

LABOUR MARKET FLEXIBILITY IN INDIA: AN INTER-INDUSTRY ANALYSIS

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Abstract: *The neo-liberal thinkers including the industrialists believe that Indian labour market is highly rigid which creates hindrances in the way of increasing output and employment in a country like India. It also affects the process of adjustment during shock because employers are bound by several laws and regulations related to retrenchment or lay off. They regard labour market flexibility as a panacea to cure unemployment, both in developed and developing world. This rigidity or various restrictive and prohibitory provisions related to lay off/retrenchments of Indian labour laws prohibits the employer to employ workers to its fullest potential. The purpose of the present paper is to examine whether Indian labour market is truly rigid or it is just a myth spread by the protagonists of the labour market reforms. The findings of the paper reveal that Indian labour is not that rigid as it is alleged to be because the contract intensity in different manufacturing industries has increased over time. In this paper the extent of contractualisation of workers in Indian manufacturing industries has been taken as an indicator or index of labour market flexibility/rigidity. To study the phenomena of contractualisation of workers, the Annual Survey of Industry data has been used for the period 1984-85 to 2005-06.*

Key Words: *Labour Market Rigidities/Flexibility, Contractualisation, Neo-liberal, Workforce, Average, Coefficient of Variation.*

I. INTRODUCTION

The new economic policy measures hesitatingly initiated during 1980s and then started on a firm and bold footing in July 1991 have greatly removed the barriers to trade and investment; giving rise to increased flow of commodities, capital and technology both domestically and globally. These changes have facilitated the integration of Indian production system with the global production system and have made it possible to break the production processes up into different stages and location in order to take advantages of cheap and easily available labour and other inputs across the globe. Large and modern firms, rather than being vertically integrated, prefer to adopt the strategy of outsourcing and sub-contracting. As the new policies have exposed the Indian enterprises to the environment of increased competitiveness both domestically and globally; they are resorting to various measures to minimise costs and increase profitability. The firms are resorting to various cost cutting devices including the expenditure incurred on

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permanent and regular workers. In order to achieve their objectives the employers have been constantly demanding changes in the labour laws stating it to be archaic and unfavourable to the growth of output and employment. The supporters of the changes in labour laws who believe in neo-classical labour theories, argue that labour market rigidities not only reduce output and employment potential of industries but also affect the process of adjustment during shock. These rigidities often render firms sick (Fallon and Lucas, 1991; Seth and Aggarwal, 2004). They regard labour market flexibility as a panacea to cure unemployment, both in developed and developing world.

On the other hand, it is argued by the antagonists of the labour market reforms that forced labour market flexibility would create labour market insecurities and exploitation of working class at the hands of employers and their agents by increasing degree of monopoly, shifting income distribution from wages to profit and a general decline in the profile of aggregate demand and employment (Patnaik, 2006; Sen and Dasgupta, 2006). This is particularly true in such institutional settings where enforcement of various labour legislations is quite weak and mismanaged. It is further pointed out that a significant degree of labour market flexibility has been introduced by the employers stealthily and through the backdoor (Mathur, 1992; Bardhan, 2002; Shyam Sundar, 2003; Nagaraj, 2004; Dutt, 2006; Guha, 2009). The employers have been grossly flouting various provisions of labour laws related to employment and wages in many guises and excuses. Further, employers are alleged to be using non-standard work practices by resorting to subcontracting and outsourcing their production work and employing increased number of casual and contract workers in order to escape various provisions of the labour laws (Ramaswamy, 1999; Bagchi and Das, 2005; Sen and Dasgupta, 2006). The use of non-standard work practices allows employers to retain a core workforce of skilled, permanent employees and to retain excess through casual or contract labour, to a peripheral workforce of general labour. These practices provide to the employers labour use flexibility because such workers can be removed any time without rendering any lay-off costs (Seth and Aggarwal, 2004; Sahu, 2003; Papola, 2005). The weak enforcement of various provisions of labour laws, specially, the contract labour laws have resulted in an increasing presence of temporary workers in regular works. Thus, a substantial degree of labour market flexibility is said to have already been achieved by the employers without changing any of the above mentioned Acts (Datta, 2003).

