forming the community is also the threat from outsiders. Self-defence is an important reason of forming the community. Drinking does not mean relaxing rather it is a means of communication among the homeless individuals.

[52] The activist group working in the Sanya area called the Sanya Day Labourers' Welfare Centre Action Committee, confirmed that the government sponsored job welfare centres get employment twice a month to the homeless people. In 1960s there were riots, and thereafter the government introduced some support mechanism to get them jobs through public work programmes. The job welfare society run by the local governments also provides some medical aid. But people usually don't visit those hospitals as the quality of services is extremely poor. Besides, it is limited to few patients, involves long waiting hours and attends to only a few health problems.

long run, as the beneficiaries are not able to become self-sufficient by the end of the schemes. Also, the number of homeless population and the capacity of these programmes reveal significant mismatches. Besides, the lack of valid address or a residential registration, as mentioned above, does not allow a person to exercise the right to vote or receive welfare assistance, including pension and health insurance[53]. Day labourers who are chronically out of work are not eligible to receive unemployment benefits[54]. On the whole, as the survey results also reveal, the inadequacy of productive jobs is central to the issue of homelessness. It is not a mere recovery of the economy that can offer solution to this problem; it has rather got more to do with public work programmes including the construction activities and the nature of technology used in the manufacturing sector. Many of the restrictions which once protected workers have been relaxed since 2004 in the name of deregulation: for example, manpower placement and dispatching services and the business contracting practices are rapidly replacing the traditional temporary employment. Many of the labour placement firms treat the labourers registered with them as self-employed and independent contractors and not as workers entitled to the full protection of the labour laws (Nasubi, 2005). Unfortunately, orthodox macroeconomics, as Islam (2005) writes, highlights only the virtue of labour market flexibility and not the importance of labour market institutions in dealing with the welfare issues of the workers (Standing, 1999).

6. Slums in India

Having highlighted the problem of homeless population in Japan we now turn to the issue of urban slums in India. The empirical findings discussed in this section are largely based on the survey carried out by the author himself in 2004-05. The survey of 200 and odd households in Delhi was based on a three stage random sampling technique. Two important issues in this section are dealt with: one, the occupational distribution (choice) of workers from slum households and their income profile with a focus on the role of 'social capital'; two, the occupational and income mobility (upward) of these workers. We try to identify the real cause of slums in terms of employment problem vis-a-vis housing problem, though both in reality are closely inter-woven and hardly separable. While the government policy for a long time envisaged the slum problem in terms of the housing problem and shortage of basic amenities, academic research has seen it as a problem of low productivity informal sector employment (Mitra, 1994 and 2003). In other words, even if slum inhabitants are hypothetically provided with decent housing, their residual absorption in low productivity activities earn them meager incomes, which are not adequate even to retain these housing facilities for long.[55]

[53] Recently the Osaka District Code, however, ruled that a homeless can be registered as a resident of a public park (Japan Times, January, 28, 2006).

[54] See for details Nasubi (2005). If a person is able to get employment for 28 days over a period of two months, then for an almost equal number of days the government extends a grant of yen 7500 per day.

[55] Either these facilities are sold off in the black market or the inability to maintain them reduces these facilities soon into a different kind of low quality settlements.

A large number of studies in the past highlighted the importance of social capital in accessing information on the job market and reducing uncertainties relating to incomes, consumption and housing (Mitra, 2004). Social capital, as Putnam (1993) defined, are "those features of social organizations such as trust, norms and networks that can improve the efficiency of society by facilitating coordinated actions." It is the networking that helps create linkages which in turn forge rules, conventions and norms governing the development process, (Chopra, 2002).

The responses of individuals to economic opportunities available are indicative of the various subtle mechanisms that they adopt in the process of maximizing their earnings and ensuring their own welfare. The networks, which are not truly exogenous, of course, constitute a significant component of the job search process. The socio-economic and cultural factors determine the nature of the networks to which an individual takes recourse; the nature of the networks also changes with the rise in the duration of migration, employment experience, and the acquisition of marketable skills. The entire process of upward mobility demonstrates the interplay of several socio-economic and cultural variables, which again in the context of urban transformation keeps changing to give rise to a spectrum of new processes as substitutes for the older ones. Though in the first instance the nature of the network decides the occupation that the individual will choose or will engage in, the nature of economic opportunities (occupations) also determines subsequently the nature of the network that an individual will decide to adopt in implementing his/her future job market strategies. Issues relating to occupational choices and networks are so complex that any empirical question in this regard remains far from being completely answered. Caste-kinship bonds, education, infrastructure, and indivisibilities all intermingle with each other and shape human behaviour with elements so diverse that a framework based on any single academic discipline finds it impossible to satisfactorily explain them.

In this section we emphasize the role of social networks while estimating occupational choice model for the slum workers. Secondly we try to examine if there exists any scope for them to shift to relatively better jobs and improve their incomes over time. Several studies on the urban labour market bring out the importance of the rural-based search for urban jobs through contacts. These contacts operate though relatives, friends, members' of one's caste group and co-villagers. As job expectations were guided by information received from urban-based contacts, migrants were in general successful in obtaining their desired employment in the first instance. And thus the job search subsequent to their joining the first urban job was not phenomenal (Banerjee, 1986; Banerjee, 1991 and Banerjee and Bucci, 1994). With this background, we analyze the role of networks in occupational choice models.

Based on a fairly detailed listing of activities/occupations, the workers from slum households have been broadly categorized into eight occupation classes (Table 44). The distribution of slum workers shows that a very large percentage of them are engaged in sales and trade (nearly 30 percent). Next to that is manufacturing, accounting for nearly 20 per cent of the workers. The male-female differences in terms of occupational distribution are quite evident particularly in certain activities like personal services, transport, construction, and tailoring. While personal services and tailoring are quite dominant activities for female workers (accounting for nearly 45 per cent) with a nominal

share for male workers, transport and construction constitute 10 per cent each of the total male workers with a negligible presence of female workers. The detailed description of activities indicates that most of them are engaged in the informal sector or employed informally in the formal sector[56]. The educational background of the slum population shows that the illiteracy rate was as high as 33 percent (relative to total population), and around 56 per cent of them were just literate or studied up to primary level or maximum till class 9.

