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## Structural change and non-standard forms of employment in India

Ravi SRIVASTAVA

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***Structural change and non-standard forms of  
employment in India***

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## 1. Introduction

Standard employment is defined in terms of an open ended employment contract, restricted to one employer, and regulated by restrictions on working time, length of the working week and other defined conditions of work (Schmid, 2010). On the other hand, conditions of employment defined by temporary employment (casual work or fixed term contracts), temporary-agency work, ambiguous employment relationships such as dependent homework, and part-time work are treated as non-standard forms of employment (NSFE) (ILO 2015).

In the context of EU and OECD countries, formal employment contracts between the employer and employee for full time work can still be taken to be the norm, despite the growth of NSFE. In India and other developing countries, where self-employment, both in agriculture and outside it, is still the dominant form of employment, and where such employment is often characterized by indefinite hours of work and multiple modes of livelihood, the growth of NSFE and changes in employment characteristics have to be focused upon in *paid* work, within the context of the overall employment structural changes.

Paid work is, broadly, regular / salaried work or casual work. Both are defined later in this paper. Casual work, in its entirety, needs to characterize as a NSFE because of the absence of a regular relationship between the worker and the employer. The contours of NSFE are also associated with informal employment, now extensively defined by the ILO as employment without any social security. Informal employment can coexist with self-employment and casual work, but increasingly with regular work. Further, temporary agency workers, described in India as “contract labour”, i.e. workers hired through contractors, also fall within the scope of NSFE. These three forms of employment overlap to varying degrees, but with changes emerging in the size of each category as well as the overlap. Putting-out workers or homeworkers are generally categorized as self-employed but are treated here as a non-standard form of employment because they also share several characteristics with such paid workers. Many other emerging non-standards forms of employment, such as part-time work, are also important, but as we shall see from the case of part-time work, we have meagre macro evidence regarding them. This study, therefore, mainly focuses on analysis of casual work, informal employment, homework, and contract labour, which are considered to be the main forms in which NSFE exists, or is becoming more predominant in India.

Table 1 provides the categorization of employment by major activity status and sectors/industries and shows the relationships and principal overlaps between the categories of employment discussed in this paper. As pointed out above, non-standard forms of employment (NSFE) are explored mainly in the context of paid work in the non-agricultural economy, but with some agricultural non-farm activity, defined by NIC codes 014, 016 and 017, for which we have similar data, also added in (Aiii to Bvii). Further, homeworkers (Aii, Bii) who share partial characteristics with paid workers in NSFE are also considered as part of NSFE universe. Total NSFE is, therefore, given by the light shaded area Aii to Bvi. The table also depicts the relationship between formal/informal employment and NSFE, as well as contract labour (temporary agency employment) and NSFE. While informal employment in India covers both paid as well as self-employed workers, in agriculture as well as outside it, here we focus only on informal employment among paid workers in non-agriculture (Aiii to Bvi) as NSFE. Contract labourers are a sub-set of informal workers in the formal non-agricultural sector (Aiv to Bv).

**Table 1. Employment category of workers and non-standard forms of employment in India**

			Self Employed		Casual Workers		Regular/Salaried		
					Paid Informal				Formal
			Independent	Dependent (homeworkers)	Directly employed	Agency workers (contract labourers)	Agency Workers (contract labourers)	Directly employed	Directly employed
			1		2		3		
			i	ii	Iiii	iv	v	Vi	vii
Non-agriculture		A	Aii	Aiii	Aiv	Av	Avi	Avii	
Agriculture	NIC codes 014, 016, 017	B	Bii	Biii	Biv	Bv	Bvi	Bvii	
	Remaining agriculture	C							

In recent decades, a lot of debate in India has focused on the casualization of the Indian workforce, greater informalization of employment, and the use of contract labour. With regard to informalization and contract labour, the debate has focused on the *causes* of greater informalization and use of contract labour, and in particular, whether these changes are due to the need of employers to have more flexible and cheaper labour due to the needs of global production, or whether they are due to rigid labour laws in India. The debate has also taken up the implications of these for employment growth and conditions of labour, as well as for greater growth and productivity of the industrial and services sector.