The purpose of the present paper is to examine the extent of labour market rigidity/flexibility (contractualisation) in Indian manufacturing industry before and after the period of economic reforms and also to observe whether this phenomenon of contractualisation has accentuated after the new policy regime came into being in July, 1991. Section – II attempts to review some earlier studies related to the topic. Section –III data sources and methodology used for the study. Section – IV presents the data analysis which discusses the trends in contractualisation of employment using ASI data and some important statistical techniques. Finally, section – V attempts to summarise and conclude the main findings.

II. LITERATURE REVIEW

Mukhopadhyay (1992) has conducted a brief study of structure of employment in terms of its three broad status categories viz. casual workers, self employed workers and regular wage/salaried workers for both male and female as well as rural and urban segment of the

workforce in India. This has been done for the period 1972-73 to 1987-88, covering the 27th, 32nd, 38th and 43rd round of NSS quinquennial survey. The study finds that during the period 1972-73 to 1987-88 incidence of casualisation increased among male as well as female workers, in both urban and rural areas of the country until the early eighties. Another important study on labour market flexibility was conducted by **Deshpande, Sharma, Karan and Sarkar (2004)** on the basis of a comprehensive survey of about 1300 manufacturing firms across nine industry groups both in public and private sectors scattered in ten states. The study found that employers have frequently been adjusting their labour force and this process accelerated during the post liberalisation period.

A study which was conducted in the year 2003 by **Das and Pandey (2004)** focused on economic and social issues relating to contract workers engaged in some organised manufacturing industries producing steel, cement and white goods in Eastern, Southern and North/Western India. The researchers found that all the contract workers were paid not only the minimum statutory wages but in certain instances some of the skilled contract workers were paid wages even higher than the state stipulated minimum. Further, wherever contract workers were unionised and had collective bargaining strength, they got a better deal.

Another important work has been done by **Bhandari and Heshmati (2006)** which focuses on the issue of wage inequality between permanent and contract workers. A substantial wage gap exists between permanent and contract workers where contract workers earn 45.5 per cent less than their counterpart. The lower wage paid to contract workers has been attributed largely to cost cutting strategy by the firms, rather than differences in productivity of the two categories of labour. By using the strategy of casualisation/contractualisation of workforce, the firms achieve both employment flexibility and cost adjustment goals.

Yet another study by **Sen and Dasgupta (2008)** dwells on the issues of employment, wages and other benefits to labour in the organised manufacturing industries in some states of India. The study is based on a primary survey undertaken in selected pockets of West Bengal, Delhi, Haryana, Gujarat and Maharashtra over a period of 14 months during 2004-06. The study found a sharp difference between the wage of permanent and casual workers.

Another empirical study based on data on Annual Survey of Industries (ASI) manufacturing sector has been attempted by **Neethi (2008)** in which she has examined the implications of labour market flexibility on quantity and quality of employment. The researcher has observed that the annual growth rate of total workers during the period 1995-96 to 2003-04 was -1.91 per cent, while that of direct workers was -3.54 per cent. The percentage increase in contractual workers over the same period was 7.01 per cent. In fact, contractual worker was the only component which has shown a consistent and positive growth.

Guha (2009) using ASI data at 3 digit level of NIC-1998 for the year 1994-95 to 2003-04 pertaining to 44 sectors has critically investigated the claims made in favour of introducing greater flexibility in the labour market. The scholar has examined the neo-liberal proposition that casualisation of labour leads to higher output and employment growth. The author observed that the neo-liberal proposition that an increase in labour flexibility would lead to greater output and employment growth does not seem to be valid as far as Indian manufacturing industry is concerned.

On the basis of the above survey of literature, it may be pointed out that though these studies have significantly contributed to the debate on labour market flexibility, yet these studies suffer from certain shortcomings. Some of the studies are based on NSS data and deal with structural changes in employment in terms of the broad categories of the workers viz. casual workers, self employed workers and regular salaried/wage workers. Although, some of the studies have captured the contractual segment of the workforce but the scope of these studies is limited in the sense that these studies are either based on primary survey of some selected industries and/or regions or they do not adequately cover the periods corresponding to pre and post-reform era. Further, none of the above studies has attempted to identify and quantify the possible determinants of such restructuring of manpower in terms of contractual vs. directly employed workers; rather some of these studies have attempted to study the implications of such restructuring on the level of output and employment. In view of the limitations of the above studies it is justified to study different facets of the restructuring of manpower in terms of contractual vs. directly employed workers during pre and post-reform period.