The average incomes calculated across activities show wide variations though in terms of coefficient of variation the figures are not very high (Table 45). Particularly among the migrant workers from both below- and above-poverty-line households the coefficient of variation is relatively high. In tailoring for example, the monthly income was as high as Rs 5000/- whereas in personal services it was only 1208/- among the migrant workers from above-poverty-line households. Similarly among the migrant workers from below-poverty-line households the average monthly income was 3150/- and 1294/- per month in commercial service and sales respectively. It would be interesting, as mentioned above, to model the occupational choice of these workers from low income households in terms of social capital they possess.

Table 44: Occupational Distribution of Workers from Slums (%)

Activity	Male	Female	Person	(Female/Male)*100
Semi-professional	3.19	3.17	3.19	20.0
Sales and Trade	30.99	22.22	29.52	14.4
Personal Service	5.11	26.98	8.78	106.3
Manufacturing and Repairing	21.41	17.46	20.74	16.4
Commercial Services and Security	13.74	11.11	13.30	16.3
Transport	10.54	0.00	8.78	0.0
Tailoring etc.	4.47	17.46	6.65	78.6
Construction	10.54	1.59	9.04	3.0
Total Workers	100.00	100.00	100.00	20.1

Note: Work participation rate is 50.0, 12.6 and 33.42 per cent among males, females and total persons respectively. For detailed occupational listing see appendix 2.
Source: Delhi Slum Survey, 2004-05.

[56] Informal sector is characterized by small size, lack of union, low capital-labour ratio and perfect competition in the factor market. Informally employed in the formal sector means contract labour hired through other agencies, i.e., dispatched labour and casual daily wage labour working in the formal sector.

Table 45: Average income of workers per month (Rupees)

Activities	Migrant		Other	
	BPL	APL	BPL	APL
Semi-Professional (OCCP1)	-	-	2,075	3,736
Sales and Trade (OCCP2)	1,294	2,418	1,929	2,526
Personal Service (OCCP3)	1,350	1,208	1,250	3,239
Manufacturing and Reparing (OCCP4)	2,150	1,967	2,337	2,176
Commercial Services and Security (OCCP5)	3,150	2,375	2,428	2,791
Transport (OCCP6)	1,862	3,500	2,700	3,715
Tailoring and Knitting (OCCP7)	1,950	5,000	2,569	1,450
Construction (OCCP8)	1,510	2,617	2,314	2,864
Coeff of Variation	12.75	16.87	7.34	9.73

Note: BPL and APL stand for below and above poverty line households respectively. Migrants are those who moved into the city in last ten years or less. The category of "other" workers comprises non-migrants and those who have been residing in the city for more than 10 years. Migrant workers are those whose duration of stay is up to 10 years. For detailed occupational listing see appendix 2.
Source: See Table 44.

Some of the social capital networks are perceived in terms of connections with relatives (NTW1), co-villagers and neighbours (NTW2), members of the same caste group (NTW3), friends (NTW4), colleagues at or employer of the present or previous job (NTW5), religious organizations, NGOs, private contractors and employment exchange (NTW6)[57] and slum or community leader (NTW7), who helped access information on the job market. The effect of these networks is examined in the occupational choice model taking those who pursued job-search independently (or through self-initiative) as the comparison category.
Table 46 gives the distribution of individuals as per their migration status (and duration of migration) and the nature of network that they accessed in moving to the city. It may be noted that a large majority of the migrants who have been in the city for last 4 to 10 years accessed NTW2 and NTW3, while around 37 per cent among those who stayed in the city for more than 10 years used NTW1 and NTW2. Also, 13 percent of them utilized NTW4, though a very significant proportion (45 percent) depended on self-initiative. Among the non-migrants the two most important networks turn out to be NTW1 and NTW6.

Table 46: Migration status and network

	---- Duration of Migration ----				
NETWORK	1-3 years	4-10 years	>10 years	NON MIG.	Total

[57] Though employment exchange is not a part of social capital it has been included in NETW6 as observations are few in number.

Relatives (NTW1)	0	37.5	17.61	27.27	19.68
Co-villagers and Neighbours (NTW2)	0	31.25	18.87	0	18.62
Members of the Same Caste Group (NTW3)	0	0	0.63	0	0.53
Friends (NTW4)	0	12.5	12.58	9.09	12.23
Colleagues, Employers (NTW5)	0	0	2.52	9.09	2.66
NGOs, Private Contractors etc.(NTW6)	0	0	1.89	18.18	2.66
Slum or Community Leader (NTW7)	0	0	0.63	0	0.53
Self-Initiative	100	18.75	45.28	36.36	43.09
Total	100	100	100	100	100
% Distribution relative to row total	1.06	8.51	84.57	5.85	100

Source: Delhi Slum Survey (2004-05).

Table 47 presents the estimates of the occupational choice model taking non-workers as the comparison group. Further, semi-professionals have been clubbed with those in commercial services as the former included only few observations. Along with network dummies, education dummies (EDUi=1,2.3)[58] 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, migration dummies (MIGi=1,2) representing migrants with a duration of stay up to 10 years and more than 10 years respectively with non-migrants 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 accessibility to a particular job declines after a certain age. In the case of multinomial logit model the coefficients are not directly interpretable as one of the categories is taken to have zero coefficients in order to avoid the problem of indeterminacy. Hence, the marginal effects must be interpreted instead of the main model. But since the reference category comprises non-workers, there is not much loss of information in the sense that the equations for all the occupation categories have been

[58] 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.

estimated. More importantly, the main model and the marginal effects do not give conflicting results. Hence, the results of the main model are reported in Table 47.
Interestingly, many of the network dummies are significant, and the differences in networks operating across occupations are also evident. For example, in trade and sales NTW1, NTW2, NTW3 and NTW4, in personal services NTW1 and NTW2, in manufacturing and commercial services NTW1, NTW2, NTW4, NTW5 and NTW6, in transport NTW1, NTW2, and NTW4, in tailoring NTW1, NTW2, NTW3 and NTW4 and in construction NTW1, NTW4 and NTW6 are statistically significant. It is evident that the informal channels of information-flow are dominant over the formal channels. The NTW6 is seen to be important in the case of manufacturing, commercial services and construction mainly because the role of private contractors in recruiting labour and supplying to other organizations has become a distinct phenomenon after the economic reforms.

