OCCASIONAL PAPER



Employment Growth in West Bengal : An Assessment

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OP-52 / 2

Employment Growth in West Bengal: An Assessment¹

Subhanil Chowdhury^{*} Soumyajit Chakraborty^{**}

Abstract

West Bengal witnessed the highest growth in non-agricultural employment between 2004-05 and 2009-10 amongst all the states in India. The state also witnessed the highest growth in manufacturing employment between 2004-05 and 2011-12. The paper analyses this increase in employment in the manufacturing sector in particular. Employment in West Bengal can generally be characterized by massive informalization of labour, stagnant real wages and minimal social security. While there has been an increase in employment in the manufacturing sector, its share in West Bengal GSDP has been declining. Even within the top sectors of manufacturing in terms of employment, informalization and the lack of social security are widespread. Moreover, it has been shown that significant proportion of workers in the manufacturing sector earn wages less than the national floor level minimum wage. This proportion has not decreased significantly

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between 2004-05 and 2011-12. It is therefore concluded in the paper that while there has been a significant increase in employment in manufacturing sector in the state, it needs to be interpreted with caution given the preponderance of the informal sector and very low wages in the manufacturing sector.

Section I: Introduction

It is now a well-established fact that there has been an increase in the growth rate of Gross Domestic Product (GDP) in India since the beginning of the last decade, which reduced with the onset of the global financial crisis in 2008. This unprecedented increase in the growth rate of GDP in India however could not generate adequate employment. This is shown in the following figure.

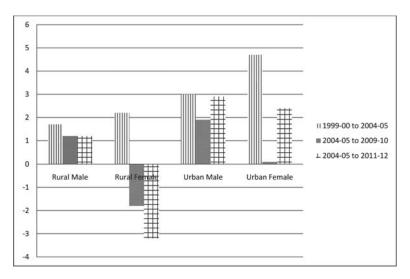
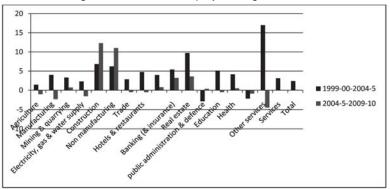


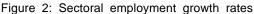
Figure 1: Employment growth rate in India (for age>15 years)

Source: Chandrasekhar and Ghosh (2013)

From Figure 1 it is clearly seen that the growth rate of employment for all categories of workers have declined significantly between 1999-00 to 2004-05 and 2004-05 to 2011-12. However, the overall growth rate of GDP during this period did not witness any such drastic fall, except in the year 2008-09. Therefore, clearly there is a divergence between the employment growth rate and GDP growth rate for India. As Himanshu (2011) points out changes in the employment pattern and workforce structure has been sluggish and do not conform to the growth rate of output in the economy.

Even if we consider the period between 1999-00 and 2009-10, a grim picture emerges. Figure 2 shows the sectoral growth rate of employment between the abovementioned periods. The growth rate of employment has not only gone down for the country as a whole but every sector of the economy, except construction, has witnessed a fall in the growth rate of employment. For certain industries like manufacturing, trade, hotels and restaurants, public administration, etc the growth rate of employment in the period 2004-05 to 2009-10 has actually been negative, denoting a net decline in the absolute number of workers employment in these industries.





Source: Table A2, Planning Commission (2011)

NB: Non-manufacturing indicates the secondary sector without manufacturing

However this story is not the same for all states in India. In the period 2004-05 to 2009-10, in which the growth rate of

employment in India fell drastically across all industries except construction, there were significant variations across the states in this regard.

States	Agricul- ture	Manu- facturing	Non manu- facturing	Services	Total
Andhra Pradesh	-0.1	-0.2	2.7	-1.2	1.1
Assam	-0.82	0.06	0.33	0.57	0.11
Bihar	-4.09	-0.02	2.02	1.21	-0.86
Chhattisgarh	-2.25	0.06	1.2	0.19	-0.82
Delhi	-0.04	0.34	-0.03	0.48	0.74
Gujarat	-2.81	0.17	0.5	1.5	-0.65
Haryana	-0.71	0.36	0.42	0.37	0.43
Himachal	0.06	-0.07	0.21	-0.14	0.05
Jammu and Kashmir	0.12	-0.05	0.12	0.31	0.49
Jharkhand	-2.74	-0.25	0.97	0.36	-1.66
Karnataka	-2.32	0.08	0.87	0.76	-0.61
Kerala	-0.93	-0.1	0.64	0.66	0.26
Madhya Pradesh	0.39	-0.71	2.5	-1.93	0.34
Maharashtra	3.97	-1.81	0.17	-1.86	0.97
Orissa	-1.11	-0.13	0.84	-0.06	-0.47
Punjab	1.1	-0.38	-0.02	-1.06	-0.27
Rajasthan	-4.46	-0.6	4.96	0.83	0.74
Tamil Nadu	-2	-0.98	2.02	-0.41	-1.34
Uttar Pradesh	-3.56	-0.85	4.19	0.93	0.71
Uttarakhand	-0.32	0.08	0.17	0.07	0
West Bengal	-0.71	0.98	1.11	1.12	2.48
Total across states	-23.33	-4.02	25.89	2.7	1.74

Table 1: Sector-wise change in absolute employment across states between 2004-05 and 2009-10 (in millions)

Source: Table A10, Planning Commission (2011)

NB: Non-manufacturing indicates the secondary sector without manufacturing

It is seen from Table 1 that there has been across the states increase in non-manufacturing industrial employment with the exception of Punjab and Delhi. On the other hand, many leading industrial states like Maharashtra and Tamil Nadu have witnessed an absolute decline in manufacturing employment. It is also remarkable that West Bengal, which is not known as the most industrially advanced state in the country, has witnessed the maximum increase in absolute employment in the non-agricultural sector as well as in the manufacturing sector. Table 2 shows the number of manufacturing jobs created in India for major states during the period 2004-05 to 2011-12. It is evident that even during the period 2004-05 to 2011-12, West Bengal witnessed the largest increase in jobs in the manufacturing sector. It is remarkable that West Bengal which is not regarded as a prominent industrialized state in the country has witnessed the largest increase in the number of jobs in the manufacturing sector.