III. DATA SOURCES AND METHODOLOGY

To study the phenomena of contractualisation the Annual Survey of Industry data has been used for the period 1984-85 to 2005-06. The manufacturing industries at 2-digit level have been used after doing necessary concordance of the data. To capture the phenomenon of restructuring of manpower in terms of *contractual* versus *directly employed workers* in Indian organised manufacturing industries, the ratio of contractual workers to directly employed workers has been computed. This aspect is studied for all major industrial groups under two time frames viz. 1984-85 to 1990-91 (Pre-reform) and 1991-92 to 2005-06 (Post-reform). *Firstly*, a year wise (inter-temporal) analysis of different categories of workers in different manufacturing industries has been undertaken for two broad periods viz. pre- and post-reform periods. *Secondly*, an inter-temporal ratio analysis of workers in terms of contractual workers and directly employed workers (CW/DW) which is an indicator of contract intensity is done again for pre- and post-reform periods.

IV. DATA ANALYSIS

IV (i) Industry Level Analysis of Contractualisation for Aggregate Time Period

The present sub-section would deal with inter-industry changes in the employment of above categories of the workforce for two time periods viz. 1984-85 to 1990-91 and 1991-92 to 2005-06.

Table 1¹ shows industry wise average number of total workers, contractual workers and the directly employed workers for the period 1984-85 to 1990-91. The above table also depicts CV in the employment of those workers in each industry over time.

Average and CV of Direct Workers: Like total workers, the direct workers also had the highest employment in *textile and textile products* industries with reasonable degree of consistency showing CV of 5.79 per cent. This was followed by *food products, beverages, tobacco and tobacco products* with CV 8.35 per cent. *Wood and wood products* are again the

Table 1
Descriptive Statistics of Workers in Different Industries during Pre-reform Period

S. Industry No.	Total Workers		Contractual Workers		Direct Workers	
	Average	CV (%)	Average	CV (%)	Average	CV (%)
1 Food Products, Beverages, Tobacco and Tobacco Products	1179201	8.34	311484	10.42	867716	8.35
2 Textile and Textile Products	1197875	4.98	77441	12.90	1120435	5.79
3 Leather and Leather Products	76276	15.62	7025	32.06	69252	14.67
4 Wood and Wood Products	52368	4.25	6455	18.36	45913	4.95
5 Paper and Paper Products	211157	3.01	17418	14.63	193739	3.51
6 Chemical and Chemical Products	382691	6.48	32099	22.97	350592	6.89
7 Rubber and Plastic Products	149054	10.31	13774	66.91	135281	10.62
8 Non-Metallic Mineral Products	350293	1.47	93644	7.34	256650	3.48
9 Basic Metal, Alloys and Metal Products	632668	2.57	89706	16.77	542962	4.29
10 Machinery and Machine Tools	560071	3.67	25668	18.07	534402	3.22
11 Transport Equipment and Parts	379311	4.27	10722	14.59	368588	4.26
12 Other Misc Manufacturing n.e.c.	40891	6.48	1452	44.22	39440	5.84
All Manufacturing Industries	5211857	3.53	686887	9.16	4524970	3.35

Source: Author's calculation from ASI data for various years

least employment provider followed by *leather and leather products*. The employment fluctuation in *leather and leather products* was the highest (14.67 per cent) followed by *rubber and rubber products* (10.62 per cent).

Average and CV of Contract Workers: As far as employment of contract workers is concerned, the industry group belonging to *food products, beverages, tobacco and tobacco products* hire the highest number of such workers followed by *non-metallic mineral products* and *basic metal, alloys and metal products*. The CV of their employment is 10.42 per cent, 7.34 per cent and 16.77 per cent respectively. *Wood and wood products* and *leather and leather products* are two such industries which use very less number of contract workers in comparison to their counterparts in manufacturing sector. The employment fluctuation in these industries is also reasonably high at 18.36 per cent and 32.06 per cent respectively.

Table 2² shows pattern of employment of different categories of workers in different industries in the overall post-reform era. The table also shows CV of employment of different categories of workers in different industries.