The fact that informal networks play a crucial role in accessing jobs and that they vary across occupations, suggests that even within the informal sector not all activities are available to all the job seekers. Depending upon the nature of contact they land up in different activities though the impact of other variables like experience, household size and gender is important as well. The caste factor does not turn out to be significant, possibly indicating its less relevance in the urban setup, particularly in the context of informal sector or informal employment, to which neither the reservation policy nor the discriminating factor applies. The education dummies are significant in some of the activities like sales and trade, manufacturing, commercial services, and tailoring whereas in activities like construction and personal services they are least important. On the whole, the relevance of networks tends to refute the premise of unlimited supplies of labour. Various types of informal channels of information-flow that operate in the society pertaining to the urban labour market determine the ultimate selection of occupation. In other words, depending upon the nature of contact that one is able to cultivate, the job accessibility is determined though in such a situation the activity pursued by the contact person is most likely to be the entry point of the new comer as well (Mitra, 2004).

Table 47: Results of the occupational choice model (Multinomial Logit : Maximum Likelihood Estimation)

Var.	Sales & Trade	Per-sonal Ser.	Manufac-turing	Commer-cial Ser.	Trans-Port	Tailor-ing	Const-ruction
NTW1	7.60 (6.34)*	9.16 (6.93)*	6.60 (5.46)*	7.59 (6.18)*	7.49 (5.72)*	7.83 (6.11)*	6.84 (5.37)*
NTW2	26.77 (41.54)*	27.37 (32.1)*	27.11 (39.67)*	27.03 (37.78)*	27.47 (35.59)*	26.15 (28.80)*	26.59 (0.001)
NTW3	28.68 (19.31)*	-15.93 (-0.01)	28.26 (0.01)	-14.80 (0.01)	-14.57 (-0.001)	29.74 (16.94)*	-15.44 (0.001)
NTW4	24.73 (18.92)*	25.21 (0.02)	26.56 (20.98)*	26.34 (21.12)*	27.14 (20.54)*	24.63 (15.17)*	24.65 (16.60)*
NTW5	22.77 (0.01)	-16.56 (-0.001)	25.01 (20.77)*	24.39 (18.26*	-17.82 (-0.001)	-17.39 (-0.001)	-17.85 (-0.001)

NTW6	-19.51 (0.02)	27.17 (18.44)*	25.10 (16.34)*	27.14 (21.07)*	-17.34 (-0.001)	25.89 (0.001)	28.22 (20.21)*
NTW7	-20.25 (0.01)	26.86 (13.97)*	-19.21 (-0.01)	24.60 (0.01)	-19.05 (-0.001)	-18.32 (-0.001)	-19.44 (-0.001)
EDU1	0.75 (1.54)	-0.52 (-0.81)	0.91 (1.66)**	0.65 (1.16)	0.77 (1.14)	2.36 (3.21)*	-0.15 (-0.24)
EDU2	0.75 (1.12)	-1.50 (-1.15)	0.48 (0.65)	0.99 (1.33)	0.24 (0.27)	2.32 (2.39)*	-0.90 (-0.98)
EDU3	-1.19 (-0.87)	0.90 (0.58)	-1.46 (-1.02)	1.07 (0.96)	-0.92 (-0.59)	-35.07 (-0.001)	-38.74 (-0.001)
PROP	-0.034 (-0.08)	-0.44 (-0.80)	-0.102 (-0.24)	-0.04 (-0.09)	0.35 (0.62)	0.08 (0.14)	0.23 (-0.42)
SCST	0.36 (0.81)	0.60 (0.99)	-0.54 (-1.11)	0.58 (1.19)	0.35 (0.60)	1.21 (1.97)	-1.63 (-2.33)*
OBC	0.45 (0.92)	-0.007 (-0.01)	0.10 (0.19)	-0.08 (-0.14)	-0.19 (-0.26)	0.85 (1.20)	-0.65 (-1.04)
HHSZ	-0.01 (-0.11)	-0.49 (-3.17)	0.11 (1.05)	-0.25 (-2.08)*	-0.20 (-1.35)	0.03 (0.21)	-0.35 (-2.40)*
MIG1	0.02 (0.03)	0.60 (0.66)	-0.60 (-0.86)	-0.21 (-0.29)	-0.25 (-0.27)	-0.56 (-0.72)	1.13 (1.27)
MIG2	0.20 (0.38)	0.54 (0.66)	-0.16 (-0.30)	0.003 (0.001)	-0.55 (-0.70)	-0.73 (-1.06)	0.90 (1.13)
GEND	-3.99 (-8.11)*	-1.99 (-3.05)*	-3.95 (-7.35)*	-3.76 (-6.46)*	-	-1.75 (-2.83)*	-6.51 (-5.47)*
POLC	-0.19 (-0.41)	-0.08 (-0.12)	1.04 (1.87)**	0.63 (1.11)	0.28 (0.44)	-0.85 (-1.43)	0.34 (0.57)
AGE	0.67 (7.59)*	0.54 (4.48)*	0.63 (6.67)*	0.60 (6.07)*	0.89 (6.21)*	0.63 (5.32)*	0.63 (5.43)*
AGSQ	-0.008 (-6.90)*	-0.006 (-3.96)*	-0.08 (-6.08)*	-0.007 (-5.38)*	-0.01 (-5.68)*	-0.007 (-4.59)*	-0.008 (-5.06)*
INTER	-13.24 (-7.74)*	-11.19 (-4.43)*	-13.60 (-7.48)*	-12.14 (-6.32)*	-18.07 (-6.42)*	-16.24 (-6.31)*	-10.59 (-4.63)*

Note: For detailed occupational listing see appendix 2. Non-workers comprise the reference category. The number of observations is 1123 and the Chi-square value at 140 degrees of freedom is 1420.89, which is highly significant at 1 per cent level. Semi-professionals are clubbed with commercial workers due to inadequacy of observations. GEND is excluded for transport since there is no woman worker in this category. * and ** represent significance at 5 and 10 per cent levels respectively.

