

The Journal of Industrial Statistics

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EDITORIAL

Manufacturing Industry

The pattern of human consumption has been changing over the decades and changing quite fast in recent times. A shift from consumption of (hard) goods to services (soft goods included) is clearly visible. We also notice a corresponding change in the pattern of production. In fact, each influences the other. It is, however, true that Manufacturing Industry has to continue supporting all production processes in a big way. Thus, the role of 'manufacturing' remains quite significant. Of course, with 'lean manufacturing' concepts and practices and with automation in its advanced form, size of manufacturing units in terms of the number of workers or employees will tend to be smaller in general. This fact, along with the traditional practice of treating units with at least 10 workers (20 in case electricity is not used for production purposes) as constituting the "organized manufacturing" sector, may imply an increasing segment of manufacturing industry units will be marked as 'unorganized'. Having said all this, 'organized manufacturing' sector continues to be the anchor of economic activities in the country and this anchor must get stronger and more accessible to provide a boost to the National Economy.

The Annual Survey of Industries (ASI) being conducted by the Industrial Statistics Wing of the Central Statistical Office is possibly the only source of credible information about the organised manufacturing industry in the country, with gradually increasing information content. And, plans are afoot to cover the Service Industry also in course of time. Once this expansion in coverage takes place, we will get a much more comprehensive picture about the production set-up in the country and its contribution to National Development.

One thing, however, has to be realized as circumscribing the contribution of ASI data to a portrayal of performance of Manufacturing Industry (for the present). This is the inseparable connections between 'organised' and 'unorganised' manufacturing. The latter plays a big role in supplying inputs to the former, while the former in some cases provides technical, financial and other support to the latter. In fact, most unorganized manufacturing units are engaged in producing accessories or spares or semi-processed materials or finished components to large manufacturing units covered by the organised sector. The performance of any registered factory generally depends on the performance of its vendors including 'unorganised' production establishments. At the same time, most small units outside the purview of ASI depend heavily on demand from and support extended by the organized sector.

In a somewhat different sense, the performance of any industry sector is affected by sectors which provide inputs to or receive outputs from this sector. A study of interdependence among different sectors which are linked in terms of customer-supplier relations should be undertaken in respect of important dimensions of performance. In fact, there have been situations where a customer industry had to wind up its operations in the absence of required inputs coming from the domestic supplier industry. The converse also has happened with dwindling demands from domestic customer industry sending out signals or threat of extinction to the domestic supplier industry. Exploring foreign markets for customers or suppliers may not be convenient or economical in all cases. It is also interesting to note that the nature and extent of such inter-dependencies have also been changing over time and deserve appropriate investigation.

Statistics relating to manufacturing industry and meant to portray a reliable picture of this very significant economic activity should be understood and interpreted in a holistic manner that provides a balanced view about the intentions of and the contributions by different players—both domestic and foreign—in the growth and development of manufacturing industry. Thus, inflow of foreign investment which is often associated with some strings that pull the recipient industry in a certain direction—not necessarily desired in our country—is welcome in some sense, inflow of foreign production technologies—some of which draw upon more energy or generate more pollution or lead to reduction in employment—in the name of Research & Development initiative may not be always a welcome move.

All this and many more related issues call for adequate attention of investigators who can—in their turn—demand more information about different aspects of functioning of Manufacturing Industry.

September 2016
Kolkata

S. P. Mukherjee
Editor-in-Chief

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Contract Workers in India's Organised Manufacturing Sector

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Abstract

The trend of contract workers in organized manufacturing sector in recent years has been increased significantly. In this scenario an attempt has been made to examine the contract workers participation rate and wage difference between direct workers and contract workers in the organized manufacturing sector in India. The unit level data of Annual Survey of Industries (ASI) of 2000-01, 2005-06, 2010-11 and 2012-13 have been used for the analysis. From the analysis it has been observed that the proportions of contract workers have increased significantly and reached at 34 percent in 2012-13. It has been observed that industrial activities, namely, tobacco products, where highest (73.29 percent) proportions of contract workers are engaged in the production process followed by other non-metallic mineral products (57.98 percent) and manufacture of coke, refined petroleum products (49.56 percent). Contract workers participation rate with respect to different States/UTs in India has also varies significantly. States, namely, Bihar (70.05 percent), Odisha (58.47 percent), Uttarakhand (51.98 percent), Andhra Pradesh (47.87 percent) and Haryana (47.06 percent) where, significantly higher proportions of contract workers have been engaged in the organized manufacturing sector. There is significant wage difference between contract workers and direct workers has also been observed and this is also true with respect to industrial activities and major States/UTs in India. From the analysis it has been observed that contract workers average wage per day is Rs. 156 during 2012-13, whereas, direct workers average wage per day is Rs. 404. From this analysis it is clearly observed that contract workers are getting 60 percent less wage than that of the direct workers.

1. Introduction

1.1 In the present era, outsourcing, contractualisation, contract workers etc. are the predominant issues. Most of the organizations are in favour of contractual employment rather direct employment for smooth functioning of the day today activities. These contractual workers/labours are available from the market on the prevailing market price through certain agencies/contractors. There is no direct relationship between the contract workers and organization where they are contributing their labour. The agencies have to supply the contract workers and received the commission charges under certain terms and conditions. The suppliers have to manage all the issue relating to these contract workers. In this scenario the entrepreneurs are little bit free from issues relating to the contract workers and prefer to maximize their profit. If the entrepreneurs are not satisfied with the work done by these contract workers can discontinue their service as and when they like. These factors are tending industries to hire more and more numbers of contract workers to have greater flexibility to adjust the number of workforce based on economic efficiency, better utilization of resources, optimization of profit and bringing cost effectiveness, despite the risk of lower worker loyalties and lousy pay.

1.2 What are the differences between direct workers and contract workers? Therefore, it is better to understand the difference between direct workers and contract workers. The

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major difference between direct and contract workers are discussed here. Direct workers are directly recruited by the employer whereas contract workers are taken from the contractors. Recruitment rules are applied for the direct workers whereas no such recruitment rules are applied among the contract workers. On the aspect of job security, direct workers are highly secured whereas contract workers are not secured at all. On the basis of working hours direct workers are benefitted through certain rules and regulation whereas contract workers do not have any regulation of working hours. Direct workers wages & salaries are based on certain rules and regulation whereas contract workers wages & salaries are not regulated properly. On the social security aspects, direct workers are in advantages which includes medical allowance and sick leave whereas contract workers are not get such protection. Among direct workers leave rules are applicable whereas among contract workers, leave rules are not applicable. Finally, direct workers are protected by labour laws including right to freedom of association and collective bargaining whereas no such rules for the protection of contract workers.