This paper is in nine sections. After the introductory section, the second section analyses the changes in employment structure in India by activity status, across sectors and major industry categories, with particular reference to the growth of casual labour (which is a major NSFE) and regular/salaried employment. Section 3 relates to the changes in the nature of informal employment in India, with focus on how informalization is increasingly turning regular wage/salaried employment into a NSFE. Section 4 analyses the trends in homework (putting-out work) which has grown due to globalization and outsourcing. Section 5 looks at the available but limited data on part-time work. Section 6 focuses on contract labour, which is an important form of employment relation in which NSFE is manifested in the organized sector. The analysis focuses on the organized manufacturing sector. The section also draws upon two recent micro studies on contract labour and labour standards in two of the most employment intensive industries outside of agriculture (construction and garment production) to throw further light on the use of contract labour and its implications. Section 7 of the paper analyses the empirical evidence on the relationship between non-standard forms of employment and conditions of work, skill-training of workers, and participation in workers' organizations. Section 8 reviews and assesses recent changes in policy and labour law with implications for NSFE. Section 9 is the concluding section.

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## 2. India's changing employment structure and impact on casual and regular work

India's employment relations have to be understood in the context of the evolution of its economy from a predominantly agrarian and rural to one where the urban and non-agrarian sectors are gradually beginning to play a major role. The cross-over point occurred as recently as 2011-12, when for the first time, the agrarian workforce dipped below half (Table 2). This shift in employment has occurred mainly in favour of the construction sector and services, whereas the share of employment in manufacturing has increased by only about two per cent points in nearly three decades. Over this period, the total share of manufacturing and services increased from 27.9 per cent to 40.7 per cent, but with a large chunk of this increase coming from services.

**Table 2. Percentage of industry divisions in total employment, various years**

Industry groups	1983	1993-94	1999-00	2004-05	2009-10	2011-12
<b>Agriculture</b>	69.0	64.0	60.0	56.6	51.5	47.8
<b>Mining, man. &amp; elec.</b>	11.6	12.5	11.8	13.0	12.3	13.8
<b>Construction</b>	2.3	3.3	4.5	5.7	9.6	10.6
<b>Trade &amp; hotels</b>	7.2	8.6	10.4	10.8	11.3	11.9
<b>Real estate &amp; finance</b>	0.6	1.0	1.2	1.7	2.2	2.8
<b>Administration</b>	2.6	2.7	2.7	2.0	2.2	1.8
<b>Education &amp; health</b>	2.1	2.3	2.9	3.3	3.5	4.0
<b>Community &amp; household</b>	2.1	2.7	2.9	2.9	2.8	2.9

Source: Computed from unit level data, NSSO, Various Rounds on Employment-Unemployment

This structural change has important implications in as much as the agrarian structure predominantly consists of self-employed and casual workers whereas regular employment is expected to have a much larger presence in the industrial and services sector, although not in the construction sector.<sup>1</sup>

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<sup>1</sup> The National Sample Survey (see Instruction to Field staff, NSS 68<sup>th</sup> Round, Vol. 1, Chapter 1, pp. A14-15) categorises workers as *self-employed*, *regular wage/ salaried employee* and *casual wage labourer*. These categories are defined as follows:

**Self-employed:** Persons who operate their own farm or non-farm enterprises or are engaged independently in a profession or trade on own-account or with one or a few partners are deemed to be self-employed in household enterprises. The self-employed are further categorised into own-account workers, employers, and helpers in household enterprises. The category of self-employed also includes 'home workers', 'home based workers' and 'out workers' who have *some degree of autonomy* and *economic independence* in carrying out the work, and their work is not directly supervised, as is the case for the *employees*.

**Regular wage/ salaried employee:** These are persons working in other's farm or non-farm enterprises (both household and non-household) and getting in return salary or wages on a regular basis (and not on the basis of daily or periodic renewal of work contract) are the regular wage/ salaried employees. *This category not only includes persons getting time wage but also persons receiving piece wage or salary and paid apprentices, both full time and part-time.*

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**Table 3. Percentage change in activity status of workers, various years**

Location	Status	1983	1993/94	1999/00	2004/05	2009/10	2011/12
Rural	Self-employed	61.2	58.3	55.5	60.4	54.5	56.4
	Regular	7.0	6.4	6.9	7.0	7.1	8.5
	Casual	31.8	35.3	37.5	32.5	38.4	35.1
Urban	Self-employed	42.8	42.3	42.0	45.2	41.1	42.0
	Regular	39.4	39.6	40.0	39.8	41.3	43.0
	Casual	17.8	18.1	18.0	15.0	17.6	15.0
Rural + Urban	Self-employed	57.7	54.7	52.2	56.6	50.8	52.3
	Regular	13.2	13.7	14.9	15.3	16.5	18.5
	Casual	29.1	31.6	32.8	28.1	32.7	29.3

Source: Same as Table 2

Note: Self-employed stands for Self employed

The overall changes in the workforce by activity status, is shown in Table 3. While the percentage of self-employed workers has shown an irregular decrease, the percentage of regular workers increased systematically from 13.2 per cent in 1983 to 18.5 per cent in 2011-12. But there has been no systematic change in the percentage of casual workers. On the face of it, regular work is not treated as NSFEE, but we go deeper into this when we consider formal/informal employment. However, notably, even in 2011-12, less than one in five workers were regular / salaried workers, while more than half the workers were self-employed and three in ten workers were casually employed.