Source: Same as Table 33.

In the income function, occupation dummies (OCCPi, i = 2…8, with OCCP1 as the comparison category)[59] do not turn out to be significant possibly suggesting the presence of low income jobs across occupations without much variability[60]. With age, income increases but beyond a threshold level it shows a sign of decline. Relative to the non-migrants the migrants tend to have lower levels of income, possibly because the natives are able to access the relatively high income jobs first. The gender differentials in terms of earnings are also evident indicating lower earnings for women workers. From policy point of view what is noteworthy is that with higher levels of education incomes tend to increase, though those who are just literates or studied up to class 9 earn as low as the illiterates.

Since the incidence of all-duration migration is extremely high in the sample it may be, therefore, interesting to identify some of the factors determining migration. However, due to the lack of information at the place of migration this kind of an exercise could not be carried out with precision. On the other hand, we have attempted a binomial logit model distinguishing between the migrants up to 10 years duration (represented by 1) and "others" including the non-migrants and the very long duration migrants who have been residing in the city for more than 10 years (represented by 0). This exercise is pursued at the individual level. The empirical results suggest that those in large households are less likely to be migrants (0 to 10 years duration), indicating that the propensity to migrate declines with a rise in household size possibly due to higher costs associated with migration. With a rise in the age the probability of being migrant increases though after a certain level it declines, implying that very old persons are less likely to be fresh migrants - they are more likely to be natives or very long duration migrants residing in the city for more than 10 years. In other words, the propensity to migrate is high in relatively younger age brackets, which declines with age. Among occupation categories personal services (manufacturing) tend to have more (less) migrant workers than natives while other activities seem to have almost equal incidence of both the type of workers. That migrants of a maximum of ten years duration are more likely to have property at the place of origin than the migrants of very long duration is also evident from the equation. To put it differently, households with property at the place of origin (rural areas) are less likely to move to the city permanently whereas for those without property it is possibly easier to take a decision to migrate on a long term basis. The former supplements the income from both the sources whereas the latter depends primarily on the income earned at the place of destination. On the other hand, the very long duration migrants are more likely to have political contacts than the relatively short duration migrants. Those with lower and higher

[59] For details on the description of OCCPi see Table 45 .

[60] Income = -169.14+ 144.61 AGE -1.58 AGSQ -1154.84 GEND+217.84 EDU1+ 577.79 EDU2+1617.34 EDU3-399.37MIG1-418.26MIG2-207.74POLC + 205.1OCCP2 + 53.0 OCCP3 +13.23OCCP4+313.24OCCP5 + 433.90 OCCP6 + 368.44 OCCP7 + 147.99 OCCP8;
(-0.22) (4.0)* (-3.42)* (-5.09) (1.10) (2.30)* (3.09)* (-1.59)*** (-1.85)** (-1.13) (-0.48) (0.11) (0.03) (0.69) (0.91) (0.73) (0.31)
OCCP1 is the comparison group. Adj R^2 = 0.17, N=373, *, ** and *** represent significance at 5, 10 and 20 per cent respectively.

levels of education seem to have the same propensity to migrate as that of the illiterates, which is higher than those who studied above class 9 but did not complete graduation.

The next issue of interest is whether the workers from slums are able to experience upward mobility over time. It has been noted in the past that a large majority of them are engaged in the informal sector and the possibility of graduating from the informal to the formal sector is bleak (Papola, 1981, Banerjee, 1986 and Mitra, 2003). However, within the informal sector whether occupational mobility has occurred is an interesting question. Hayami, Dixit and Mishra (2006) in their study of waste pickers and collectors in Delhi noted that the poverty of waste pickers is chronic as they have no possibility of upward mobility to the community of waste collectors and higher-level waste traders within which the community mechanism works effectively to reduce risks. However, both waste pickers and collectors, the authors noted, are adding more value than their own income to waste producers' income and to the saving of the city government's expenditure for disposing waste. These positive contributions to the society need to be recognized by the policy makers.

We have addressed this issue of mobility in terms of a binomial logit model, assigning 1 to those whose present jobs are different from the entry-level jobs and 0 otherwise. Most of the variables remain insignificant and also the overall goodness of the fit judged in terms of the chi-square statistic is poor. Some of the results which may be mentioned are as follows: smaller households seem to have experienced mobility to a larger extent compared to their larger counterparts. Scheduled castes show lower probability of mobility than others. Those who are literates and those who studied up to class 9 at the most, show a lower probability of mobility compared to the illiterates. However, EDU3 representing higher level of education shows a positive effect but it is statistically insignificant. Political contact on the other hand, raises the scope for mobility. The statistical insignificance of the model is understandable because of the absence of inter-occupational mobility which could be because of the presence of informal networks used in accessing job information. As Banerjee (1986) also noted, most of the migrants did not continue their job search after finding an employment in the urban areas. The job of the new entrant is expected to be the same as that of the contact person, and unless the new contact emerges, with the same contact there is no bright scope for inter-occupational mobility. Our earlier work confirmed that once a person enters a specific job, his/her pursuits are directed towards learning more about the same job and hence intra-occupational mobility was seen to be more prevalent than inter-occupational mobility (Mitra, 2003)[61]. This kind of mobility is less likely to be captured in terms of the occupation categories that we have formed.