1.3 Some of the studies have observed that employers in a globalised economic environment favour flexible labour strategies where they ask for the freedom to hire workers for a fixed term even for perennial activities and discontinue their services when not needed (Sood, Nath and Ghosh, 2014). A study by Neethi (2008) has observed that contractualisation prevails in almost all industry groups and it is highly region-specific and industry-specific factors have their influence in determining contract work intensity.

1.4 All India Organisation of Employers' has studied on the issues relating to the industrial relations & contract labour and observed that during the recent years, employment of contract labour has become a contentious issue and a key reason for the increasing labour unrest in the form of strikes and protests. They have cited that the major reasons for the rise in industrial unrest could be increasing dependence of industries on contract labour for requirement of flexibility. This segment of worker due to anxiety of job security, lack of social security, exploitation in the hands of contractors, low wages, unequal treatment by Trade Unions and even abusive behavior of the permanent workers and supervisors develop rebellion feelings. This study has also cited some of the instances of industrial unrest during recent past and conclude that the surge in violence disturbing industrial relations has become a concerning situation for all. On September 22, 2008 the CEO of Graziano Transmission India, the Indian unit of an Italian auto component maker, was clubbed to death by a group of 200 workers. In another incidents, in March 2011, a Deputy General Manager (Operations) of Powmex Steel, a unit of Graphite India Ltd. was killed after his vehicle was set afire by irate workers, in November 2010 an Assistant General Manager of Allied Nippon, an auto parts maker, was stoned to death by angry workers, in September 2009 the Vice-President (HR) of Pricol was beaten to death by agitating workers, and many more. The most recent worst form of industrial unrest was witnessed in the Maruti Suzuki India Ltd., Manesar plant, where workers went into riotous, leaving its General Manager (HR) dead and 100 other officials laid up in hospital with serious injuries (<http://www.aioe.in/html/IndustrialRelations.pdf>).

1.5 In this context an attempt has been made to examine the contract workers participation and wage differentials in organized manufacturing sector in India with the following objectives.

2. Objectives of the Study

- (i) To examine the participation rate by contract workers in organized manufacturing sector in India.
- (ii) To study the differentials in participation of contractual workers with respect to major industrial activities and major states in India.
- (iii) To examine the wage differentials among contract workers with respect to direct workers.

3. Data and Methodology

3.1 Annual Survey of Industries (ASI) data are available for the organized manufacturing sector and those industries are registered under the Factories Act, 1948 are covered in the survey. ASI schedule is the basic tool to collect required data for the factories registered under Sections 2(m)(i) and 2(m)(ii) of the Factories Act, 1948. Block E of the ASI schedule collects the information with respect to employment and labour cost including contract workers in the organized manufacturing sector. In this block, information with respect to direct workers, contract workers, supervisor & managerial staff, unpaid family members, other employees, man-days worked, average number of persons worked, wages/salaries etc. are available. Therefore, in this paper an attempt has been made to examine the contract workers participation rate and wage differentials in the organized manufacturing sector. Before analyzing the contract workers participation, we should have better idea about who are the contract workers? Who are the direct workers? How are they different from each others?

3.2 **Contract Worker:** All persons who are not employed directly by the factory owner/employer but engaged through a third party i.e. agency/ contractor, are termed as contract workers. Such agency charges from the factory for this job. In ASI schedule, Block E: item 4 collects the information on workers employed through contractors. In more specific terms those workers employed purely on contract basis are reported in item 4 of Block E (Govt. of India, 2014).

3.3 **Direct Worker:** It includes those workers employed directly by the factory. In ASI schedule, Block E: items 1 & 2 collects the information with respect to male and female workers directly employed which include all persons employed directly on payment of wages or salaries and engaged in any manufacturing process or its ancillary activities like cleaning any part of the machinery or any premises used for manufacturing or storing materials or any kind of work incidental to or connected with the manufacturing process (Govt. of India, 2014).

3.4 In this paper, the contract workers participation rate is defined as the proportion of contract workers employed in the total workers and contributing in the organized manufacturing process.

Thus,

$$\text{Contract Workers Participation Rate} = \frac{\text{Total Contract Workers}}{\text{Total Workers}} \times 100$$

3.5 ASI unit level data from 2000-01 to 2012-13 have been used for the analysis of employment composition in the organized manufacturing sector. However for depth analysis of contract workers participation and their wage rate calculation, the unit level data of ASI of 2000-01, 2005-06, 2010-11 and 2012-13 have been used.

4. Results and Finding

4.1 Employment Scenario in Organised Manufacturing Sector

4.1.1 It is interesting to analyse the composition of employment scenario in the organized manufacturing sector. Figure 1 presents the employment scenario in the organized manufacturing sector during 2000-01 to 2012-13. From the figure it is clearly shown that in 2000-01 the total employment in the organized manufacturing sector was around 8 million. However, over the period it has increased drastically and reached 13 million in 2012-13. It is interesting to see the proportions of workers in the total employment. From the figure it is evident that workers constitute around 80 percent of the total employment in the organized manufacturing sector and the remaining 20 percent are other than workers, which includes, supervisor & managerial staff, unpaid family members, other employees those are not directly involved in the manufacturing process. Over the period both workers as well as total employees have increased drastically. From this analysis it is clearly understood that workers in the manufacturing sector are the back bone for the organization for manufacturing process.

4.2 Contract Workers in Organised Manufacturing Sector

4.2.1 Now it will be interesting to analyse the composition of the workers with respect to direct workers and contract workers. Figure 2 presents the proportions of direct and contract workers in the organized manufacturing sector during 2000-01 to 2012-13. From the figure it is evident that in 2000-01 direct workers constitute around 80 percent of the total workers and the remaining 20 percent are contract workers. However, during last decade it has been observed that proportions of direct workers declined significantly and reached at 66 percent in 2012-13. Moreover, the proportions of contract workers increased significantly and reached at 34 percent in 2012-13. In beginning of the decade there was a big gap between direct workers and contract workers participation in the organized manufacturing sector. However, over the period the gap has become narrowed.

4.3 Workers Size vs Contract Workers

4.3.1 An attempt has been made to examine the percentage of contract workers with respect to the workers size. Figure 3 presents the proportions of contract workers in total workers by workers size of factories during 2000-01, 2005-06, 2010-11 and 2012-13. From the figure, it is clearly evident that higher proportions of contract workers are engaged with respect to higher workers size. It is observed that those factories having 5000 and above workers, more than 50 percent workers are contract workers. Those factories, where workers size is less than 50 significantly lower percentage of contract workers are engaged in the organized manufacturing sector. There is an upward trend of contract workers participation with respect to workers size in organized manufacturing sector.