State	Number of jobs
West Bengal	23.72
Gujarat	11.45
Tamil Nadu	5.71
Karnataka	4.84
Punjab	4.44
Maharashtra	4.11
Uttar Pradesh	2.54
Bihar	0.35
Goa	0.33
Chattisgarh	-0.05
Haryana	-0.09
Rajasthan	-0.24
Andhra Pradesh	-1.62
Kerala	-1.36
Jharkhand	-1.5
Madhya Pradesh	-2.63
Odisha	-2.89

 Table 2: Jobs created in the manufacturing sector across

 states between 2004-05 and 2011-12 (in Lakhs)

Source: Authors' calculation from NSS Unit level data of Employment-Unemployment survey, various years

The purpose of this paper is to critically evaluate the employment situation in West Bengal with particular reference to the employment in the manufacturing sector. In spite of being an industrially backward state, how is West Bengal witnessing such high employment in the manufacturing sector? The remaining paper will try and answer this question. The paper is arranged in the following manner: Section II deals with the economic structure of West Bengal. Section III analyses the overall employment trend in West Bengal in comparison to India. Section IV looks into the non-agricultural and manufacturing employment in West Bengal in details. Section V concludes.

Section II: Economic structure of West Bengal

Agriculture

The agricultural sector in West Bengal witnessed a steady decline till the 1970s.² With the Left Front government assuming office in 1977 a series of measures like land reforms and panchayati raj were adopted which resulted in a marked increase in the growth rate of agricultural output, particularly food-grains. For example, the compound growth rate of food-grains between 1970and 1980 was only 0.96%. But in the next decade the growth rate of food-grain production rose to 5.81%.³ If one looks at the growth rate of agriculture in West Bengal with a more rigorous statistical approach, one finds a major structural break in 1983 while taking into consideration the period from 1960 to 2004-05.4 However, it also needs to be noted that the growth rate of agriculture started to come down from the 1990s. Bhattacharyaa and Bhattacharyaa (2007) find a significant negative trend break in the year 1992-93. Also, there exists the problem of increasing cost of cultivation for West Bengal which has made the growth rate of agriculture come down during the 1990s.⁵ In short, therefore, there has been a slowdown in the growth rate of agriculture in West Bengal since the 1990s.

Industry and Manufacturing

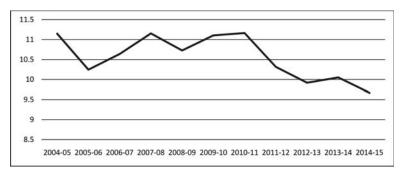
The industrial sector has been a problematic area for West Bengal for a very long time. At the time of independence West Bengal had one of the highest shares of total industrial output in India. But gradually with time there has been a decline in that share. West Bengal's share in total number of factories in India was only 4.5% in 2004-05, which further declined to below 4% in 2011-12. West Bengal's share in India's net value added in the industrial sector is currently below 3%.⁶

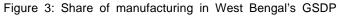
- 4. West Bengal Development Report, 2010
- 5. Khasnabis (2008)
- 6. Calculated from Annual Survey of Industries data

^{2.} Rawal and Swaminathan (1998)

^{3.} Rawal and Swaminathan (1998)

While there has been a relative decline of West Bengal's industries in comparison with India, it is also the case that the share of the manufacturing sector in West Bengal's GSDP has declined over the years. This is shown in Figure 3. The share of manufacturing in West Bengal's GSDP has witnessed a secular decline over the years with its current value hovering around 9.5%. On the other hand, it is providing employment to an increasing number of workers. This makes the nature of employment in the manufacturing sector problematic since a decreasing share of the state's pie is being produced by larger number of workers.





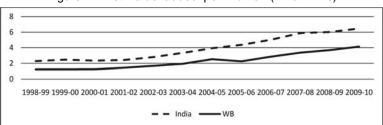
Source: National Accounts Statistics

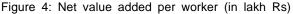
Secondly, the unregistered factories have a higher share in Net State Domestic Product (NSDP) compared to the registered factory sector.⁷ Moreover, West Bengal's share in total number of unregistered enterprises in the country is 16.13%, which is the highest in the country.⁸ Such a high concentration of unregistered manufacturing enterprises, which mainly comprise small scale unorganized enterprises, is a key feature of the West Bengal economy. As Khasnabis (2008) argues, the existence of such petty production has facilitated a peculiar condition in West Bengal, where even on the face of a decline in the importance of large scale manufacturing industries the economy has continued

^{7.} Khasnabis (2008)

^{8.} Economic Review, 2011-12, Statistical Appendix, Government of West Bengal

to grow significantly.⁹ He further argues that labour productivity in West Bengal was rather low, for which the investors were not sure of earning a requisite profit rate on their investments in West Bengal, which prompted them to leave the state. If we take Net Value Added (NVA) per worker as a measure of labour productivity, then it is seen from figure 4 that West Bengal's labour productivity is less compared to India as a whole.





Source: Authors' calculations from the Annual Survey of Industries, various issues.

This low productivity of West Bengal in the organized sector is added to the fact that the state has a very high share of unorganized sector. This is evident from the latest report of the Economic Census. We observe the following from Table 3, which shows a comparison between West Bengal and India based on some indicators available from the Economic Census.