The next exercise that we have pursued relates to income mobility. From Table 48 it may be noted that the percentage of workers who experienced upward income mobility is much higher than the percentage of workers who experienced downward mobility. Given this situation income mobility perceived in relation to the present income vis-a-vis the entry level income can be taken as a proxy for improvement in labour market status at least for a large majority of the respondents. The binomial logit model attempted below in

[61] For example, one who enters as a helper in tea stall in due course manages to run the same business independently.

terms of income mobility (1 for yes and 0 for no) brings out certain interesting features (Table 49). Household size and age (though not linearly) 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. This is in conformity with our earlier findings suggesting that self-initiative has been a crucial factor for upward mobility (Mitra, 2003). The contacts through caste-kinship bonds are important in the initial stages to access jobs, particularly at the entry point. But for further mobility – whether intra- or inter- occupation – self-initiative brings in more information and generates skill and other pre-requisites for improvement in earnings.

Table 48: Percentage of individuals cross-classified by size classes formed on the basis of current income and entry level income per month (in Rs/-)

Current\Entry	< 500	500-1000	1000-1500	1500-2500	2500-3500	3500-4500	4500 and above	Total
< 500	50	25	25	0	0	0	0	100
500-1000	60	20	20	0	0	0	0	100
1000-1500	46.67	26.67	16.67	10	0	0	0	100
1500-2500	33.33	38.10	15.48	7.14	3.57	1.19	1.19	100
2500-3500	34.78	17.39	10.87	21.74	8.70	2.17	4.35	100
3500-4500	33.33	14.29	23.81	28.57	0.00	0.00	0	100
4500 and above	60	13.33	6.67	13.33	6.67	0.00	0	100
Total	39.05	26.67	15.24	12.86	3.81	0.95	1.43	100

Note: Percentage figures are given relative to the row total.
Source: Same as Table 33.

Table 49: Binomial logit model presenting migration function, occupational mobility and income mobility (Maximum Likelihood Estimate)

	Occupation Mobility		Income Mobility			Migration Function	
Variables	Coefficient	Marginal Effect	Coefficient	Marginal Effect	Variables	Coefficient	Marginal Effect
NTW1	0.30 (0.68)	0.06	-0.72 (-1.40)***	-0.09	OCCP1	-0.67 (-0.58)	-0.07
NTW2	-0.01 (0.03)	-0.003	-0.85 (-1.41)***	-0.12	OCCP2	-0.21 (-0.61)	-0.03
NTW3					OCCP3	0.70 (1.53)	0.12
NTW4	-0.08 (-0.18)	-0.02	-0.06 (-0.08)	-0.006	OCCP4	-0.72 (-1.71)	-0.08
NTW5	-0.69 (-0.77)	-0.16			OCCP5	-0.13 (-0.30)	-0.02

NTW6	0.60 (0.48)	0.11	-1.02 (-0.74)	-0.16	OCCP6	-0.18 (-0.32)	-0.02
NTW7	-1.04 (-0.68)	-0.25	-1.68 (-0.99)	-0.31	OCCP7	0.08 (0.14)	0.01
					OCCP8	0.24 (0.51)	0.04
EDU1	-0.90 (-1.81)**	-0.18	0.26 (0.44)	0.03	EDU1	-0.03 (-0.18)	-0.005
EDU2	-0.58 (-0.99)	-0.13	-0.03 (-0.04)	-0.003	EDU2	-0.53 (-1.57)***	-0.06
EDU3	0.62 (0.51)	0.12	-0.91 (-0.71)	-0.14	EDU3	-0.08 (-0.12)	-0.01
PROP	0.09 (0.25)	0.02	-0.41 (-0.86)	-0.04	PROP	1.11 (5.49)*	0.13
SCST	-0.51 (-1.34)***	-0.11	-0.27 (-0.54)	-0.03	SCST	-0.12 (-0.64)	-0.02
OBC	-0.41 (-0.97)	-0.09	0.15 (0.26)	0.02	OBC	0.02 (0.09)	0.003
HHSZ	-0.13 (-1.56)***	-0.03	0.21 (1.81)**	0.02	HHSZ	-0.10 (-2.15)*	-0.01
GEND	-0.53 (-0.71)	-0.12	-2.06 (-2.45)*	-0.39	GEND	0.44 (2.33)*	0.06
POLC	0.73 (1.83)**	0.17	0.57 (1.12)	0.07	POLC	-0.24 (-1.31)***	-0.03
AGE	0.08 (0.83)	0.02	0.42 (3.70)*	0.05	AGE	0.11 (4.30)*	0.02
AGSQ	-0.001 (-0.83)	-0.0002	-0.005 (-3.82)*	-0.001	AGSQ	-0.002 (-4.70)*	-0.0003
INTER	0.39 (0.20)		-6.52 (-2.68)*		INTER	-2.31 (-5.06)*	
Chi-Sq	15.38		31.01*		Chi-Sq	107.91*	
N	208		203		N	1125	

Note: (1) *, ** and *** represent significance at 5, 10 and 20 per cent levels respectively. NETW3 in the occupation mobility function and NETW3 and NETW 5 in the income mobility function are dropped due to absence of observations. Non-workers comprise the comparison group with eight occupation dummies included in the migration function.
(2) For occupational mobility and income mobility those who had a change are represented by 1, and those who did not take 0. For migration function those who migrated in last 10 years take a value of 1 and those who are outside this category take a value of 0.
Source: Slum Survey (2004-05).

The headcount measure of poverty based on the concept of poverty line, turns out to be 57.08 and 61.85 per cent among migrants up to 10 years duration and "others" (defined as non-migrants plus migrants of more than 10 years duration) respectively. However, using the factor analysis of a large number of attributes[62] the household specific wellbeing index has been generated (for details see Mitra and Tsujita, 2006). Table 50 shows that almost 15 per cent of the sample households correspond to the lowest size class formed on the basis of composite wellbeing index. On the other hand, around 12 per cent are located in the top two size classes. The second size class from the bottom constitutes the largest percentage of households (39.3). It is also noted that migrant households of very long duration are better off compared to the rest, suggesting an increase in the possibility of improvement, as they continue to reside in cities (Mitra and Tsujita, 2006). All this tends to support the upward mobility hypothesis though in a very limited sense.

Table 50: Distribution of Households as per Wellbeing Index

Wellbeing Size Class	No. of Household	Percentage Share	Coefficient of Variation in Wellbeing Index
270	30	14.56	16.95
271-420	81	39.32	12.67
421-570	50	24.27	9.36
571-720	21	10.19	7.61
721-1020	12	5.83	8.61
>1,021	12	5.83	35.18
Total	206	100	13.05

Source: Same as Table 1.