4.4 Contract Workers vs Direct Workers

4.4.1 An attempt has also been made to examine the number of factories in operation with respect to the contract workers size. Table 1 presents the contract workers size class with respect to factories in operation during 2000-01, 2005-06, 2010-11 and 2012-13. From the analysis of ASI unit level data, it has been observed that the contract workers are predominant among the 25 percent of the total factories in the manufacturing sector. It has also been revealed that around 75 percent of the factories are functioning without any contract workers. From the table it has been revealed that around 7 percent (11891 factories) of factories are in operation with contract workers 1-9 followed by 20-49 contractor workers (6 percent) and 10-19 contract workers (4 percent).

4.4.2 It is surprising to see the number of factories where numbers of contract workers are more than that of the direct workers. Table 2 presents the numbers of factories in operation with respect to the contract workers size among those factories where numbers of contract workers are more than that of the direct workers. It has been observed that in 2000-01 around 9 percent of factories are in operational where numbers of contract workers are more than that of the numbers of direct workers. Over the period in 2012-13, it is also interesting to see the huge number of factories (31908 factories during ASI 2012-13), where numbers of contract workers are more than that of the direct workers which constitute around 18 percent of the total factories in the organised manufacturing sector in India. By examining contract workers size class among these factories, it has been observed that higher proportions of factories (around 25 percent) are in the size class of 20-49 contract workers. It has also been observed that there are significant proportions (around 38 percent) of factories where contract workers are above fifty. It has also been observed that 12 percent (3744 factories) of factories are functioning where more than 200 contract workers are in the production process.

4.4.3 Table 3 presents the number of contract workers and number of direct workers per factory among those factories where numbers of contract workers are more than that of the number of direct workers with respect to contract workers size class. From the table it has been revealed that in contract workers size class 1-9, where around 6000 factories are in operational, on an average six contract workers are engaged in the production process and in the same industry on an average around one direct worker is engaged. Similarly, in size class 10-19, the average numbers of contract workers per factory are around 14 whereas the average numbers of direct workers are only 3. Similarly, in size class above 200, the average numbers of contract workers per factory are around 473 whereas the average numbers of direct workers per factory are around 117 in 2012-13. From this analysis it has been revealed that the numbers of contract workers are proportionately increasing with respect to the contract workers size class. Similarly, irrespective of contract workers size class the average number of contract workers per factory has significantly more than three times that of the number of direct workers.

4.5 Industry-wise Variations in Contract Workers Participation

4.5.1 It is interesting to see the industry wise variation in contract workers participation. Figure 4 presents the industry wise variation in contract workers participation. From Figure 4, it is evident that there is significant variation with respect to contract workers participation

in industrial activities. Industrial activities, namely, tobacco products, where the highest (73.29 percent of all workers) proportion of contract workers are engaged in the production process followed by other non-metallic mineral products (57.98 percent) and manufacture of coke, refined petroleum products (49.56 percent). Industrial activities, namely, manufacturing of wearing apparel (12.35 percent), textiles (14.07 percent), and printing & reproduction of recorded media (16.85 percent), where, significantly low percentage of contract workers are engaged.

4.6 Interstate Variation in Contract Workers Participation

4.6.1 Figure 5 presents the percentage of contract workers with respect to major States²/UTs in India. From the figure, it is evident that there is significant variations have been observed with respect to the participation of contract workers in major States/UTs in India. Top five States, namely, Bihar (70.05 percent), Odisha (58.47 percent), Uttarakhand (51.98 percent), Andhra Pradesh (47.87 percent) and Haryana (47.06 percent) where, significantly higher proportions of contract workers have been engaged in the organized manufacturing sector. However, bottom five States/UTs, namely, Delhi (10.83 percent), Kerala (14.17 percent), Tamil Nadu (19.54 percent), Assam (19.86 percent) and Karnataka (20.09 percent), where significantly low proportions of contract workers have been engaged in the organized manufacturing process. It has also been observed that the most industrialized States/UTs, namely, Maharashtra (40.31 percent), Gujarat (36.55 percent), Uttar Pradesh (35.93 percent) and Andhra Pradesh (47.87 percent) significantly higher proportions of contract workers have been engaged in the organized manufacturing sector which is higher than the national average. However, one industrialized States, namely, Tamil Nadu (19.54 percent) has significantly low proportions of contract workers have been engaged in the organized manufacturing sector.

5. Why Contract Workers?

5.1 From the above analysis it has been observed that percentage of contract workers are increasing over the study periods. But exact reason is not revealed from the above analysis. There are many reasons behind increasing contract employment in organized manufacturing sector. However, some of the possible reasons are given below:

- i. Contract workers are the substitution against the direct workers: It is argued that employers facing stringent labour laws do not want to employ more people in the production process. Employers in a globalised economic environment favour flexible labour strategies where they ask for the freedom to hire workers for a fixed term even for perennial activities and discontinue their services when not needed.
- ii. For short run/seasonal production: The enterprise may interest for short run production for some specific kind of job. Therefore, the enterprise may hire contract workers to meet the short term demand. It may happen that for seasonal items/production, enterprise may hire contract workers when required and fire them in completion of the project.

² Major States/UTs are Andhra Pradesh, Assam, Bihar, Chattisgarh, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand and West Bengal. Other States/UTs includes A & N. Island, Chandigarh, Dadra & Naveli, Daman & Diu, Goa, Manipur, Meghalaya, Nagaland, Puducherry, Sikkim and Tripura

iii. Special kind of skilled workers for technical work: It may happen that for fulfillment of special kind of technical work which may not require regularly. In this context, enterprises are very much interested to outsource the work through contract workers.

iv. Minimizing monitoring cost/regulatory cost: Employing contract workers through contractors minimizes the monitoring cost. It is the responsibility of the contractor to follow the terms and conditions for specific job. Therefore, contractor will be very much responsible for the completion of specific job as per the terms and condition otherwise forfeit the payment.

v. Avoid fringe benefits like annual leave with wages, gratuity, bonus, etc.: Contract workers are not in the pay-role of the factories. Therefore, leave rules and other welfare measures such as gratuity, bonus etc. are not applicable for the contract workers.

6. Wage Differentials

6.1 In the following section an attempt has been made to look into the wage differential in the registered organized manufacturing sector with respect to contract workers and direct workers in India.