Table 3: Enterprises and Employment in India	
and West Bengal: A Comparison	
West	_

	West Bengal	India
Growth in no. of enterprises between 2005 and 2013 (in %)	41.26	41.73
Growth in employment between 2005 and 2013 (in %)	20.35	34.35
Percentage of enterprises outside household without fixed structure (in 2013)	29.05	20.49
Percentage of hired workers in total workers (in 2013)	40.62	45.69

Source: Provisional Results of Sixth Economic Census, Government of India

9. We will come back to the issue of the unorganized sector in West Bengal in greater detail later on.

First, the growth rates of the number of enterprises in West Bengal and India are almost the same. But, West Bengal is lagging behind India significantly with regard to the growth rate of employment (see row 3 of Table 3). Therefore, it must be the case that the enterprises in West Bengal on an average employ fewer workers compared to India. Second, it is seen that West Bengal has significantly higher percentage of enterprises outside household which do not have any fixed structure as compared to India (see row 4 of Table 3) and the proportion of hired workers is also smaller in the state as compared with India (row 5). These numbers indicate that West Bengal has significantly higher number of unorganised enterprises compared to India, otherwise enterprises would have been employing more hired workers if there were a higher share of the organised sector.

While the reasons for the industrial decline in West Bengal are manifold, they are outside the scope of this paper. What is however relevant to us in the context of the current study are three facts. First, there has been a decline in manufacturing as a share of GSDP in West Bengal. Second, West Bengal economy is characterized by low labour productivity in comparison to India. Third, there is a preponderance of the unorganized sector in the economy.

Growth and Sectoral Composition

Table 4 shows the growth rate of NSDP in West Bengal over various plan periods. It is clear that the services sector in West Bengal has witnessed the maximum rate of growth followed by industry, while agriculture has lagged behind.

West Bengal over various plan periods							
	Ninth Plan	Tenth Plan	Eleventh Plan				
	(1997-2002)	(2002-2007)	(2007-2012)				
Agriculture & allied	3.29	1.63	2.76				
Industry	6.64	8.01	5.08				
Services	8.62	7.79	9.65				
Total	6.53	6.19	7.32				

Table 4: Sector-wise Average Growth Rate of NSDP in

Source: Economic Review, 2011-12, Government of West Bengal

On the other hand it is also seen that the growth rate of NSDP in West Bengal has been maintained at moderately high level over the entire 15 year period. In order to understand which sectors within agriculture, industry and services have contributed most to the GSDP of the state, we show the shares of the various sectors in GSDP for West Bengal in Figure 5. The shares of all sectors in GSDP have decreased (between 2004-05 and 2011-12) (including manufacturing), except transport, real estate, trade hotels and restaurants, banking and insurance and other services. In short what we find in West Bengal is that the growth is mainly led by the service sector within which the real estate, banking and insurance and other services are the fastest growing, while the share of the manufacturing sector in GSDP has fallen.

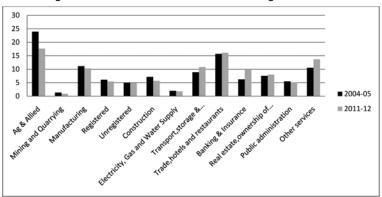


Figure 5: Sectoral shares in West Bengal's GSDP

Source: National Accounts Statistics

To sum up the main features of the economy, while the growth rate of GSDP has been maintained at a moderately high level, the main impetus to the growth has been provided by the service sector (banking, insurance, real estate and other services), the share of manufacturing in GSDP having declined. It is also noteworthy that labour productivity in West Bengal (as measured by NVA per worker) is less than that of India and the state has a huge unorganized sector. In this overall economic scenario we now turn to the employment situation in the state.

Section III: Employment situation in West Bengal

As has been already pointed out in Table 1, employment in West Bengal has increased the most among all the major states between 2004-05 and 2009-10. This increase in employment on the other hand has been mainly concentrated in the nonagricultural sector. Table 2 also shows that between 2004-05 and 2011-12, West Bengal witnessed the highest growth in employment in the manufacturing sector. The analysis of the economy of West Bengal shows that the state is marked by a burgeoning unorganized sector and the dynamism of the manufacturing sector in the state is practically absent. The question is how an economy whose manufacturing sector is witnessing a fall in the share in GSDP is still able to register a high share of employment? In order to understand this puzzle, we first need to analyse the overall employment situation in the state.

The labour force participation rates (LFPR) for West Bengal and India between the years 2004-05 and 2011-12 are shown in Table 5.It is seen that the LFPR for male in West Bengal is higher than that of India for all years in both urban and rural areas. However, the LFPR for rural female is significantly less than that of India. It is also noteworthy that the LFPR for all have decreased in West Bengal between 2004-05 and 2011-12, except for that of urban female.

(Usual Status (ps+ss), age>15 years)						
			2	2011-12		
	India	West Bengal	I	ndia	West Bengal	
Rural Male	85.9	86.6	8	31.3	85	
Rural Female	49.4	26.8	3	35.8	26.4	
Urban male	79.2	79.3	7	76.4	77.9	
Urban Female	24.4	21	2	20.5	22.9	

Table 5: LFPR for West Bengal and India (Usual Status (ps+ss), age>15 years)

Source: NSS report on Employment and Unemployment in India, various rounds

The second issue that we focus on is the category of employment for the usual status employed in West Bengal and India between 2004-05 and 2011-12. This is shown in Table 6.There has been a massive casualization of the workforce in rural West Bengal where the proportion of casual workers has increased by 7 percentage points between 2004-05 and 2011-12, while in case of India, this increase has been around 3 percentage points. The other notable feature of employment in West Bengal has been that the proportion of regular salaried workers in the urban areas is less than that of India. Third, most of the workers in India as well as West Bengal are self-employed. However, in case of West Bengal, the proportion of self-employed workers has witnessed very little decline compared to that of India, in the urban areas.

Category of Employment									
	Rural								
	200	2004-05		-12					
	India	WB	India	WB					
Self-employed Regular Salaried Casual Worker	60.2 7.1 32.8	55.2 7.5 37.3	55.9 8.8 35.3	46.4 8.7 44.6					
Urban									
Self-employed Regular Salaried Casual Worker	45.4 39.5 15	46.2 37.2 16.6	42 43.4 14.6	45 38 16.8					

Table 6: Distribution of Usually Employed Persons by Category of Employment

Source: Same as Table 5

It may seem that the persistence of the self-employed category should be welcome, but it may not be so. This is because there exists high degree of self-exploitation within these workers. It has also been argued that an increase in self-employment category may be symptomatic of the fact that people are unable to find productive paid employment. Sanyal and Bhattacharyya (2009) argue that the existence of massive urban informalized selfemployed workers actually shows the exclusion of large segments of labour from the capitalist growth process. Therefore, the fact that significant casualization of workers has taken place in rural West Bengal along with a dominance of self-employment activities in the urban areas with a concomitant stagnation in regular salaried employment in urban areas may be a pointer towards the fact that informalization of the labour force is increasing in West Bengal. We now look into the quality of employment in West Bengal, and try to ascertain the degree of informalization of workers that has taken place in the state.