On the whole, it is evident that a large majority of the workers are engaged in the informal sector and/or informal employment. Various informal channels or networks of information-flow designated as 'social capital' exist to provide access to the job market. In fact, the existence of these informal networks facilitates the rural based search for urban jobs. However, the limitation of the social capital is that the job of the new entrant and that of the contact person are same, implying overcrowding and prevalence of low wages in certain activities. Also, these networks operating through relatives and friends have a lower effect than self-initiatives on upward mobility, as they operate within limited ranges. On the other hand, without social capital, access to a source of livelihood

[62] These variables include household size, child-woman ratio, per capita total expenditure, i.e., food and all categories of non-food excluding health expenditure, proportion of persons in the household who reported illness in last one year preceding the date of survey, per capita health expenditure, percentage of household members who acquired at least primary level education, percentage of members in the age group 15 to 59, i.e., a proxy for adult potential earners, the percentage of working individuals, age of the household head/principal earner taken as a proxy for experience in the job market particularly, and per capita household income.

seems to be almost impossible at least at the initial stages of migration. The government measures must acknowledge the role of 'social capital' in economic development, which the low income households have evolved over the years. The role of 'social capital' has to be integrated with the existing support schemes, which are highly inadequate in the urban context. This would be not only beneficial for the low income households but also cost efficient from the government point of view. Also, these measures would be fruitful as they would not conflict with the informal support system or the 'social capital' that the low income households have developed as a mechanism to reduce risks and uncertainties in various spheres.

7. Conclusion

This study with a special emphasis on homeless population in Japan and slum dwellers in India is pursued in the backdrop of the labour market changes that both the economies are undergoing since the early nineties. In analyzing whether labour market changes in Japan have marginalized the workers at the bottom we have examined both the macro data on aspects of employment-unemployment and the survey data on homeless population. With the macro data showing a decline in the demand for workers in regular and long term employment accompanied by a rise in technology-intensive production, the hardships of the homeless population including the causes of becoming homeless are brought out by the survey data, portraying to some extent the adverse consequences of globalization.

After the bubble economy collapsed in the early nineties, the process of globalization led to deceleration in the manufacturing sector in Japan. Major changes are witnessed in the labour market in terms of shrinkage of jobs, including labour retrenchment, rising unemployment and rapid growth in part-time employment. Significant shifts are evident away from the lifetime employment with a seniority based payment system toward short term employment and performance-based remunerations and finally, the weakening of the labour unions. In an attempt to reduce cost, technology has replaced widely the human labour in manufacturing activities and even in some of the traditionally labour intensive sectors.

The employment elasticity with respect to growth in manufacturing was negligible during the eighties and became negative thereafter. Manufacturing productivity and unemployment rate both moved in the same direction and the share of manufacturing in total employment and unemployment in the opposite direction, supporting our hypothesis that increase in labour productivity has occurred at the expense of employment or in other words, mechanization has aggravated the problem of unemployment. Dispatched workers in manufacturing firms and business firms have replaced the regular salaried workers, while the labour contractors in an attempt to avoid paying labour the benefits of a regular worker, have started showing the dispatched workers registered with them, as self-employed workers or independent workers. The overall recession in the economy caused a decline in the activities in the construction sector as well, which witnessed a negative employment growth in the post-1992 period. Labour productivity in the construction sector is positively associated with this sector's employment share and negatively with the unemployment rate. In the absence of rise in manufacturing employment it is the

expansion of the construction sector and productivity rise in this sector which can generate employment opportunities and help reduce unemployment rate.

India, on the other hand, in an attempt to overcome the macro economic setbacks in terms of adverse balance of payment situation and fiscal imbalances introduced economic reforms around the same period (early nineties). The so called 'jobless growth' of the eighties prompted measures favouring labour market deregulation, which have been followed by the employers informally to a larger extent than the actual changes being carried out in labour laws. All this has resulted in sub-contracting and outsourcing of activities including the rise in employment of the contract workers, who are employed through labour intermediaries or labour contractors. Though the employment growth rate in the non-agricultural sector in India did not decline during the nineties, the possibility of absorbing those who were displaced from agriculture in a big way was not bright and hence, the nineties recorded a decline in the overall employment growth rate compared to the eighties.