As one might expect, there are differences between rural and urban areas, with the former still dominated by agriculture, which has a high percentage of self-employed and casual workers. But in urban areas 43 per cent of workers were regular workers in 2011-12, up from 39.4 per cent in 1983.

One may ask whether the change in employment structure in favour of more regular work is a result of changes that have taken place within industries, influenced, for example, by the growth of the formal segment, or whether it is mainly due to change in the *share* in total employment of different industries, which have varying propensities to employ self-employed, casual or regular workers, in total employment.

Table 4 shows the activity wise composition of the workforce across different industry groups for three years (1983, 1999-00 & 2011-12). What is interesting is that while manufacturing shows a larger increase in the percentage share of regular wage/salaried workers between 1983 and 2011-12, the employment structure in the services sector shows a much smaller change between these years. However, the services sector has a high percentage of regular workers, both in the initial and terminal years. On the other hand the share of regular workers in agriculture and construction has declined. The implication of this is that with a share of the employment structure towards services, the share of regular wage/salaried workers in the

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**Casual wage labour:** A person casually engaged in other's farm or non-farm enterprises (both household and non-household) and getting in return wage according to the terms of the daily or periodic work contract is a casual wage labour. This includes one category of casual labourers in rural areas who normally engage themselves in '*public works*' activities.

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workforce will tend to increase. On the other hand, the growth of employment in the construction industry with a high share of casual work has more or less compensated for the declining casual workforce due the declining share of agriculture in total employment.

In Table 5, we have shown the industry-wise share of regular workers in 1983, 1999-00 and 2011-12. Between 1983 and 2011-12, the share of all regular workers in the services increased from 55.9 per cent to 67.7 per cent, while manufacturing's share rose only from 22.8 per cent to 24.6 per cent. Agriculture's share in total regular workers declined from 15.6 per cent to only 2.2 per cent over this period.

Gender differences in the share of regular workers across industries have increased over the years. In 1983, 23.2 per cent of all regular male workers and 19.5 per cent of all female regular workers were employed in manufacturing. By 2011-12, while the percentage of all male regular workers in manufacturing increased to 27.4 that of female workers fell to 13.4. On the other hand, while the share of regular male workers in services increased from 55.7 in 1983 to 64.3 in 2011-12, that of female workers increased from 58 per cent to 81.6 per cent over the corresponding period. Most female regular workers were in educational services (32 per cent), followed by household services (13.4 per cent), manufacturing (13.1 per cent) and education (9 per cent).

**Table 4. Percentage change in activity status of workers across industry divisions, various years**

Industry/Sector	1983			1999-00			2011-12		
	Self-employed	Regular	Casual	Self-employed	Regular	Casual	Self-employed	Regular	Casual
<b>Agriculture</b>	63.2	3.0	33.8	57.7	1.5	40.9	65.7	0.8	33.5
<b>Manufacturing</b>	49.9	28.2	21.9	49.9	32.1	18.0	48.5	35.2	16.3
<b>Construction</b>	19.1	10.2	70.7	18.0	5.5	76.6	10.8	4.7	84.5
<b>All services</b>	48.1	43.0	8.9	47.7	41.5	10.8	48.3	44.9	6.8
<b>All non-agriculture</b>	45.5	35.9	18.6	44.1	35.1	20.8	40.0	34.6	25.5
<b>All sectors</b>	57.7	13.2	29.1	52.2	14.9	32.8	52.3	18.5	29.3

Source: Computed from unit level data, NSSO, various rounds on employment-unemployment