Informalization of Workers in West Bengal

The first issue that we look into while dealing with the question of informalization of workers in West Bengal is the type of enterprises in which the workers are working. This is shown in Table 7.A very large section of the workers in West Bengal are engaged in proprietary, partnership and employers' households. The workers engaged in these three kinds of enterprises (P1, P2 and E) formed 82.98% in 2004-05, which came down to 80.62% in 2011-12.

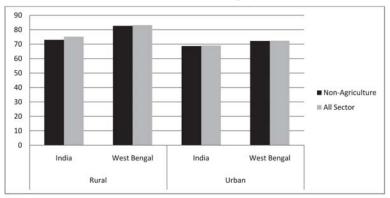
in West Bengal (percent)									
		2004-0)5	2011-12					
	Rural	Urban	Total	Rural	Urban	Total			
Proprietary (P1)	82.75	65.86	74.88	79.38	67.73	74.06			
Partnership (P2)	3.26	5.48	4.29	2.69	3.82	3.20			
public sector	7.29	14.94	10.85	7.69	13.11	10.16			
public/private ltd. company	/ 1.92	5.27	3.48	2.18	7.85	4.76			
co-operative society/trust/									
non-profit inst.	0.52	0.81	0.65	0.25	0.43	0.33			
employer's household (E)	2.18	5.68	3.81	2.15	4.80	3.36			
others	2.09	1.96	2.03	5.67	2.27	4.12			
Source: Authors' calculation from NSS Employment Unemployment unit level data						and			

Table	7:	Distribution	of	workers	by	type	of	enterprises
		in Wes	st	Bengal (per	cent)		

These three kinds of enterprises belong to the informal sector as per the NSS classification.¹⁰ If we however compare this scenario with India we will see that the proportion of workers belonging to the informal sector is higher in case of West Bengal than for India. This is shown in Figure 6.

^{10.} Informal Sector and Conditions of Employment in India, NSS Report No. 539

Figure 6: Proportion of Workers Working in Proprietary and Partnership Enterprises category in 2011-12



Source: Informal Sector and Conditions of Employment in India, NSS report no. 557

It is evident that the informalization in West Bengal is higher than that of both urban and rural India.In terms of the number of workers employed, enterprises which have less than 10 workers with electricity are regarded as unorganized while those enterprises which have less than 20 workers without electricity are also regarded as unorganized. In Table 8 we provide the percentage distribution of workers in various types of enterprises in West Bengal.

Table 8:	Percentage	distribution	of	workers	by	size	of	employment
	in	non-agricul	ltura	al enterp	orise	es		

No. of workers	Rural + Urban	Rural	Urban
< 6	62.53	68.76	55.36
? 6 but < 10	10.19	9.01	11.55
? 10 but < 20	6.02	4.75	7.47
? 20	15.42	11.00	20.49
Not known	5.85	6.48	5.13

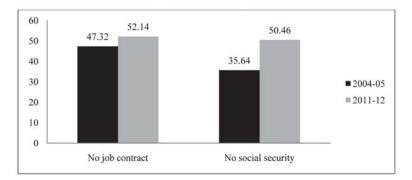
Source: Same as Table 7

Around 73% of the non-agricultural workers were employed in enterprises employing less than 10 workers in 2011-12. In the

rural areas around 78% workers are employed in enterprises employing less than 10 workers, while in urban areas the proportion is around 67%. Only 15% of workers in West Bengal work in enterprises employing more than 20 workers, the corresponding figures for rural and urban areas are 11% and 20% respectively. This shows that an overwhelming majority of the nonagricultural workers in West Bengal are employed in small enterprises.

The issue of social security and job security for workers has emerged as a major issue in the discussion of labour in India and the world. Without adequate social security the workers become more vulnerable to the caprices of the market. On the other hand, without adequate job security and a well-defined job contract, the workers become victims of hire and fire. Figure 7 shows the proportion of workers who do not receive social security benefits and do not have written job contracts in West Bengal. In this figure, we have considered enterprises which employ 20 or more workers since generally such enterprises are designated as the organized sector.

Figure 7: Social and job security of workers in enterprises having equal or more than 20 workers



Source: Same as Table 7

From Figure 7, some important features are strikingly evident. First, more than 50% of the workers (who are engaged in

enterprises employing 20 or more workers) did not receive any social security benefit in 2011-12. This proportion has increased from 35% in 2004-05. This shows that the social security net has significantly declined in West Bengal in this time period even in the organized sector. Second, 52% of the organized workers in West Bengal have no written job contract in 2011-12, increasing from 47% in 2004-05. In the absence of explicit written job contracts, if the workers are illegitimately thrown out of the job, they have no way to seek redressal from the government or the judiciary. This also denotes a very high level of informalisation of workers in the state even within the organized sector.

It is clear from the above set of data that whatever employment growth has taken place in West Bengal has been in the nature of informal employment. In fact, the employment in the organized sector in the state has declined in absolute terms (Figure 8).The decline in organized employment in the state has mainly been led by the public sector. It needs to be mentioned that private organized sector employment has practically stagnated in the state.