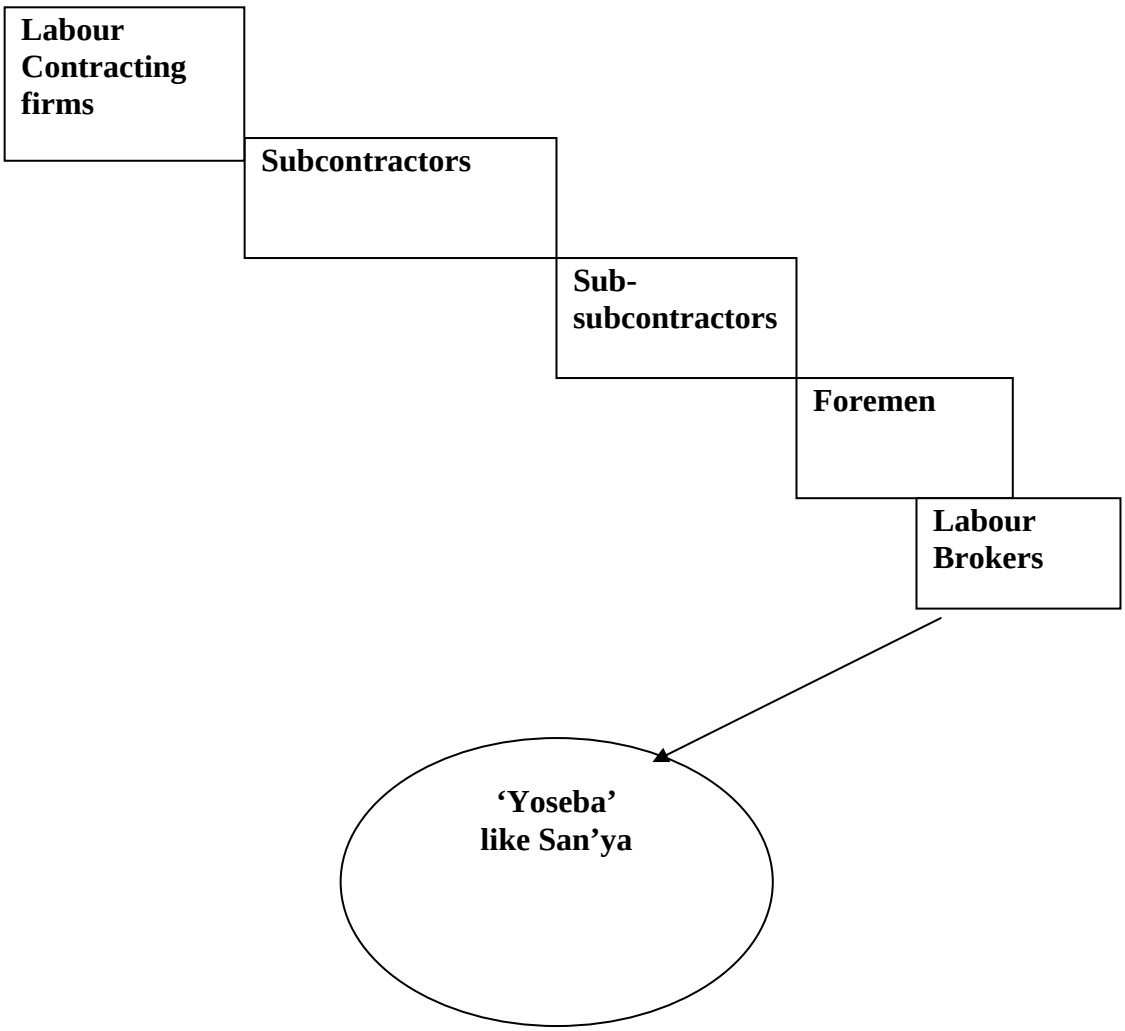
Downward mobility of the homeless population is reflected in their occupational structure prior to the movement to the street. The occupational structure was quite diverse and did not reveal that any large percentage of them was engaged in petty activities. On the other hand, some of them were employed in manufacturing activities and as skilled employees in technological jobs and as managers and supervisors and clerks in firms and as skilled and unskilled workers in construction. Further, a substantive percentage of the respondents agreed that they became homeless because of the closure of the units and/or business failure. The overlaps between job-retrenchment and job-loss and homelessness are very much evident. All this tends to provide support to the proposition that deceleration in manufacturing employment accompanied by a decline in construction activities and the overall recession in the nineties led to a decline in fulltime employment and day employment, which in turn raised marginal employment and homelessness. Also, it is true that some of them were once engaged in construction activity (possibly at a relatively younger age) and moved into streets as they grew older and lost the ability to pursue labour-intensive activity. However, this is not to deny the fact that family problem, alcoholism and gambling did not aggravate the situation though they account for a nominal percentage in the total. Besides, it is important to note that homelessness could be related to sociological reasons such as rapidly declining family support system, which is not analyzed here as it falls outside the scope of the present study.

A very large percentage of the sample has been pursuing economic activity to earn an income. While the construction sector has both high and low income jobs, other activities with low income jobs relate to collection and resale of old books and other recyclable goods. However, in some of these jobs homeless persons have been working for more than 20 days or so per month. In other words, the earnings in these activities are so low that even after working for a large number of days in a month, individuals are not able to sustain themselves. All this is indicative of the overlaps between homelessness and working individuals engaged in marginal activities without adequate earnings, which rose in the process of economic deceleration. This is however, not to deny the existence of those who could not work due to old age, illnesses, physical problems and weakness. However, over time homeless population seems to have included an increasing number of

younger people, mainly because of the changes in the economic structure, which brought about a widening income gap and a dire employment situation.
Given the population ageing phenomenon, the construction sector is quite averse to employ old job-seekers. Also, the change in the mode of employment and payment from daily basis to work (contract) basis has reduced the number of jobs in this sector. The number of intermediaries is too large and they extract a substantial component of the wage paid to the worker. Besides, as mentioned above, at the aggregate economy level, there has been substantial decline in construction activity, for which it is becoming increasingly difficult to absorb labour in this sector.

The government sponsored job welfare centers are not able to provide employment for a reasonable number of days. Some of the schemes relating to unemployment benefit are related to the specific number of days that an individual has to work, which in the face of labour market deceleration has turned out to be a difficult condition. On the whole, in terms of policy implication the most important task for the government is to initiate public work programmes and other special welfare schemes for the homeless population in a major way; else the long term success of some of the housing programmes too would remain unrealized. The homeless issue needs to be linked to the labour market issues to arrive at a practical solution to the problem that Japan is confronted with. At such a high level of per capita income the cost of state support, which is already exorbitantly high, will increase further in future, if not attended immediately.

In the Indian context also, the slum problem is seen to be a reflection of 'employment problem' rather than housing problem. The overlaps among informal sector employment, poverty and slum dwelling are evident. The main survival mechanisms that the low income households have evolved over time fall into the domain of 'social capital'. The entry into the urban labour market is sought on the basis of these informal networks in search of a livelihood. The importance of these networks is evident from the multinomial logit model for occupational choice estimated for the slum workers in Delhi. The possibility of experiencing upward mobility in terms of occupation and/or income over time exists to a limited extent, though. Job market experience and self-initiatives tend to enhance the scope for upward mobility. However, the standard of living in slums is extremely poor. Not only in terms of headcount measure of poverty but also the wellbeing index calculated on the basis of a number of indicators at the household level shows that a large percentage of the households are lying at the lower echelons of the socio-economic ladder. Government policy on the employment front for the urban poor has been scanty, and it requires a great deal of effort to identify the exact need and requirements of the low productivity workers engaged in the highly heterogeneous urban informal sector. For government policy to be effective in the context of slums, it is important that the informal networks through which the low income households operate are taken into consideration. Besides, the positive contributions that the society receives from their services, as noted by Hayami, Dikshit and Mishra (2006), need to be recognized. This would help tap the unrealized productive potential of the poor and enhance social harmony by evolving mechanisms that would result in pro-poor growth.