We define,

$$\text{Wage Differential Ratio} = \frac{\text{Average contract workers wage}}{\text{Average direct workers wage}}$$

6.2 The average wage has been calculated on the basis of total annual wages³ to total man-days⁴ worked. So, the average contract workers wage has been calculated on the basis of total contract workers annual wage to total man-days worked for contract workers. Similarly, the average direct workers wage has been calculated on the basis of total annual wage to total man-days worked for direct workers.

6.3 Table – 4 presents the average wage per day, wage difference and wage differential ratio with respect to contract workers and direct workers. From the table it has been revealed that the average wage rate per day for direct workers is Rs. 164 in 2000-01. However, the wage rate has increased significantly during last decade and reached at Rs. 404 in 2012-13. Whereas the average wage rate per day for contract workers is Rs. 90 in 2000-01 and increased to Rs. 221 in 2010-11 and Rs. 156 in 2012-13. It has also been revealed that there

³ **Wages:** Wages are defined to include all remuneration capable of being expressed in monetary terms and also paid more or less regularly in each pay period to workers (defined above) as compensation for work done during the accounting year. It includes:

(i) Direct wages and salary (i.e. basic wages/salaries, payment of overtime, dearness, compensatory, house rent and other allowances);

(ii) Remuneration for period not worked (i.e. basic wages), salaries and allowances payable for leave period, paid holidays, lay-off payments and compensation for unemployment (if not paid from source other than employers);

(iii) Bonus and ex-gratia payment paid more or less regularly (i.e., incentive bonuses and good attendance bonuses, production bonuses etc.).

is significant wage difference with respect to direct workers and contract workers. Over the period, the wage rate difference between contract workers and direct workers has increased significantly. From wage differential ratio, it has been revealed that the contract workers wage rate is forty five (45%) percent less than that of direct workers wage in 2000-01. There is an indication of declining wage differential ratio between direct workers and contract workers over the last decades.

6.4 From the Figure 6 it is clearly understood the wage differentials between contract workers and direct workers during 2000-01 to 2012-13.

6.5 Wage differential Ratio in Industrial Activities

6.5.1 It will be interesting to examine the wage differential ratio with respect to industrial activities. Table A3 presents the average wage rate of direct workers, contract workers and wage differential ratio. From the table it has been revealed that there is significant wage difference has been observed in coke & refined petroleum products (0.29) followed by motor vehicles & trailers (0.42) and basic metals (0.46). But there are industrial activities, namely, recycling (0.93), cotton ginning (0.88), leather & related products (0.86) and products of wood (0.85) wage differential ratio is comparatively low. It has also been observed that there are industrial activities, namely; wearing apparel, leather & related products, cotton ginning contract workers are getting higher wages than direct workers. Activities of wearing apparel in 2000-01, leather and related products in 2000-01 and 2010-11, cotton ginning in 2005-06 and 2010-11 contract workers are getting higher wages than director workers. It has also been observed that in 2012-13 the wage rate of contract workers was almost four times (3.85) of direct workers in the industry of tobacco products. This is in sharp contrast with the earlier years of 2000-01, 2005-06 and 2010-11 in that activity. It may happen that for special kind of technical work enterprises are very much interested to outsource the work through contract workers by paying higher wages.

6.6 Wage differential Ratio in Major States/UTs

6.6.1 Table A4 presents the wage difference in organized manufacturing sector in India with respect to major States/UTs between contract and direct workers. From the table it has been revealed that contract workers are always getting lower wage than that of direct workers. There is significant variation in wage difference has been observed among major States/UTs between contract and direct workers. States, namely; Odisha, Bihar, Andhra Pradesh, Uttarakhand, and Maharashtra wage difference is higher than that of other States.

It excludes layoff payments and compensation for employment except where such payments are for this purpose, i.e., payments not made by the employer. It **excludes** employer's contribution to old age benefits and other social security charges, direct expenditure on maternity benefits and crèches and other group benefit in kind and travelling and other expenditure incurred for business purposes and reimbursed by the employer. The wages are expressed in terms of gross value, i.e., before deductions for fines, damages, taxes, provident fund, employee's state insurance contribution etc. Benefits in kind (perquisites) of individual nature are only included (Govt. of India, 2014).

⁴ **Man-days Worked:** These are obtained by summing up the number of man-days worked by persons working in each shift over all the shifts on all days, i.e. both manufacturing and non-manufacturing days. This figure excludes persons who are paid but remain on leave, strike, etc. Manufacturing days will mean and include number of days on which actual manufacturing process was carried out by the unit where as Non-manufacturing days will mean and include number of days on which only repair/maintenance and construction work were undertaken (Govt. of India, 2014).

It has also been revealed that the eastern region significantly wage difference is higher followed by central and western region.

7. Conclusion

7.1 From the above analysis it has been revealed that contract workers participation rate has significantly increased during the last decade. This is also true with respect to industrial activities and major States/UTs. Because of flexibility in labour laws, contract workers are engaged as the substitution against the direct workers. There is significant wage difference has been observed between contract and direct workers.

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Figure 1: Employment Composition in Organised Manufacturing Sector during 2000-01 to 2012-13 in India