**Table 5. Percentage of regular workers across industry divisions & sectors, various years**

Industry/Sector	1983			1999-00			2011-12		
	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons
<b>Agriculture</b>	15.1	19.3	15.6	5.6	7.4	5.9	2.0	3.1	2.2
<b>Mining</b>	2.0	2.0	2.0	1.4	0.4	1.2	1.3	0.3	1.1
<b>Manufacturing</b>	23.2	19.5	22.8	24.8	17.0	23.5	27.4	13.4	24.6
<b>Electricity</b>	2.0	0.5	1.8	2.1	0.5	1.8	1.9	0.7	1.7
<b>Construction</b>	1.9	0.7	1.8	1.9	0.5	1.6	3.2	0.8	2.7
<b>Trade</b>	6.8	1.0	6.1	11.8	3.3	10.4	11.8	4.1	10.3
<b>Hotel</b>	1.8	0.5	1.7	2.2	0.7	2.0	3.0	1.4	2.7
<b>Transport</b>	10.3	2.1	9.3	12.2	3.2	10.7	12.9	1.7	10.7
<b>Finance</b>	2.7	1.6	2.6	3.3	2.6	3.2	3.9	3.2	3.8
<b>Real estate</b>	0.8	0.4	0.8	2.0	1.4	1.9	6.1	4.9	5.8
<b>Administration</b>	19.7	12.4	18.9	18.4	11.5	17.3	10.3	5.9	9.5
<b>Education</b>	8.6	25.9	10.6	9.2	28.7	12.3	10.4	32.0	14.6
<b>Health</b>	2.3	7.8	3.0	2.2	9.3	3.4	2.4	9.3	3.8
<b>Community services</b>	2.7	6.4	3.1	1.8	1.7	1.8	2.0	6.1	2.8
<b>Household</b>				1.3	11.9	3.0	1.4	13.1	3.7
<b>Total services</b>	55.7	58.0	55.9	64.3	74.3	66.0	64.3	81.6	67.7
<b>All non-agriculture</b>	84.9	80.7	84.4	94.4	92.6	94.1	98.0	96.9	97.8

Source: Computed from unit level data, NSSO, various rounds on employment-unemployment

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The preceding analysis shows that the 21 per cent point decline in the percentage of workforce engaged in agriculture over roughly three decades has been accompanied by relatively little *overall* change in the distribution of activity status of the workers. Self-employment is still the dominant activity status, followed by casual work and regular/salaried work. While more than half the workers were still self-employed, less than one-fifth workers were engaged as regular/salaried workers in 2011-12. Between the initial and terminal years, however, the percentage of those self-employed fell by just over five and those engaged as regular workers rose by a similar percentage. This relatively small increase in the regularly employed occurred principally because of the shift in the workforce from agriculture to other sectors, mainly due to shift to services which engage a higher percentage of regular workers. The construction sector also absorbed a higher percentage of the workforce, but these workers were mainly casually employed. The activity structure remained virtually unchanged within the broad industrial groupings (manufacturing, services etc.). The workforce structure did not experience increased casualization, as has often been debated, but nor was there a very substantial increase, as a whole, in the proportions of the regularly employed. However, the industrial composition of regular workers experienced a significant change, different across sexes, with nearly two-third of male regular workers and more than four-fifth of female regular workers being in services, but with a major concentration of the latter in the social sectors, household paid services, and manufacturing. Further, important changes have occurred that are related to the growth of formal and informal employment, across the organised and unorganised sectors, which we discuss in Section 3 below.

### **3. Formal and informal employment**

Formal and informal *employment* can exist both within the *formal* and *informal* sectors of the economy, but these sectors have different attributes with respect to regulations. In this paper, we have regarded informal employment among paid workers as a NSFEE, and in this section, we further focus on informal employment in the formal sector of the economy.

The ILO (15th ICLS) and the ILO Delhi Group have defined the basic attributes of the formal sector, leaving it to countries to evolve specific definitions of the formal sector in country specific contexts (ILO 2013). In the past, the Indian statistical system and the regulatory framework has used the term "organised sector" to categorise those establishments which come under the regulatory framework and has used criteria of numbers employed in an establishment, along with (in the case of manufacturing), registration under the Factories Act, 1948. There are numerous other forms of registration available, such as registration under the Companies Act or the Shops and Establishment Act, which do not specify the ownership/management criteria and/or the minimum numbers employed and these have not been taken as criteria to categorise organised/unorganised sectors (NCEUS 2008, NSC 2011).

The National Commission for the Unorganised Sector (NCEUS) in its various reports (NCEUS 2007, 2008), has drawn a distinction between organised/formal sector and the unorganised/informal sector using the basic criteria of enterprise type and employment size. It has categorised individual proprietorship/partnership based enterprises employing less than ten workers only as belonging to the informal sector. However, it has also included all agricultural operations on private holdings as being part of the informal sector. The basic difference is that while the NCEUS treats all private and public limited companies, irrespective of size, and all other establishments with ten or more workers, as belonging to the formal sector, social security

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laws and employment protection legislation usually take either the Factories Act (in the case of manufacturing firms) or size (twenty or more workers) as the demarcating point.<sup>2</sup>

The notion of formal and informal employment was first given shape by the 17<sup>th</sup> ICLS of the ILO in 1997. Informal workers include workers in paid jobs without job security or social security. The concept has been elaborated and countries have defined informal employment using one or both of these yardsticks (job security and/or social security) (Hussmans 2004, ILO 2013).