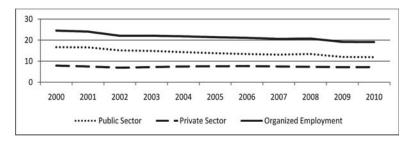


Figure 8: Employment in Organized Sector in West Bengal (in lakhs)

Source: Statistical Appendix, Economic Review, 2011-12, Government of West Bengal

This fall in organized employment and burgeoning of unorganized employment also gets reflected in the presence of trade unions in the state. Trade unions in India have been traditionally involved with organizing the organized sector workers. Now, if the importance of the organized sector in terms of providing employment declines with a concomitant rise in the employment in the unorganized sector, trade union activities are adversely affected. At the same time, with the fall in the trade union action, the social security, job security and other benefits for the workers take a beating. This again leads to a further informalization of the workforce. In other words the data presented here suggest that trade union strength has declined in the state (Figure 9).

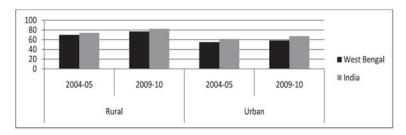


Figure 9: Workers reporting absence of trade union in their activities (percent)¹¹

Source: Informal Sector and Conditions of Employment in India, NSS report no. 519 and 539

It is seen from Figure 9 that the proportion of workers who have no trade union in their activities has increased in West Bengal in both rural and urban areas. However, this proportion is less than that of India. However, it can be said trade unions are mainly active in the organized sector. Hence, we should consider enterprises employing 20 or more workers and check whether trade unions exist in these enterprises or not. This is shown in Figure 10. It can be seen that in the rural areas, absence of trade unions has increased in West Bengal, while it is constant in the urban areas. The absence of trade unions reported by workers is greater in India, as compared to West Bengal.

^{11.} The report on Informal Sector for the year 2011-12 does not have state-wise data regarding trade unions. Hence, 2009-10 data is presented.

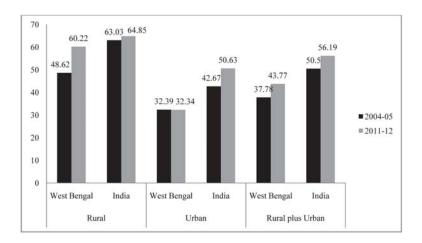


Figure 10: Workers reporting absence of trade union in their enterprises having equal or more than 20 workers (per cent)

The main purpose of trade unions is to organize the workers for collective bargaining in terms of employment and higher wages. It is an elementary lesson of economics that the bargaining strength of trade unions is directly related with the employment situation. If more workers are employed, the strength of trade unions increases. In case of West Bengal however even with an increase in the overall number of employed persons in the state, proportion of workers having no trade unions have increased in rural areas and remained constant in the urban areas. This may imply that the bargaining strength of the workers has declined in the state. This decrease in the bargaining strength of the workers is also evident if we look at the data on wages, which is shown in Figure 11. The real wage of workers employed in the factory sector has witnessed a decline in West Bengal, while that of India has stagnated. This decrease in real wage shows that far from what many believe, over the last decade at least, trade unions in West Bengal has been unsuccessful in protecting or increasing the real wage of the workers in the state.

Source: Same as Table 7

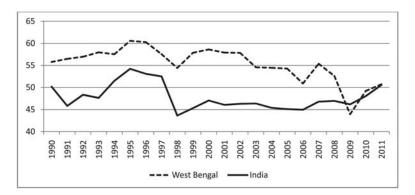


Figure 11: Real wage of workers in India and West Bengal

Source: Annual Survey of Industries, various issues NB: Nominal Wage has been deflated by the Consumer Price Index for Industrial Workers

From the above discussion it is seen that the majority of the workers in West Bengal are essentially unorganized. Secondly, even within the organized sector, workers are losing out in terms of trade unions' existence or social and job security. Thirdly their real wages are also declining. All this suggests that the increase in employment in West Bengal that has taken place between 2004-05 and 2011-12 is essentially of a low quality.

Another important feature of the employment situation in any economy is the sectoral employment profile which helps us identify sectors which are generating the maximum employment for West Bengal and sectors that are lagging behind. Table 9 presents sector-wise employment data.

Section	Indi	ia	West Bengal		
	Rural	Urban	Rura	lUrban	
Agriculture, forestry and fishing	64.10	6.69	53.21	2.37	
Mining and quarrying	0.47	0.75	0.3	0.86	
Manufacturing	8.64	23.62	19.47	31.38	
Electricity, gas, steam and					
air conditioning supply	0.14	0.62	0.04	0.43	
Water supply; sewerage, waste					
management and remediation activities	0.09	0.68	0.02	0.62	
Construction	11.05	9.32	8.43	6.16	
Wholesale and retail trade; repair of					
motor vehicles and motorcycles	5.61	19.61	6.43	18.66	
Transportation and storage	2.86	7.42	3.53	7.94	
Accommodation and Food service					
activities	0.87	3.78	1.01	3.03	
Information and communication	0.13	2.53	0.07	1.76	
Financial and insurance activities	0.33	2.50	0.42	2.45	
Real estate activities	0.07	0.55	0.02	0.25	
Professional, scientific and technical					
activities	0.17	1.63	0.17	1.7	
Administrative and support service					
activities	0.22	1.86	0.35	2	
Public administration and defence;					
compulsory social security	0.79	4.12	0.58	2.67	
Education	2.07	5.50	2.67	6.93	
Human health and social work activities	s 0.47	2.18	0.48	2.12	
Arts, entertainment and recreation	0.12	0.49	0.16	0.38	
Other service activities	1.52	3.83	1.63	2.9	
Activities of households as employers;	0.28	2.33	1.01	5.39	
Activities of extraterritorial organizations					
and bodies	0.00	0.00	0	0	

Table 9: Distribution of employed persons by broad industry divisions (2011-12)

Source: Employment and Unemployment Situation in India, NSS Report No. 554

From Table 9 it is seen that West Bengal has a lower proportion of workers engaged in agriculture compared to India. Remarkably, the share of manufacturing employment in West Bengal is significantly higher than that of India. Particularly, in the rural areas, 23.62% of the employed are in the manufacturing sector while in urban areas 31.38% are engaged in manufacturing. The corresponding figures for India are 8.64% and 19.47% respectively. In spite of the share of manufacturing sector coming down, such a high share of employment in this sector essentially shows that most of the workers are engaged in low end manufacturing activities. To better understand the nature of manufacturing employment in West Bengal, we now turn to employment in this sector in greater details.