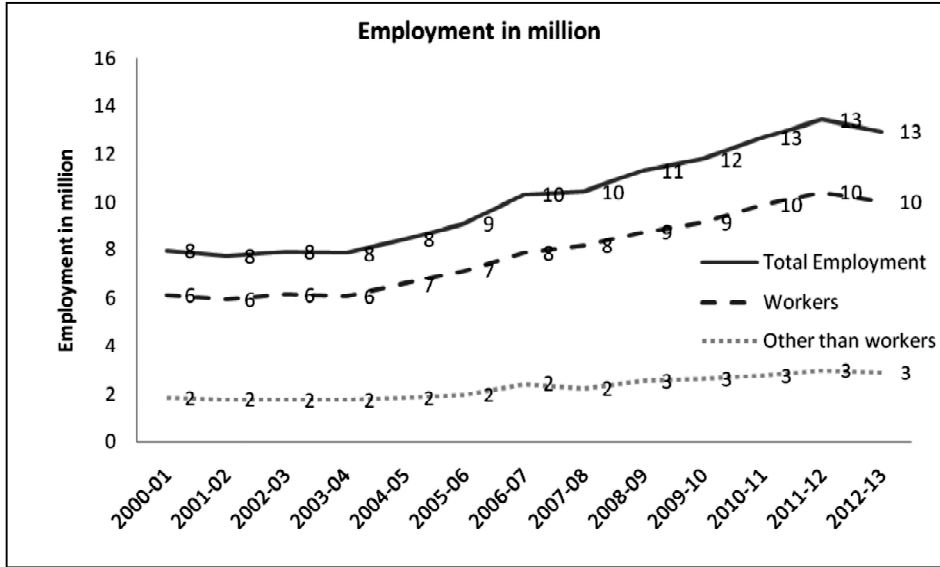
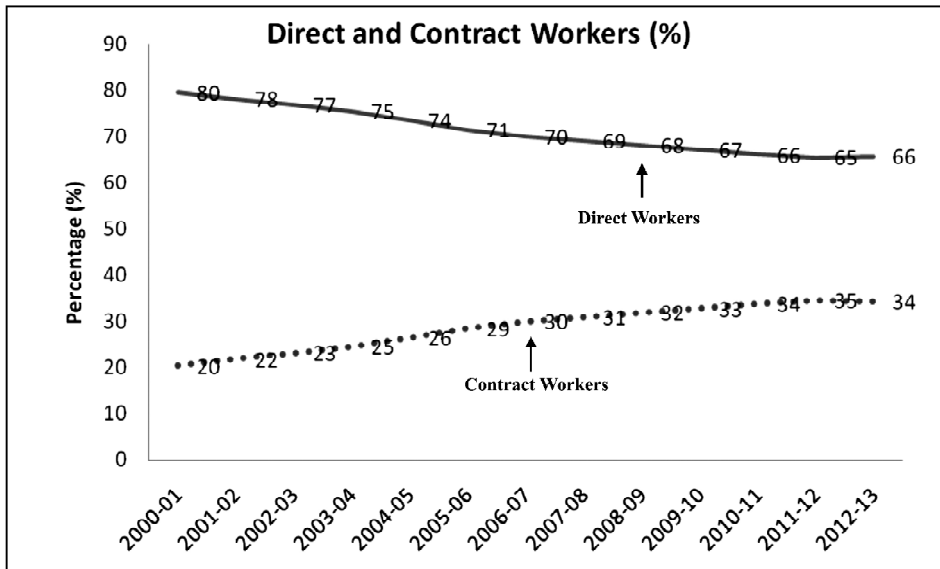


Figure 2: Percentage of Direct and Contract Workers in Organised Manufacturing Sector during 2000-01 to 2012-13 in India



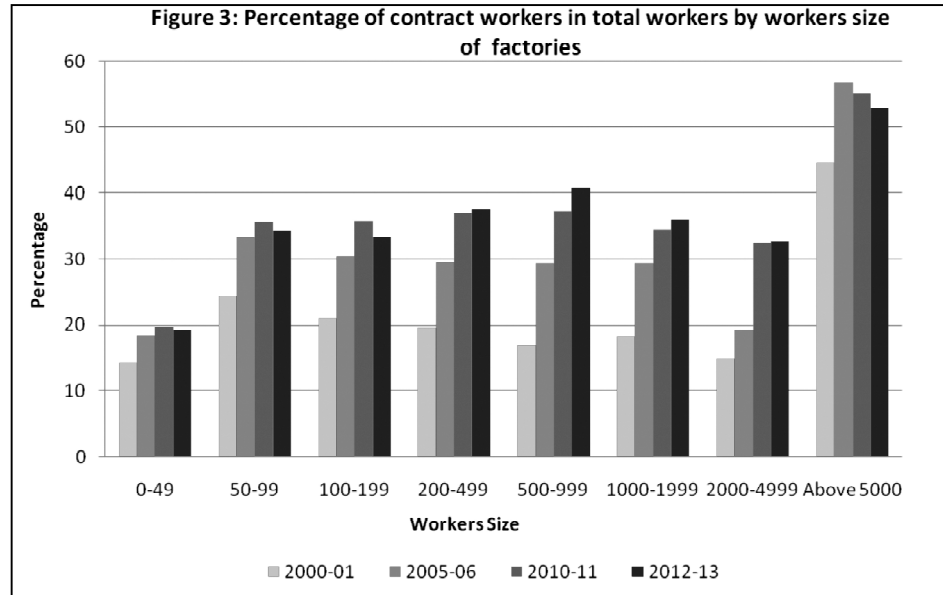


Figure 4: Contract Workers in Organised Manufacturing Sector with respect to Industrial Activities during 2000-01 and 2012-13.

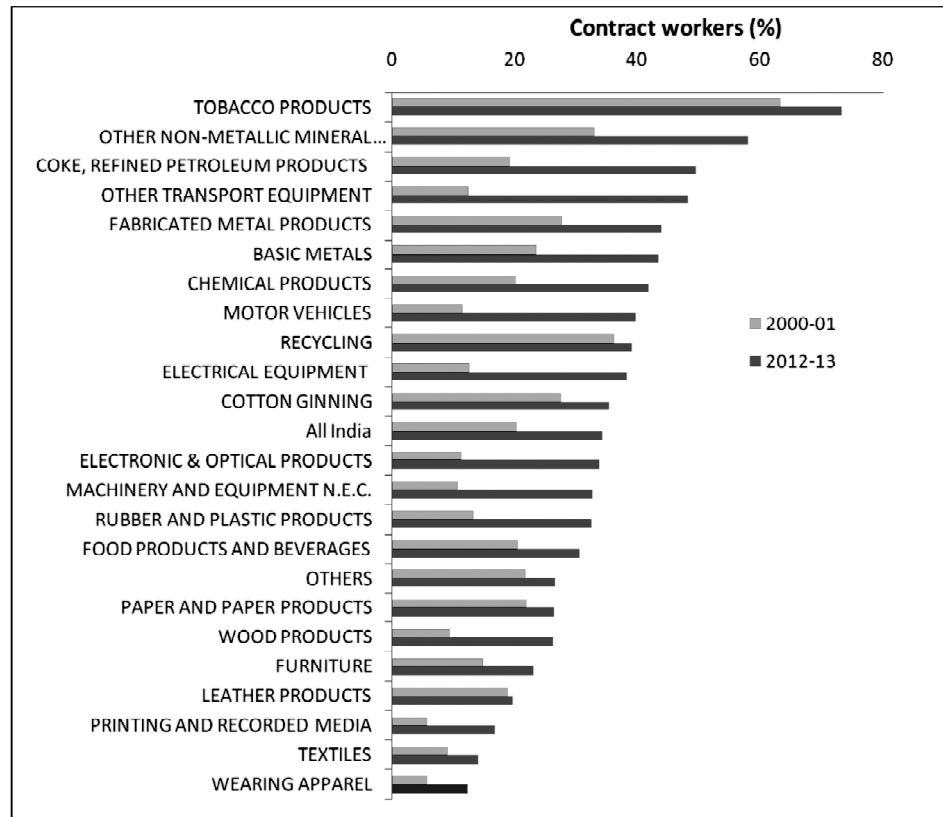


Figure 5: Contract Workers in Organised Manufacturing Sector with respect to Major States/UTs during 2000-01 and 2012-13.