Data on employment in the organised sector is required to be reported to the Director General of Employment and Training (DGET) and is collated and published by it. But since 1999-00, the NSS also collects data on employment by size and type of enterprise and these results show that organised sector employment is underreported by the DGET. Further, the direct estimates of employment in the formal/organised sector obtained from the NSS also show that the formal sector has grown in India's high growth period (Srivastava and Naik, 2015). Formal sector employment grew at a higher rate between 2004-05 and 2011-12 in all major sectors except mining (ibid.).<sup>3</sup> This trend is also corroborated by figures for organised sector manufacturing estimated from the Annual Survey of Industries examined later in this paper. Thus apart from the growth of regular employment, discussed earlier, the growth of employment in the *formal* sector, also raises a question regarding the possibility of growth in *formal employment* in India, and this is the issue to which we turn next.

In India, no direct data on informal employment was available till the NSS 55<sup>th</sup> Round (1999-00), and a reasonable approximation to such employment among paid workers was casual workers. The NSS 55<sup>th</sup> Round collected information on limited aspects of social security available to paid workers in the non-farm sector (relating to availability of provident fund). Subsequent rounds of the NSS in 2004-05, 2009-10 and 2011-12, have extended enquiry to availability of other types of social security benefits, as well as the nature of job contract between the employee and the employer. While NCEUS (2007, 2008) used the non-availability of social security as the main criterion of informality, the non-existence of any job security is, according to us, a more fundamental criterion of informality in India. This is also because Indian social security laws have created social security entitlements, at least on paper, for all types of workers in formal sector establishments, even if such workers do not have minimal job security. Further, from the data available, we consider the most rudimentary criteria of no job security as workers without any written contract since these workers have no proof of their contractual status and are in a weak position to exercise any claims. In the subsequent discussion in this section we have considered those workers (regular/casual) not having any written job contract as being informally employed.

### **3.1 Informal workers without any written job contract**

As discussed earlier, the NSS surveys of 2004-05 and subsequent employment-unemployment surveys have collected information from paid workers (employees) on the type and size of

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<sup>2</sup> The definition of organised and unorganised sectors used by the NCEUS, as well as the official system, and issues relating to estimation of the informal/unorganised sector as well as employment are discussed in NCEUS (2008) and also in NSC (2012).

<sup>3</sup> Between 2004-05 and 2011-12, in manufacturing, formal sector employment grew at the annual rate of 5.4 per cent while informal sector employment and total employment grew by 0.3 per cent and 1.9 per cent respectively. In services, formal sector employment grew at the rate of 5.9 per cent over this period while informal sector employment and total employment grew at rates of 2 per cent and 3.1 per cent respectively.

enterprise in which they were currently employed, whether they had a written contract, and if so, of what duration, whether they could avail of any paid leave etc. The NSSO rounds provide this information for all paid workers (employees) in non-agriculture (NIC codes 2 to 99). It also covers NIC codes 014, 016 and 017 in agriculture. In the relevant NIC groups covered, the paid workers covered constitute 43.4 per cent of all workers.

Results show that while the number of employees grew in both categories (workers with a written contract and workers without any contract), the hired workforce consisting of workers without contracts experienced a much faster increase during 2004-05 and 2011-12. As can be expected, negligible numbers of casual workers report having a contract with employers. The high growth rate of workers without any written contract occurred not only among all employees (casual workers plus regular workers) but also for regular workers alone. For example in manufacturing while the formal regular workforce grew at the rate of only 0.7 per cent during 2004-05 and 2011-12, the informal regular workers grew at the rate 4.1 per cent per year. In the tertiary sector, the gap was lower. While informal regular employees increased at 4.5 per cent per year, formal regular employees increased at 2.1 per cent per year. The overall growth rates of formal and informal employees in the tertiary sector were 3.6 per cent and 1.5 per cent respectively. In the entire non-agricultural sector, the informal regular workers increased at 4.6 per cent per year while formal regular employees increased at 1.9 per cent per year. Among all employees outside agriculture, formal employment grew by only 1.3 per cent per year while informal employment grew by 5.8 per cent per year (Table 6).