Average and CV of Directly Employed Workers: For directly employed workers textile sector is again the most prominent sector (like pre-reform era) followed by *food products, beverages, tobacco and tobacco products*. These two groups of industries are also among the most consistent provider of employment in the post-reform era. The industry groups belonging to *Wood and wood products* and *leather and leather products* provide least number of direct employments along with other manufacturing n.e.c. The CV of employment over the given

Table 2
Descriptive Statistics of Workers in Different Industries during Post-reform Period

S. Industry No.	Total Workers		Contractual Workers		Direct Workers	
	Average	CV (%)	Average	CV (%)	Average	CV (%)
1 Food Products, Beverages, Tobacco and Tobacco Products	1466782	4.36	441065	22.07	1025717	7.85
2 Textile and Textile Products	1347037	8.24	115028	31.67	1232009	7.44
3 Leather and Leather Products	109713	13.35	14033	51.58	95680	10.04
4 Wood and Wood Products	45278	16.75	5379	35.19	39899	18.44
5 Paper and Paper Products	223302	7.64	35597	33.53	187706	9.63
6 Chemical and Chemical Products	515679	8.08	101050	38.43	414629	7.48
7 Rubber and Plastic Products	239741	14.68	40272	61.98	199470	10.40
8 Non-Metallic Mineral Products	382474	12.27	119091	34.63	263383	18.90
9 Basic Metal, Alloys and Metal Products	670459	8.15	154172	32.55	516287	12.64
10 Machinery and Machine Tools	609220	8.95	72420	47.47	536800	12.85
11 Transport Equipment and Parts	409719	16.75	50160	71.79	359559	23.65
12 Other Misc Manufacturing n.e.c.	89430	32.45	13370	60.16	76061	28.27
All Manufacturing Industries	6108834	6.20	1161635	29.90	4947199	7.06

Source: Author's calculation from ASI data for various years

period of time is 18.44 per cent, 10.04 per cent and 28.27 per cent respectively for the above three groups of industries.

Average and CV of Contract Workers: So far as the use of contract workers during the post-reform period is concerned, it may be observed from table 2 that like the pre-reform period the use of such workers is highest in the industry group of *food products, beverages, tobacco and tobacco products* followed by *basic metal, alloys and metal products* and the industries belonging to *non-metallic mineral products*. But these industries have depicted increased degree of fluctuations in the use of such workers. The CV for these industries is 22.07 per cent, 32.55 per cent, 34.63 per cent and 31.67 per cent respectively. Industries like *wood and wood products, leather and leather products* and *other manufacturing n.e.c.* have been reported not only to use very less number of contract workers but also have a very high CV. The CV of employment in these industries over given period of time is 35.19 per cent 51.58 per cent and 60.16 per cent respectively.

IV (ii) Inter-industry Ratio Analysis of Contractual to Directly Employed Workers

The ratio of contract workers to the directly employed workers (CW/DW) may be used as an indicator of labour market flexibility enjoyed by the employers in an individual industry or the sector as whole. In this sub section changes in the relative employment of contractual workers with respect to the directly employed workers in different industries; and the degree of variation therein has been discussed during the two time periods.

Table 3
Contract Intensity in Different Industries during Pre-reform Period³

S. No.	Industry	Ratio of Contractual to Directly Employed Workers (CW/DW)	
		Average	CV (%)
1	Food Products, Beverages, Tobacco and Tobacco Products	0.36	7.94
2	Textile and Textile Products	0.07	15.83
3	Leather and Leather Products	0.10	24.33
4	Wood and Wood Products	0.14	20.69
5	Paper and Paper Products	0.09	16.27
6	Chemical and Chemical Products	0.09	23.34
7	Rubber and Plastic Products	0.10	73.07
8	Non-Metallic Mineral Products	0.37	10.49
9	Basic Metal, Alloys and Metal Products	0.17	19.73
10	Machinery and Machine Tools	0.05	16.43
11	Transport Equipment and Parts	0.03	14.14
12	Other Misc Manufacturing n.e.c.	0.04	41.41
	All Manufacturing Industries	0.15	8.42

Source: Author's calculation from ASI data for various years

Industry-wise Average and CV of CW/DW: Table 3 depicts the incidence of contractualisation and variation in this ratio over time in each industry group. It is evident from the table that the relative employment of contract workers is highest in the industry group belonging to *non-metallic mineral products* followed by *food products, beverages, tobacco and tobacco products*. It is followed by *basic metal, alloys and metal products* and also *wood and wood products*. Here the ratio CW/DW for the above industries is 0.37, 0.36, 0.17 and 0.14 respectively. For the remaining industries the proportion varies between 0.03 and 0.1.

Those industries which employ relatively larger number of contract workers also tend to show less degree of fluctuations in the use of such workers.