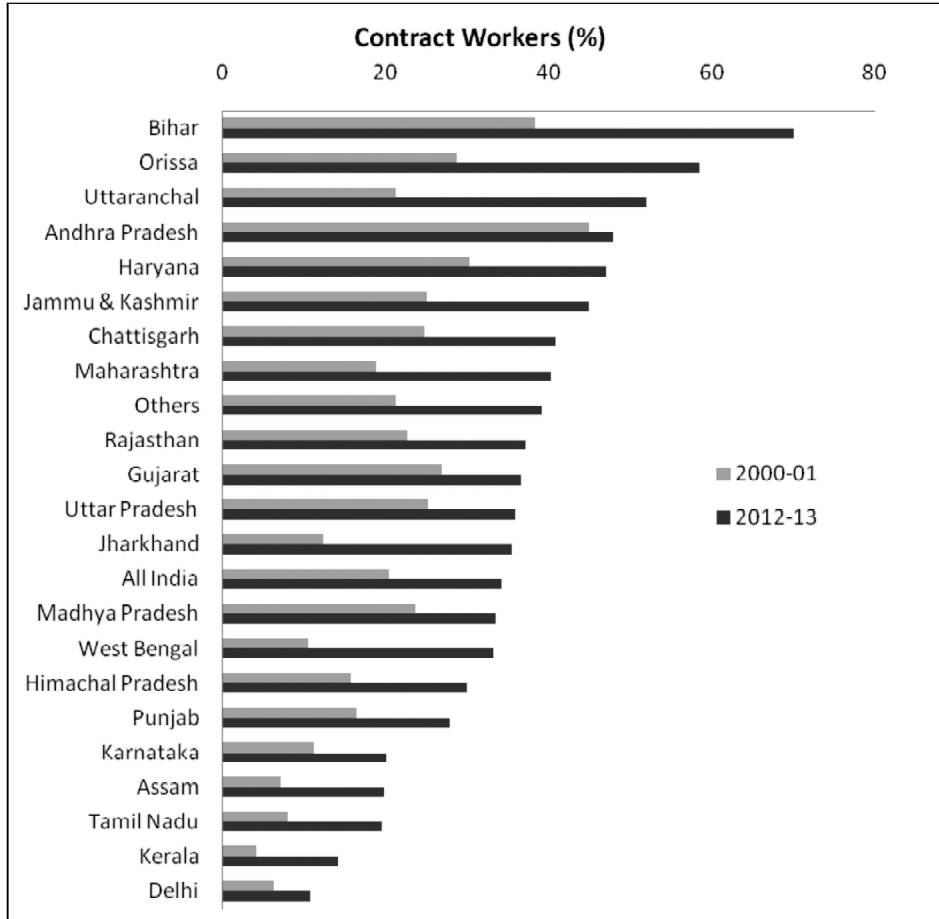


Figure-6: Wage Rate Differentials in Organised Manufacturing Sector

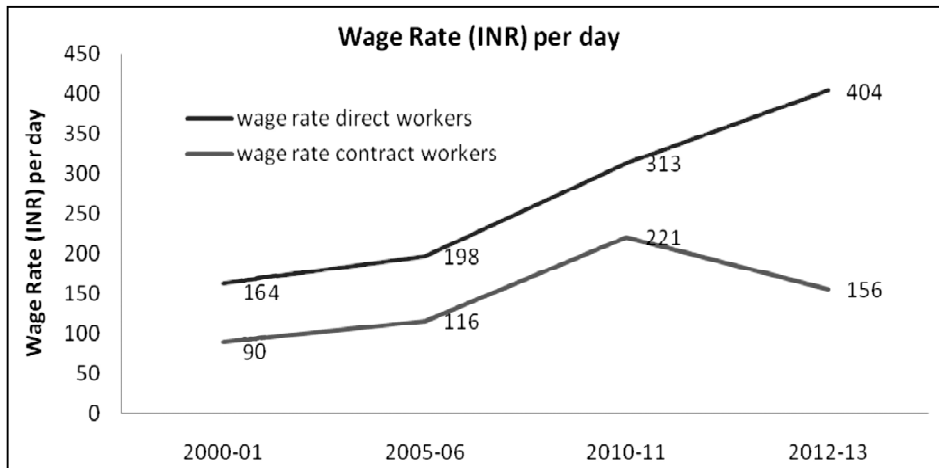


Table 1: Number of Factories in Operation with respect to Contract Workers Size during 2000-01, 2005-06, 2010-11 and 2012-13.

Contract Workers Size Class	Number of factories in operation				Percentage of factories in operation (%)			
	2000-01	2005-06	2010-11	2012-13	2000-01	2005-06	2010-11	2012-13
No contract workers	147531	138312	124449	133486	85.63	80.48	72.28	74.53
1-9	8387	9551	13022	11891	4.87	5.56	7.56	6.64
10-19	4765	6066	8506	7668	2.77	3.53	4.94	4.28
20-49	6138	8213	10928	10831	3.56	4.78	6.35	6.05
50-99	3064	5040	7157	6813	1.78	2.93	4.16	3.80
100-199	1303	2505	4123	3974	0.76	1.46	2.39	2.22
Above 200	1102	2178	3991	4439	0.64	1.27	2.32	2.48
All India	172290	171865	172176	179102	100.00	100.00	100.00	100.00

Table 2: Number of Factories in Operation with respect to Contract Workers Size during 2000-01, 2005-06, 2010-11 and 2012-13 among those Factories where Contract Workers are more than the Direct Workers.

Contract Workers Size Class	Number of factories in operation				Percentage of factories in operation			
	2000-01	2005-06	2010-11	2012-13	2000-01	2005-06	2010-11	2012-13
1-9	3278	4079	6865	5894	21.70	17.82	20.15	18.47
10-19	3155	4393	6026	5344	20.88	19.20	17.69	16.75
20-49	4644	6533	8661	8255	30.74	28.55	25.42	25.87
50-99	2322	4135	5932	5477	15.37	18.07	17.41	17.16
100-199	916	2002	3383	3194	6.06	8.75	9.93	10.01
Above 200	793	1743	3202	3744	5.25	7.62	9.40	11.73
Total	15108	22885	34069	31908	100.00	100.00	100.00	100.00
Percentage	8.77	13.32	19.79	17.82				
All India	172290	171865	172176	179102				

Table 3: Number of Contract Workers and Direct Workers per Factory in Operation with respect to Contract Workers Size during 2000-01, 2005-06, 2010-11 and 2012-13.