**Table 6. Numbers of workers (in million), with and without contract and growth rate, 2004-05 and 2011-12**

Industry/ Sector	Without contract			With contract		
	Regular	Casual	All employees	Regular	Casual	All employees
<b>2004-05</b>						
<b>Manufacturing</b>	12.7	9.2	21.9	4.4	0.2	33.5
<b>Secondary</b>	13.8	29.2	43.0	5.6	0.3	39.7
<b>Tertiary</b>	26.2	8.2	34.5	20.2	0.2	78.2
<b>Non-agriculture</b>	40.0	37.5	77.5	25.8	0.5	117.8
<b>2011-12</b>						
<b>Manufacturing</b>	16.8	9.8	26.5	4.7	0.1	34.3
<b>Secondary</b>	19.2	51.1	70.3	6.0	1.1	42.1
<b>Tertiary</b>	35.6	8.7	44.3	23.3	0.2	86.7
<b>Non-agriculture</b>	54.8	59.8	114.6	29.3	1.3	128.8
<b>Annual growth rate (%)</b>						
<b>Manufacturing</b>	4.1	0.8	2.8	0.7	-1.2	0.3
<b>Secondary</b>	4.9	8.3	7.3	1.0	18.7	0.8
<b>Tertiary</b>	4.5	0.8	3.6	2.1	2.2	1.5
<b>Non-agriculture</b>	4.6	6.9	5.8	1.9	14.4	1.3

Source: Computed from unit level data, NSSO, Various Rounds on Employment-Unemployment

Note: "All employees" includes both casual and regular workers and thus refers to total waged/salaried workers.

The result of these changes is a shift in the structure of paid employment from formal to informal across almost all NIC divisions. This is shown in Table 7. In 2004-05, 74.5 per cent of all non-agricultural wage and salaried workers and even 60.3 per cent of regular workers among them reported having no contract. These percentages increased to 78.7 and 64.7 within a short span of seven years. The percentage of workers not reporting having any contract increased both in manufacturing and the service sector. Finance and Real estate were the only two groups which reported some increase in the percentage of workers with contracts.

Typically, the organised (formal) sector of the economy is expected to generate more formal jobs and therefore we examine whether this has been the case between 2004-05 and 2011-12. Table 8 shows the percentage of informal jobs in the formal sector in 2004-05 and 2011-12. For purpose of comparison, we have used the definition of the formal sector proposed the NCEUS, discussed at the beginning of this section, as well as the criteria for the formal/organised sector currently in practice in official data. The latter is more consistent with the ambit of the current labour and social security legislation.<sup>4</sup>

**Table 7. Percentage of regular workers and all employees without written contract**

NIC Division	2004-05		2011-12	
	All employees	Regular workers	All employees	Regular workers
<b>Agriculture*</b>	99.8	94.9	99.7	91.9
<b>Mining</b>	68.8	24.5	70.6	26.7
<b>Manufacturing</b>	82.6	74.0	84.7	78.3
<b>Electricity</b>	28.3	25.3	39.5	35.9
<b>Construction</b>	97.9	74.6	96.8	81.1
<b>Trade</b>	91.9	89.7	91.7	89.7
<b>Hotels</b>	89.1	84.3	90.7	87.9
<b>Transport</b>	74.5	65.5	76.9	70.5
<b>Finance</b>	31.4	30.7	43.4	42.7
<b>Real estate</b>	64.6	60.9	58.7	55.7
<b>Administration</b>	27.5	26.5	30.8	30.6
<b>Education</b>	37.5	37.1	43.5	43.0
<b>Health</b>	47.2	45.5	49.9	48.3
<b>Community</b>	83.5	77.1	85.0	79.1
<b>Household</b>	97.6	97.3	97.8	97.9
<b>Primary</b>	99.0	76.9	98.8	69.7
<b>Secondary</b>	87.8	71.0	90.7	76.1
<b>Tertiary</b>	62.9	56.5	65.3	60.4
<b>Non-agriculture</b>	74.5	60.3	78.7	64.7
<b>Total</b>	86.2	61.6	86.0	65.3

Note: \* Only NIC codes 014, 016 and 017

Source: Computed from unit level data, NSSO, Various Rounds on Employment-Unemployment

<sup>4</sup> In manufacturing, the definition of the organised sector is aligned to the coverage of the Factories Act which is 10 or more workers working with the aid of power, and 20 or more workers working without the aid of power. Workers covered by the Factories Act also are entitled to social security benefits and other protection. In other sectors, organised sector establishments (other than public sector establishments) are those with 20 or more workers.