Section IV: Non-Agriculture and Manufacturing Employment in West Bengal

We identify the top 10 non-agricultural sectors in the state based on NIC-2008 2 digit level of classification. Table 10 shows the top 10 industries in rural West Bengal. Is it the case that the top employment generating sectors of West Bengal are providing adequate social and job security to the workers? In order to answer this question we also look at the proportion of workers having no social security or written job contracts in these sectors.

and job security in these industries, 2011-12					
	Share in mployment	No Social Security	No Written Job Contract		
Construction of buildings Manufacture of tobacco products Retail trade, except of motor vehicles and motorcycles Manufacture of textiles Land transport and transport via pipelines Education Manufacture of wearing apparel Manufacture of other	6.67	97.87 100.00 85.72 94.07 88.10 32.53 82.74	100.00 100.00 90.89 95.25 88.64 11.85 97.28		
non-metallic mineral products Manufacture of food products	1.72 1.43	98.48 87.37	100.00 78.40		
Civil engineering	1.08	95.11	93.66		
Total (top 10 sectors)	34.47	—	—		

Table 10: Shares of top 10 industries in total employment in rural West Bengal, and social security and job security in these industries, 2011-12

Source: Author's calculation based on NSS unit level data

In rural West Bengal, construction of buildings is the major source of employment followed by manufacture of tobacco products and retail trade. The top 10 non-agricultural sectors account for 34.47% of total employment in the rural areas. However, in terms of social security and job security the situation remains very bleak. Apart from education, no other sector provides social security to its workers. In some cases 100% of the workers are outside social security net or do not have a written job contract. In other words, even within the top ranking employment generating sectors in West Bengal, informalization of labour is overwhelming.

Table 11: Shares of top 10 industries in total urban employment inWest Bengal, and social security and job security in these industries, 2011-12

Industry	Share in	No Social	No Written
E	Employment	Security	Job Contract
Retail trade, except of motor			
vehicles and motorcycles	14.30	89.90	73.64
Manufacture of wearing appare	8.68	98.77	40.85
Education	6.93	31.35	19.74
Land transport and transport			
via pipelinės	6.61	52.67	46.99
Manufacture of textiles Activities of households as	6.10	67.74	82.64
employers of domestic person	nel 5.39	96.14	74.33
Construction of buildings Wholesale trade, except of	4.38	91.15	95.96
motor vehicles and motorcycle	s 3.56	82.28	80.95
Public administration and defence; compulsory			
social security	2.67	6.00	8.00
Food and beverage service activities	2.48	81.44	54.04
Total of top 10 sectors	61.1		
	0		

Source: Same as Table 10

Some interesting features can be discerned from Table 11. First, retail trade emerges as the most significant employer in urban West Bengal followed by manufacture of wearing apparel and education. What is noteworthy is that even with a perceptible

construction boom happening in urban areas, construction employs only 4.38% of the workers while the 'activities of households as employers' category employs 5.39% of workers. This category comprises of household servants, private tutors and other such petty jobs. The fact that this category of employment is placed within the top 10 employment generating sectors in West Bengal indicates the degree of informalization and lack of proper job opportunities in the state. Again in terms of having no social security and job security, it is seen that even in urban West Bengal, most of the top employment generating sectors have practically no social security with the exception of education, land transport and public administration (Table 11).

Manufacturing Employment in West Bengal

In order to better understand the nature of manufacturing employment in the state let us first look at the nature of enterprises in the manufacturing sector in West Bengal in terms of their ownership.From Table 12 it is clear that most of the manufacturing employment in West Bengal is taking place in the unorganized sector, where around 89% of workers are employed in proprietary or partnership enterprises. In rural areas around 93% of employment is within proprietary or partnership enterprises while in urban areas the proportion is 85%. Only 2.93% of manufacturing workers in rural areas and 10.28% in urban areas are employed in public or private limited company.

Enterprise typeRural + UrbanRural + UrbanUrbanproprietary: male68.1066.7269.86proprietary: female16.2122.258.48partnership: with members16.2122.258.48from same hh.4.493.435.86partnership:with members from0.850.641.13Government/public sector1.520.053.41Public/Private limited company6.152.9310.28Co-operative societies/trust/other0.000.000.00others2.673.980.98	iii west bengal (2011-12)					
proprietary:female16.2122.258.48partnership:withmembers16.2122.258.48partnership:withmembers16.2122.258.48partnership:withmembers16.2122.258.48partnership:withmembers16.2122.258.48partnership:withmembers16.2122.258.48partnership:withmembers16.2122.258.48partnership:withmembers16.2122.258.48partnership:withmembers16.2122.258.48partnership:withmembers16.2122.258.48partnership:withmembers16.2122.258.48partnership:withmembers16.2122.258.48partnership:withmembers16.2124.493.435.86partnership:withmembers15.20.053.41Public/Privatelimitedcompany6.152.9310.28Co-operativesocieties/trust/other0.000.000.00	Enterprise type		Rural	Urban		
partnership: with membersfrom same hh.4.493.435.86partnership:with members from0.850.641.13different hh.0.850.641.13Government/public sector1.520.053.41Public/Private limited company6.152.9310.28Co-operative societies/trust/other0.000.000.00						
from same hh.4.493.435.86partnership:with members from0.850.641.13different hh.0.850.641.13Government/public sector1.520.053.41Public/Private limited company6.152.9310.28Co-operative societies/trust/other0.000.000.00		16.21	22.25	8.48		
partnership:with members from0.850.641.13different hh.0.850.641.13Government/public sector1.520.053.41Public/Private limited company6.152.9310.28Co-operative societies/trust/other0.000.000.00						
different hh. 0.85 0.64 1.13 Government/public sector 1.52 0.05 3.41 Public/Private limited company 6.15 2.93 10.28 Co-operative societies/trust/other 0.00 0.00 0.00		4.49	3.43	5.86		
Government/public sector1.520.053.41Public/Private limited company6.152.9310.28Co-operative societies/trust/other0.000.000.00						
Public/Privatelimitedcompany6.152.9310.28Co-operativesocieties/trust/other0.000.000.00	different hh.	0.85	0.64	1.13		
Co-operative societies/trust/other 0.00 0.00 0.00	Government/public sector	1.52	0.05	3.41		
1	Public/Private limited company	6.15	2.93	10.28		
others 2.67 3.98 0.98	Co-operative societies/trust/other	0.00	0.00	0.00		
	others	2.67	3.98	0.98		