Contract Workers Size Class	Contract workers per factory				Direct workers per factory			
	2000-01	2005-06	2010-11	2012-13	2000-01	2005-06	2010-11	2012-13
1-9	6	6	6	5	1	2	1	1
10-19	14	14	14	14	4	4	4	3
20-49	31	32	32	32	8	8	7	7
50-99	67	68	70	70	14	14	16	15
100-199	131	130	131	131	33	30	33	33
Above 200	635	504	502	473	103	98	116	117

Table 4: Wage Rate and Wage Differential Ratio in Organised Manufacturing Sector in India

Years	Wage Rate (INR) per day		Wage differential ratio
	Direct workers	Contract workers	
2000-01	164	90	0.55
2005-06	198	116	0.59
2010-11	313	221	0.70
2012-13	404	156	0.39

Appendix Tables

Table A1: Percentage of Contract Workers in Organised Manufacturing Sector in India during 2000-01, 2005-06, 2010-11 and 2012-13 with respect to Industrial Activities.

Activity Description	Percentage of Contract Workers (%)			
	2000-01	2005-06	2010-11	2012-13
MANUFACTURE OF TOBACCO PRODUCTS	63.39	68.33	67.59	73.29
MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS	33.07	49.26	56.05	57.98
MANUFACTURE OF COKE, REFINED PETROLEUM PRODUCTS	19.25	43.82	49.83	49.56
MANUFACTURE OF OTHER TRANSPORT EQUIPMENT	12.56	31.93	45.23	48.20
MANUFACTURE OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENTS	27.70	39.73	46.54	43.89
MANUFACTURE OF BASIC METALS	23.56	33.73	41.40	43.44
MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS	20.12	31.22	38.24	41.79
MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS	11.55	30.79	41.65	39.79
RECYCLING	36.15	46.24	20.84	39.04
MANUFACTURE OF ELECTRICAL EQUIPMENT	12.64	28.04	36.02	38.24
COTTON GINNING, CLEANING AND BAILING	27.57	33.46	49.75	35.48
MANUFACTURE OF COMPUTER, ELECTRONIC & OPTICAL PRODUCTS	11.46	20.81	33.84	33.86
MANUFACTURE OF MACHINERY AND EQUIPMENT N.E.C.	10.77	22.70	33.66	32.73
MANUFACTURE OF RUBBER AND PLASTIC PRODUCTS	13.28	24.14	30.64	32.61
MANUFACTURE OF FOOD PRODUCTS AND BEVERAGES	20.53	26.15	30.58	30.63
MANUFACTURE OF PAPER AND PAPER PRODUCTS	21.94	27.30	28.59	26.38
MANUFACTURE OF WOOD AND OF PRODUCTS OF WOOD	9.39	24.37	26.48	26.33
MANUFACTURE OF FURNITURE	14.90	17.63	22.77	23.10
MANUFACTURE OF LEATHER AND RELATED PRODUCTS	18.85	19.91	16.01	19.66
PRINTING AND REPRODUCTION OF RECORDED MEDIA	5.71	10.50	19.02	16.85
MANUFACTURE OF TEXTILES	9.17	12.52	14.94	14.07
MANUFACTURE OF WEARING APPAREL	5.79	13.26	14.46	12.35
OTHER ACTIVITIES	21.74	24.03	28.09	26.67
All India	20.42	28.54	33.94	34.26

Table A2: Percentage of Contract Workers in Organised Manufacturing Sector in India during 2000-01, 2005-06, 2010-11 and 2012-13 with respect to Major States/UTs.

State Name	Percentage of Contract Workers (%)			
	2000-01	2005-06	2010-11	2012-13
Andhra Pradesh	44.88	53.43	48.07	47.87
Assam	7.22	16.33	19.75	19.86
Bihar	38.24	55.24	64.28	70.05
Chattisgarh	24.77	36.08	42.91	40.81
Delhi	6.31	9.21	12.57	10.83
Gujarat	26.91	34.12	36.06	36.55
Haryana	30.26	44.66	46.65	47.06
Himachal Pradesh	15.74	20.19	26.35	29.99
Jammu & Kashmir	25.01	31.09	48.34	44.98
Jharkhand	12.40	12.33	23.24	35.45
Karnataka	11.30	13.48	21.13	20.09
Kerala	4.16	9.22	16.32	14.17

Table A2: Percentage of Contract Workers in Organised Manufacturing Sector in India during 2000-01, 2005-06, 2010-11 and 2012-13 with respect to Major States/UTs. (Contd.)

State Name	Percentage of Contract Workers (%)			
	2000-01	2005-06	2010-11	2012-13
Madhya Pradesh	23.62	27.49	33.15	33.50
Maharashtra	18.84	31.07	40.51	40.31
Odisha	28.74	42.01	47.97	58.47
Punjab	16.46	27.90	28.52	27.89
Rajasthan	22.73	33.47	36.29	37.22
Tamil Nadu	8.03	14.57	19.95	19.54
Uttar Pradesh	25.21	30.38	36.44	35.93
Uttarkhand	21.22	43.02	50.18	51.98
West Bengal	10.50	18.86	30.41	33.27
Others	21.20	31.16	41.45	39.16
All India	20.42	28.54	33.94	34.26

Table A3: Wage Differenc in Organised Manufacturing Sector in India during 2000-01, 2005-06, 2010-11 and 2012-13 with respect to Industrial Activities between Contract and Direct Workers.