Table 4
Contract Intensity in Different Industries during Post-reform Period

S. No.	Industry	Ratio Contractual to Directly Employed Workers (CW/DW)	
		Average	CV (%)
1	Food Products, Beverages, Tobacco and Tobacco Products	0.44	27.66
2	Textile and Textile Products	0.09	27.71
3	Leather and Leather Products	0.14	47.84
4	Wood and Wood Products	0.14	44.38
5	Paper and Paper Products	0.19	37.13
6	Chemical and Chemical Products	0.25	42.82
7	Rubber and Plastic Products	0.20	65.26
8	Non-Metallic Mineral Products	0.47	42.46
9	Basic Metal, Alloys and Metal Products	0.31	41.62
10	Machinery and Machine Tools	0.14	56.94
11	Transport Equipment and Parts	0.16	83.21
12	Other Misc Manufacturing n.e.c.	0.16	40.55
	All Manufacturing Industries	0.24	33.38

Industry-wise Average and CV of CW/DW: A comparison of tables 3 and 4 shows an overall increased relative employment of the contract workers during post-reform period as compared to pre-reform period. This phenomenon is observed across all industrial groups except industry belonging to wood and wood products.

It should be further noted that three industries viz. *non-metallic mineral products* followed by *food products, beverages, tobacco and tobacco products* and *basic metal, alloys and metal products* in descending order of highest proportionate use of the contract workers in pre-reform period have maintained their position in the post-reform period also. The CW/DW ratio for the above industries during the period is 0.47, 0.44 and 0.31 while their respective value of CV is 42.46 per cent, 41.62 per cent and 27.66 per cent.

During this period industries related to *textile, leather and machinery and machine tools* employ very less proportion of the contract workers but the ratio CW/DW has obviously increased during post-reform as compared to the pre-reform period. There is sharp increase in the proportion of contract workers during the post-reform as compared to the pre-reform period in industries like *paper and paper products, chemical and chemical products, rubber and plastic products, basic metal, alloys and metal products, non-metallic mineral products, machinery and machine tools* and *transport equipment and parts*.

In order to know whether there is any significant change in the relative employment of contract workers vis-à-vis the directly employed workers in different industries from pre to post-reform period, the **one-tail 't' test** has been conducted assuming equal population variances. The justification for using one tail test is that sometimes we have a strong a priori or theoretical expectation based on some previous empirical work that the alternative hypothesis is one-sided or unidirectional rather than two-sided Gujarati (1995: 124). Here also it is strongly believed that the relative employment of contractual workers (CW/DW) has significantly increased during the post-reform period. Accordingly, the null hypothesis has been formulated as:

Post-reform CW/DW \leq Pre-reform CW/DW and thus the alternative hypothesis is that Post-reform CW/DW $>$ Pre-reform CW/DW.

It can be observed from the p-values of 't' test produced in table 5 that in aggregate manufacturing as well as six of such industries, there is sufficient evidence available to reject the null hypothesis at 1%, in two of the industries the null hypothesis is rejected at 5% and in three of the industries it is rejected at 10% level of significance. These results testify that on an average the CW/DW has increased significantly from pre to post-reform period. In case of one industry i.e. *wood and wood products* the result is found to be insignificant.

It can be observed from table 5 that the post-reform CW/DW has shown an increasing trend as compared to CW/DW of the pre-reform period. It may be observed further that the intercept of the trend line of CW/DW of pre-reform period (103.9) is greater than the post-reform period (60) but the slope of the trend line of post-reform period (13.35) is greater than the pre-reform period (3.44). It shows that the rate of contract intensity (CW/DW) has increased during the post-reform period.

Table 5
Change in Contract Intensity (CW/DW) from Pre to Post-reform Period

S. No.	Industry	Average	Average	One tail
		CW/DW Pre-reform	CW/DW Post-reform	t-dist (p-value)
1	Food Products, Beverages, Tobacco and Tobacco Products	0.36	0.44	0.055*
2	Textile and Textile Products	0.07	0.09	0.016**
3	Leather and Leather Products	0.10	0.14	0.059*
4	Wood and Wood Products	0.14	0.14	0.472
5	Paper and Paper Products	0.09	0.19	0.001***
6	Chemical and Chemical Products	0.09	0.25	0.001***
7	Rubber and Plastic Products	0.10	0.20	0.042**
8	Non-Metallic Mineral Products	0.37	0.47	0.090*
9	Basic Metal, Alloys and Metal Products	0.17	0.31	0.005***
10	Machinery and Machine Tools	0.05	0.14	0.003***
11	Transport Equipment and Parts	0.03	0.16	0.009***
12	Other Misc Manufacturing n.e.c.	0.04	0.16	0.000***
	All Manufacturing Industries	0.15	0.24	0.005***

Source: Author's calculation from ASI data for various years

*** indicates the significance at 1% level of significance

** indicates the significance at 5% level of significance

* indicates the significance at 10% level of significance

H_0 : CW_i/DW_i post-reform \leq CW_i/DW_i pre-reform period

H_1 : CW_i/DW_i post-reform $>$ CW_i/DW_i pre-reform period.