Table 12: Enterprises in manufacturing sector in West Bengal (2011-12)

Source: Same as Table 10

The same extent of informalization of manufacturing employment is observed if we look at the proportion of workers according to the size of enterprise. This is shown in Table 13. Around 75% of manufacturing workers in rural areas and 65% of workers in urban areas are employed in enterprises which employ less than 10 workers. Only 13.5% of workers in rural areas and 20.32% of manufacturing workers in urban areas are employed in enterprises which employ more than 20 workers (Table 13). Hence, on the basis of the size of enterprise too, it can be ascertained that most of the manufacturing employment in West Bengal are in the unorganized sector.

employment	in manufacturing	enterprises,	2011-12	
No. of workers	Rural + Urban	Rural	Urban	
< 6	56.97	68.67	42.01	
? 6 but < 10	14.84	8.24	23.28	
? 10 but < 20	7.34	4.72	10.69	
? 20	16.51	13.53	20.32	
Not known	4.33	4.83	3.70	

Table 13: Percentage distribution of workers by size of employment in manufacturing enterprises, 2011-12

Source: Same as Table 10

Let us now go one step further and analyse the top 10 sectors within manufacturing in terms of share of employment. After identifying these industries (at NIC-2008, 2 digit level), we also look at whether the workers in these top sectors in terms of providing manufacturing employment provide social security, job security to the workers and whether trade unions exist in these enterprises. From Table 14 it is seen that manufacture of tobacco products is the largest employer within the manufacturing sector of West Bengal followed by textile, wearing apparel and food products. A segregation of this data into rural and urban West Bengal will show that most of the tobacco industries are located in rural West Bengal, which are essentially bidi making units. Most of the top 10 manufacturing sectors in West Bengal belong to low value added labour intensive technology.

				0.101.07
West Bengal	% Share	Not eligible for social security	No written job contract	No TU present in enterprise
Manufacture of tobacco				
products	22.94	100.00	100.00	68.39
Manufacture of textiles	19.88	78.14	87.89	73.39
Manufacture of wearing apparel	16.24	92.81	95.91	91.61
Manufacture of food products	6.95	80.80	68.89	78.10
Manufacture of other non- metallic mineral products Manufacture of furniture	6.46 4.77	98.39 98.78	99.90 99.55	69.26 83.33
Other manufacturing	4.59	84.74	91.33	74.20
Manufacture of wood and products of wood and cork, except furniture	3.17	92.10	99.83	86.45
Manufacture of fabricated metal products, except machinery and equipment	3.02	90.02	83.82	82.56
Manufacture of leather and related products	2.62	98.03	98.03	93.38
Share of Top 10 within Manufacturing	90.64			

Table 14: Social and job security of workers (in per cent) in top 10 manufacturing sectors (in terms of employment share)

Source: Same as Table 11

It is interesting to note that the largest manufacturing employer in West Bengal, Manufacture of Tobacco Products have no social security or written job contract. But significantly, around 32% of the enterprises have trade unions. In spite of that if 100% of workers lack social security or a written job contract, then clearly the trade unions are not being able to ensure even the minimum rights of the workers. Most of the other sectors within the top 10 manufacturing employer have very little social or job security with minimal presence of trade unions.

However, table 14 pertains to the manufacturing sector as a whole, including the organized and the unorganized. If we consider enterprises employing 20 or more workers and then look at the top 10 manufacturing sectors in terms of employment generation, then the following picture emerges.

Inddott		Hoor Bong		
Manufacturing Sectors in West Bengal where enterprises having equal or more than 20 workers	% Share	Not eligible for social security	No written job contract	No TU present in enterprise
Manufacture of other non-				
metallic mineral products	33.19	99.68	99.87	72.63
Manufacture of textiles	22.95	44.29	68.74	16.19
Manufacture of basic metals Manufacture of leather and	5.93	34.35	38.95	7.67
related products	5.55	100.00	100.00	99.02
Manufacture of food products	4.14	49.17	59.17	30.00
Manufacture of pharma- ceuticals, medicinal chemical and botanical products	3.08	60.88	18.03	48.43
Manufacture of wearing apparel	3.06	84.13	84.13	84.13
Manufacture of tobacco products	2.81	100.00	100.00	77.26
Manufacture of wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	2.81	100.00	100.00	31.27
Manufacture of computer,	2.01	100.00	100.00	01.27
electronic and optical products	2.69	15.62	15.62	35.06
Total Share of Top 10 Manufacturing Sectors	86.21	-	-	-

Table 15: Top 10 Organized Manufacturing Industries in West Bengal

Source: Same as Table 11

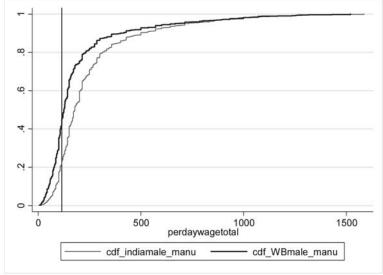
From table 15, it is seen that there is massive informalization of workers within the organized manufacturing sector in West Bengal, excluding certain sectors. Industries like non-metallic mineral products, leather, wearing apparel, wood have almost no social or job security.