Activity Descriptions	Direct workers average wage per day (Rs.)				Contract workers average wage per day (Rs.)				Wage Differential Ratio				Average Ratio
	2000-01	2005-06	2010-11	2012-13	2000-01	2005-06	2010-11	2012-13	2000-01	2005-06	2010-11	2012-13	
COKE, REFINED PETROLEUM	521	586	1181	1407	132	197	406	331	0.25	0.34	0.34	0.23	0.29
MOTOR VEHICLES, TRAILERS	277	349	503	634	116	149	261	200	0.42	0.43	0.52	0.32	0.42
BASIC METALS	274	334	477	637	143	137	236	254	0.52	0.41	0.49	0.40	0.46
ELECTRICAL EQUIPMENT MACHINERY AND EQUIPMENT	246	274	401	555	103	134	240	188	0.42	0.49	0.60	0.34	0.46
CHEMICAL PRODUCTS	228	281	422	572	111	143	267	148	0.49	0.51	0.63	0.26	0.47
COMPUTER & ELECTRONIC PRODUCTS	200	251	390	504	95	129	235	229	0.47	0.51	0.60	0.45	0.51
PRINTING & REPRODUCTION	194	250	430	555	119	145	254	154	0.61	0.58	0.59	0.28	0.51
PAPER PRODUCTS	180	214	326	462	98	144	236	65	0.55	0.68	0.72	0.14	0.52
OTHER TRANSPORT EQUIPMENT	160	200	290	358	96	124	211	116	0.60	0.62	0.73	0.32	0.57
RUBBER & PLASTIC PRODUCTS	202	284	458	525	129	173	276	281	0.64	0.61	0.60	0.54	0.60
FABRICATED METAL PRODUCTS	138	180	278	358	95	115	209	151	0.69	0.64	0.75	0.42	0.63
FURNITURE; MANUFACTURING	173	202	341	434	94	135	282	236	0.54	0.67	0.83	0.54	0.65
FOOD PRODUCTS AND BEVERAGES	161	219	312	392	131	161	298	90	0.82	0.73	0.96	0.23	0.68
TEXTILES	118	139	228	298	85	109	200	127	0.73	0.78	0.88	0.43	0.70
OTHER NON-METALLIC MINERAL PRODUCTS	129	145	222	278	109	127	203	52	0.84	0.87	0.92	0.19	0.70
WEARING APPAREL	141	172	270	355	99	110	186	347	0.70	0.64	0.69	0.98	0.75
	90	129	215	275	106	130	210	42	1.17	1.01	0.98	0.15	0.83

Table A3: Wage Differenc in Organised Manufacturing Sector in India during 2000-01, 2005-06, 2010-11 and 2012-13 with respect to Industrial Activities between Contract and Direct Workers. Contd.

Activity Descriptions	Direct workers average wage per day (Rs.)				Contract workers average wage per day (Rs.)				Wage Differential Ratio				Average Ratio
	2000-01	2005-06	2010-11	2012-13	2000-01	2005-06	2010-11	2012-13	2000-01	2005-06	2010-11	2012-13	
PRODUCTS OF WOOD	87	117	194	276	82	123	200	107	0.94	1.05	1.03	0.39	0.85
LEATHER & RELATED PRODUCTS	101	129	201	258	109	121	231	73	1.08	0.94	1.15	0.28	0.86
COTTON GINNING	73	90	163	248	70	94	169	120	0.96	1.05	1.03	0.49	0.88
RECYCLING	112	166	195	321	95	98	322	198	0.85	0.59	1.65	0.62	0.93
TOBACCO PRODUCTS	72	93	197	211	46	47	68	811	0.64	0.51	0.35	3.85	1.34
OTHERS	129	172	320	431	85	123	268	112	0.66	0.71	0.84	0.26	0.62
All India	164	198	313	404	90	116	221	156	0.55	0.59	0.70	0.39	0.56

Table A4: Wage Difference in Organised Manufacturing Sector in India during 2000-01, 2005-06, 2010-11 and 2012-13 with respect to Major States/UTs between Contract and Direct Workers.

State/UTs Name	Direct workers average wage per day (Rs.)				Contract workers average wage per day (Rs.)				Wage Differential Ratio				Average Ratio
	2000-01	2005-06	2010-11	2012-13	2000-01	2005-06	2010-11	2012-13	2000-01	2005-06	2010-11	2012-13	
Jammu & Kashmir	135	142	224	297	89	105	183	240	0.66	0.74	0.82	0.81	0.76
Himachal Pradesh	120	154	260	330	77	110	234	280	0.64	0.71	0.90	0.85	0.78
Punjab	125	166	245	314	94	112	174	258	0.75	0.67	0.71	0.82	0.74
Uttarkhand	317	303	329	411	92	115	214	271	0.29	0.38	0.65	0.66	0.50
Haryana	186	223	353	435	97	135	252	294	0.52	0.60	0.71	0.67	0.63
Delhi	138	171	295	434	124	140	271	342	0.90	0.82	0.92	0.79	0.86
Rajasthan	137	169	273	388	111	120	211	299	0.81	0.71	0.77	0.77	0.77
Uttar Pradesh	151	183	294	355	94	118	191	242	0.62	0.64	0.65	0.68	0.65
North	164	189	284	371	97	119	216	278	0.59	0.63	0.76	0.75	0.68
Bihar	174	202	477	306	58	83	138	206	0.33	0.41	0.29	0.67	0.43
Assam	93	124	250	264	79	89	144	244	0.85	0.72	0.57	0.92	0.77
West Bengal	189	221	310	381	121	123	210	289	0.64	0.56	0.68	0.76	0.66
Jharkhand	296	360	517	801	293	118	229	245	0.99	0.33	0.44	0.31	0.52
Odisha	214	305	435	579	74	89	231	293	0.34	0.29	0.53	0.51	0.42
East	193	242	398	466	125	100	190	255	0.65	0.41	0.48	0.55	0.52
Chattisgarh	228	229	370	678	138	138	196	280	0.61	0.60	0.53	0.41	0.54
Madhya Pradesh	167	209	322	413	122	103	208	268	0.73	0.49	0.65	0.65	0.63
Central	197	219	346	545	130	120	202	274	0.66	0.55	0.58	0.50	0.57
Gujarat	158	205	304	376	102	136	232	299	0.64	0.66	0.76	0.79	0.72
Maharashtra	229	288	446	547	108	144	264	350	0.47	0.50	0.59	0.64	0.55
West	193	246	375	462	105	140	248	325	0.54	0.57	0.66	0.70	0.62
Andhra Pradesh	137	182	310	423	49	77	165	193	0.35	0.42	0.53	0.46	0.44
Karnataka	153	185	333	454	103	140	258	390	0.67	0.75	0.78	0.86	0.77
Kerala	143	164	250	330	128	127	190	265	0.90	0.77	0.76	0.80	0.81
Tamil Nadu	119	143	248	327	88	131	268	316	0.74	0.91	1.08	0.97	0.92
South	138	169	285	383	92	119	220	291	0.67	0.70	0.77	0.76	0.73
Other States	127	169	305	361	89	122	210	292	0.70	0.72	0.69	0.81	0.73
All India	164	198	313	404	90	116	221	286	0.55	0.59	0.70	0.71	0.64