Appendix 1: Recruitment of Day Labourer in Japan

The process of labour recruitment in the construction sector in Japan, (details taken from Fowler, 1996).

"The success of these general contracting firms, ironically, has much to do with their ability to keep as many workers as possible off the payrolls, and they do so with the help of an intricate system of subcontracting which farms out work through a network of subcontractors, sub-subcontractors, foremen, labour brokers, and finally yoseba like San'ya. Unlike U.S. corporations, in which trade unions are firmly entrenched, general contractors in Japan can take advantage of an extremely fluid labour supply that yields workers promptly on an as-needed basis. This multi-tiered system provides the shock

absorber that buffers the larger firms against fluctuations in the business cycle, which is particularly violent in the construction industry. The men at the bottom are forced to take up the most slack, and the jobless rate on any given day in the yoseba, except in the very best of times, is typically 50 percent or higher". (Fowler, 1996, p.13)

Another way of recruitment, as noted in our qualitative survey and interviews: Sometimes labour recruiters come to yoseba (like San'ya) and take people to some far away sites of work, promising them to get employment. Usually they take more number of people than the number of vacancies actually available. As a result some remain unemployed. Some also fall sick and remain unemployed. In fact, in order to reduce the risk of labour shortage due to illness, recruiters take more number of persons than the number of vacancies. And at the end there are lot of disputes between the contractors and the labour. As a result job-seekers have developed distrust on contractors. In recent years some of the labour-recruiters come to the yoseba and develop trust between them and the labour first, and then take them to the job-site. These labour-recruiters take a cut from the labourers but the latter prefer this system because it assures employment.

Appendix 2: Occupational Classes for Delhi Slum Dwellers

1. OCCP1=Semi-Professional (Category 1)
2. OCCP2=Sales and Trade (Categories 2 and 3 have been merged)
3. OCCP3=Personal Services (Category 4)
4. OCCP4=Manufacturing and Repairing (Categories 5 and 11 have been merged).
5. OCCP5=Commercial and Security (Categories 6 and 10 have been merged).

6. OCCP6=Transport (Category 7)
7. OCCP7=Tailoring (Category 8)
8. OCCP8=Construction (Category 9)

Category 1: clerk, computer operator, engaged in field work, government service as typist, owner of a health clinic, supervisor in a company, supervisor in NGOs, teaching and giving tuition, technical assistant in Air India.
Category 2: selling books, magazines and news papers, egg seller, working in a garment-exporting agent, washing clothes in a garment exporting agent, stock checking, fish vender, flower vender, fruit packing in wholesale market (*mandi*), working in a general store, helper in a store, helper in an export agent, helper in a foot-wear shop, helper in a chemical store, helper in a shop, helper in an export company's shop, helper in a garment-export shop, helper in a fruit *mandi*, helper in a garment shop, helper in a general store, helper in a hardware shop, helper in Indian Airlines, helper in a shop selling jeep battery helper in a juice shop, helper in a medicine shop, helper in a company selling snacks (*namkeen*), helper in a shop selling sauce, helper in a shop selling TV's, helper in a shop selling wood work, ice cream vender, collecting garbage and waste (*kabariwala*), peanut seller, pan seller, seller of '*bidi*' and cigarettes on the road, salesman (medicine, cold-drinks, etc), selling vegetables, selling wood, dealing with sale and purchase of cars, sweet vender, working in the "go-down" of waste and garbage collection.
Category 3: trading in cloth, fisherman and trading in fish, trading in hosiery, helper in an iron/steel shop, helper in a sweet shop, helper in a workshop, working in a hotel, providing room service in hotels, working in shops, suitcase fitting, working in a tea shop, owning a tea-stall, working in a hotel, working in readymade garment shop, working in a canteen.
Category 4: barber, '*basti sewika*' (paid social worker), cleaning utensils and washing, cook, traditional mid-wife, domestic maid or servant, helper in a kitchen, gardener in a farm house, serving drinking water in '*mandi*', sweeper and working in small eating places (*dhaba)* or tea stalls as a cleaner or sweeper.
Category 5: bamboo work, box making, bricks making unit, bulb factory, candle making, manufacturing decorative items made of paper, factory worker, foreman, furniture work, glass work, helper in a plastic factory, helper in a factory, helper in a mineral water factory, helper in an iron factory, helper in a plastic factory, helper with a printing press, helper in a rubber factory, helper in a leather factory, labor in an iron factory, lamination work, operator, printing job, printing press, working in readymade cloth manufacturing units, screen printing, steel almira work, supervisor in a steel factory, tube light and bulb factory, utensil polish work, wood work, woolen work, working in a '*bidi* company', working in a foot-wear factory, working in an electric shop, manufacturing of food products and working in a radio and TV parts company.
Category 6: bill collection, cable TV operator, courier service, helper in an Embassy, loading goods, Municipal Corporation of Delhi (MCD) worker, packaging, peon in commercial units, class four employees/peon (at airport, private hospital and MCD worker), working in a video library and working in Delhi Electricity Supply Undertaking (DESU).

Category 7: auto-rickshaw and tempo driver, conductor, driver (car, bus, truck etc.), helper in the transport sector, helper in transporting goods, rickshaw puller and truck supervision.
Category 8: embroidery, stitching and tailoring (tailor master and worker both), coloring thread and cutting thread.
Category 9: construction workers (*beldar, dehari*) carpenter (daily wage carpenter), labor in construction work, mason (*mistri*), polishing, supervisor in building construction and whitewashing.
Category 10: security guard and watchman.
Category 11: car mechanic, cycle repairing, electrician, fitter, auto mechanic, learning electric work, machine repairing work, mechanic, mechanic of electronic items, motor fitter, and other repairing work.

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