V. SUMMARY AND CONCLUSION

The above discussion of the inter-industry ratio analysis of contractual to directly employed workers may summed up by stating that

- i) During pre-reform period relative employment of contract workers is highest in the industry group belonging to (a) *Non-metallic mineral products* followed by (b) *Food products, beverages, tobacco and tobacco products* (c) *Basic metal, alloys and metal products* and (d) *Wood and wood products*.
- ii) During post-reform period also the above industries have maintained their dominance as regards the relative employment of the contract workers.
- iii) During post-reform period all industries except wood and wood products have increased the relative employment of contractual workers.
- iv) There is wide variation in the contract labour use across different industries during this period but there appears to be a negative association between the CW/DW ratio in an industry and the CV of that industry during both the period of analyses. A high CW/DW ratio is associated with a low CV and vice-versa which is corroborated by the negative sign of the correlation coefficient (r) between CW/DW and CV.

- v) The results of t test and time trend chart corroborates the conclusion that the relative use of contract workers has increased significantly during the post-reform period.
- vi) During pre-reform period three industry groups had high and nine low contract intensity relative to the value of coefficient of contract intensity (CW/DW) in the aggregate manufacturing industry.
- vii) During post-reform period four industry groups had high and eight industry groups had low contract intensity as has been presented in the above table.

The above findings of the present study do not support the contention of the protagonists of the labour market reforms that Indian labour market is highly rigid and the rigidities of the Indian labour market is a big hindrance in the way of adjustments during shocks and output and employment is not reaching its optimum level due to this situation. It may fairly be argued on the basis of the above findings that employers and industrialist have introduced a fair degree of flexibility by stealth and by flouting several provisions of Indian laws. In such situation forced labour market flexibility would create labour market insecurities and exploitation of working class at the hands of employers and their agents by increasing degree of monopoly, shifting income distribution from wages to profit and a general decline in the profile of aggregate demand and employment. This is particularly true in such institutional settings where enforcement of various labour legislations is quite weak and mismanaged. Further, employers are alleged to be using non-standard work practices by resorting to subcontracting and outsourcing their production work and employing increased number of casual and contract workers in order to escape various provisions of the labour laws. The use of non-standard work practices allows employers to retain a core workforce of skilled, permanent employees and to retain excess through casual or contract labour, to a peripheral workforce of general labour. These practices provide to the employers labour use flexibility because such workers can be removed any time without rendering any lay-off costs. The weak enforcement of various provisions of labour laws, specially, the contract labour laws have resulted in an increasing presence of temporary workers in regular works. Thus, a substantial degree of labour market flexibility is said to have already been achieved by the employers without changing any of the above mentioned Acts.

Notes

- 1 In table 1 the average number of total workers in each industries group has been computed by summing together the number of workers in that industry from 1984-85 to 1990-91 and dividing this aggregate by the total number of years (7 in this case). Similar exercise has been done for getting average of the contractual and directly employed workers. Coefficient of variation (CV) for total workers, contractual workers and directly employed workers in each industry shows the variation of employment of that particular category of workers in that particular industry over different years. This exercise facilitates industry wise study of average employment of a particular category of worker and variation in it over time during the pre-reform era.
- 2 In table 2 the average number of total workers in each industries group has been computed by summing together the number of workers in that industry from 1991-92 to 2005-2006 and then dividing this aggregate by the total number of years (15 in this case). Coefficient of variation for each industry shows the variation in employment in that industry over different years of post-reform era. Similar exercise has been done for getting average number and CV of the contractual workers and directly

- employed workers. This exercise facilitates industry wise study of average of a particular category of workers and its CV over the given period of time.
- 3 For computing average of CW/DW in tables 6.8 and 6.9 and CW/TW in tables 6.10 and 6.11 same method has been used as for tables 6.4 and 6.5.

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