In short, while the employment has increased significantly in the manufacturing sector in West Bengal, most of the workers are employed in low level manufacturing activities and are concentrated in the informal sector. Most of the workers lack basic social security or a written job contract. In other words, in spite of the increase in employment, the quality of employment is abysmal. Therefore, it is not obvious that with the highest increase in manufacturing employment in West Bengal between 2004-05 and 2011-12, West Bengal has shifted towards becoming an industrialized state. Rather, it seems that with the decrease in manufacturing's share in the state's GSDP, manufacturing sector itself has become a reservoir of informal surplus labour with low productivity.

Section V: Evaluating the Growth in Employment

In order to further investigate into the problem of employment, we undertake the following exercise. We compare the wage earnings of the workers employed in the manufacturing sector in West Bengal (with employment size>=20) in two ways. Firstly, let us take Rs 115 as the benchmark wage, which is also the national floor level minimum wage, as defined by the government. We can then compare the proportion of employed people in West Bengal and India who are earning a wage less than Rs 115. Let us look at the following figures to compare the situation in West Bengal and India. What we essentially do is to compute the cumulative distribution functions for the relevant workers.

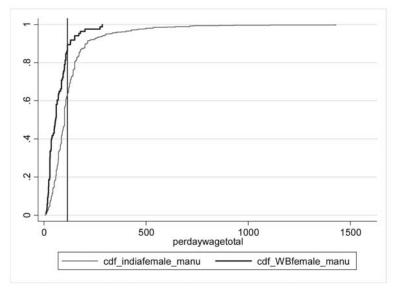
Figure 12: Cumulative Distribution Functions for Male workers in Manufacturing Sector, 2011-12 (India and West Bengal)



Source: Authors' calculation based on NSS unit level data

OP-52 / 29

Figure 13: Cumulative Distribution Functions for Female workers in Manufacturing Sector, 2011-12 (India and West Bengal)



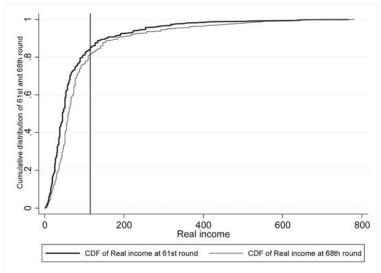
Source: Same as Figure 12

From figures 12 and 13, it is seen that in the manufacturing sector, the proportion of males earning less than Rs 115 per day is more than 40% in West Bengal while it is around 24% for India. Similarly, for females this proportion is around 85% for West Bengal and 65% for India. Thus, in the manufacturing sector, more proportion of workers in West Bengal earn wages less than the bench mark wage. This shows that the increase in employment in the manufacturing sector in West Bengal, has been mainly concentrated in the low productive sectors, compared to India.

Secondly, we check whether with time, there has been an improvement in the proportion of workers earning less than the minimum wage of Rs 115 in West Bengal. In order to do so we convert all wages into 2011-12 prices, by using the respective CPI deflators. The following figures show the findings.

OP-52 / 30

Figure 14: Cumulative Distribution Functions for workers in Manufacturing Sector in West Bengal, 2004-05 and 2011-12

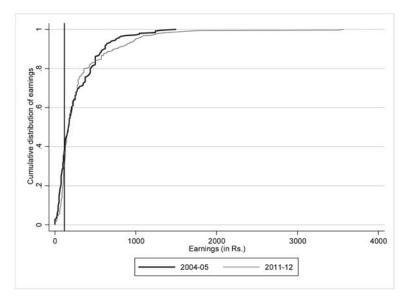


Source: Same as Figure 12

It is seen that the proportion of workers in the manufacturing sector earning less than Rs 115 per day has marginally declined between 2004-05 and 2011-12 (figure 14). However, this proportion continues to be above 80%. In other words, even after a significant growth in employment in the manufacturing sector, there has been practically no improvement in the proportion of people earning less than the benchmark wage. This shows that most of the increase in employment in West Bengal was in the low productive manufacturing.

At this point of time, again a question can be raised with regard to the difference between the organized and the unorganized sector within manufacturing itself. Therefore, we repeat the same exercise taking into account only those sectors where the size of employment is greater than or equal to 20.

Figure 15: Cumulative distribution function of earnings for Organized Manufacturing workers in *West Bengal*



Source: Same as Figure 12

Even within the organized manufacturing sector in West Bengal, around 40% of workers, both in 2004-05 and 2011-12 earn wages less than the National Floor Level Minimum Wage (Figure 15). This shows that even within the organized manufacturing sector, the proportion of workers earning less than the benchmark wage has not changed. Therefore, it can be surmised that even with the huge increase in the manufacturing employment, there has been very limited gains for the workers even within the organized sector.

Section V: Conclusion

In the preceding pages we have discussed in details the employment situation in West Bengal. It has been shown that the employment in West Bengal is characterized by large-scale informalization of the workforce. At the same time, it was also seen that the economy of West Bengal has its dynamism not from the manufacturing sector but from the real estate and construction sector. At the same time, the agricultural sector in West Bengal is also witnessing a slowdown in growth. In this situation, it is a bit surprising that West Bengal has registered the highest manufacturing employment growth in the country. We have shown that most of this increase in employment in manufacturing is mainly concentrated in the low productive sectors.

So how do we understand the employment situation in West Bengal? One of the possible explanations lies in the fact that the labour productivity in West Bengal is lower compared to that of India. The growth rate of employment is the difference between growth rate of GSDP and the growth rate of labour productivity. Since, the labour productivity in West Bengal is less than that of India the employment generating potential of West Bengal is greater than India for any level of growth rate of GDP. However, such low productive employment is neither remunerative nor rewarding in terms of health and mental satisfaction.

We believe that with the fall in the manufacturing sector in the state and the rising to importance of the services sector, productive labour intensive production at a high rate is not taking place in West Bengal. What is happening is that people are opening up small shops or small workshops in both urban and rural West Bengal to make their ends meet. This is resulting in a situation where a proliferation of low productive activities is taking place. In this sense, the growth of employment that has taken place in West Bengal, while being a better situation than most other states is not a model that can be replicated all over the country.

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