**Table 8. Percentage of informal workers (without contract) in the formal sector**

NIC Division	Formal sector –NCEUS Definition				Formal sector - Alternative (Official) Definition			
	2004-05		2011-12		2004-05		2011-12	
	Regular workers	All employees	Regular workers	All employees	Regular workers	All employees	Regular workers	All employees
<b>Agriculture</b>	45.4	76.1	38.7	77.0	40.6	65.6	31.7	74.1
<b>Mining</b>	22.6	54.2	24.9	56.3	19.4	47.3	20.0	52.4
<b>Manufacturing</b>	64.1	73.1	72.5	78.0	62.7	70.9	72.7	77.3
<b>Electricity</b>	22.0	24.7	33.5	36.4	21.0	22.8	30.2	33.1
<b>Construction</b>	62.7	93.7	74.1	91.4	57.2	90.5	66.8	88.3
<b>Trade</b>	67.1	73.3	71.0	74.3	54.3	65.8	61.8	66.1
<b>Hotels</b>	65.8	69.9	76.6	78.2	47.9	54.1	71.0	72.5
<b>Transport</b>	35.2	41.8	43.7	48.4	28.5	33.3	34.8	38.6
<b>Finance</b>	25.5	26.2	37.0	37.7	22.7	23.1	32.3	33.3
<b>Real estate</b>	41.8	43.7	46.5	48.0	35.4	37.0	41.0	42.4
<b>Administration</b>	25.6	26.6	30.6	30.8	25.4	26.4	30.6	30.8
<b>Education</b>	28.4	28.9	37.5	37.7	24.4	24.8	34.0	34.2
<b>Health</b>	30.1	32.0	39.9	41.0	23.2	24.8	34.5	35.7
<b>Community</b>	49.1	54.4	51.1	54.4	40.6	44.6	42.1	46.2
<b>Household</b>	100.0	100.0			83.3	94.6	79.6	81.7
<b>Primary</b>	26.9	59.5	27.6	62.6	23.4	51.2	22.2	58.7
<b>Secondary</b>	60.2	74.7	69.7	81.5	58.2	70.3	68.9	78.9
<b>Tertiary</b>	31.7	34.3	41.2	42.9	26.6	28.7	35.6	37.0
<b>Non-agriculture</b>	40.3	51.3	50.3	61.2	36.1	45.0	46.7	56.5
<b>Total</b>	40.3	51.6	50.2	61.4	36.1	45.2	46.7	56.6

Source: Computed from unit level data, NSSO, Various Rounds on Employment-Unemployment

The formal sector shows a very high degree of informalization, much more than is commonly attributed to it. Already, by 2004-05, 51.6 per cent of the paid workforce in the non-agricultural formal sector (NCEUS definition) was informal. Further the formal non-agricultural sector has seen a significant increase in the informalization of the workforce (to 61.4 per cent in 2011-2012), and once again this informalization has significantly affected regular / salaried workers, among whom the percentage share of informal workers went up from 40.3 to 50.2.

Informalization has also affected the regulated part of the formal sector (which is covered here by the alternative official definition) more deeply, with the percentage share of informal workers increasing from 45 per cent to 56.5 per cent of all employees, and from 36.1 to 46.7 for regular workers. It has also affected all industry groups to varying degrees. Only NIC groups 014, 016 and 016, representing a small segment of non-farm activity within agriculture do not show increased informalization as per these results.

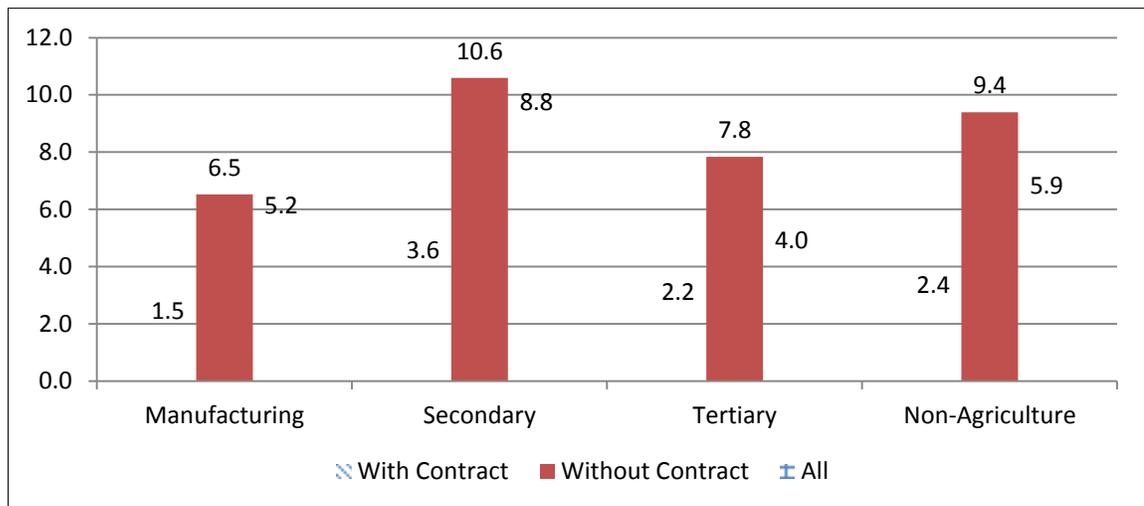
In the case of manufacturing, the percentage of informal regular workers in the formal sector (alternative definition) increased from 62.7 to 72.7, and the total percentage of informal workers among all employees increased from 70.9 to 77.3. The formal tertiary sector again

shows a lower level of informalization, but here too, the increased pace of informalization matches manufacturing.

It must be reiterated that formal sector employment rose over this period (in the next section, we will examine data for manufacturing from the Annual Survey of Industries). But within the formal sector, informal employment has been rising at a much faster rate than formal employment. Figure 1 shows the growth rate of formal sector employment (as per the official definition) in manufacturing and in the secondary and tertiary sectors between 2004-05 and 2011-12, as well as the growth rates of formal and informal employment within these sectors.

Of course, the picture presented here pertains to *all employees*, including highly skilled and managerial employees who are more likely to be recorded here as formal workers on the basis of the rudimentary criteria used in this section - since they are highly unlikely to be employed with any written contract.

**Figure 1. Annual growth rate of formal and informal workers in the formal sector, 2004-05 to 2011-12**



Source: Computed from unit level data, NSSO, various rounds on employment-unemployment

To conclude: informal employment can readily be treated as a NSFE. The share of informal workers (defined here as workers without any written contract) among all employees, has grown in recent years. It has also grown very rapidly in the formal sector of the economy, and this has happened not only because of casualization, but because an increasing proportion or regular/salaried workers are in more precarious employment relations, employed without contracts which makes it much more difficult for them to benefit from any existing employment legislation whose benefit they might otherwise be entitled to.

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## 4. Dependent workers (homeworkers)

Workers who work in, or near, their homes, under various kinds of putting out systems and sub-contracting arrangements (to one or more contractors) are characterized in India as self-employed, in terms of their activity status. However, these workers differ from independent self-employed workers, and for all practical purposes, constitute a category of disguised wage workers, although they use some part of their own capital. The ILO Homework Convention No. 177 categorises these dependent workers as homeworkers (also called outworkers) and they also are considered as a category of non-standard form of employment.<sup>5</sup>

The contractual arrangements, working hours and working conditions of these workers are not subject to any form of regulation. Homework is often embedded in value chains, both domestic and global, with the latter showing an enormous increase in presence in some industries.

Data on dependent production and homeworkers can be extracted from specific rounds of the NSS on employment-unemployment viz. survey rounds for 1999-00 and 2009-10 (which are worker based), or from surveys of the unorganised / informal sector (which are enterprise based). The worker based surveys are more pertinent as they provide direct information on the estimates of such workers and their distribution across industries. They provide information on whether self-employed workers work in their own dwellings and whether they produce partly or wholly under specification.

As NCEUS (2007, pp. 58-59) has pointed out, the independent self-employed and the dependent workers do not fall into two neat categories but there is a continuum from of dependence, from being fully independent to being fully dependent on the contractor/middlemen for prices, raw material, credit, design and markets. More extreme forms of dependence exist when there is 'vertical sub-contracting (cf. Watanabe, 1983) in which the production is contracted by providing raw materials etc. such sub-contracting relationships are estimated to cover about 70 per cent of homeworkers in 1999-00 (ibid.)

Estimates of the numbers of homeworkers, based on range of dependent relationships, and independent self-employed in rural and urban areas, and by sex, in the non-agricultural sector, are given in Table 9. This shows that there has been an across the board increase in the number of homeworkers between 1999-00 and 2009-10. The number of male homeworkers increased from 3.4 million in 1999-00 to 5.4 million in 2009-10, and this reflected an increase in both rural and urban areas. The number of female homeworkers outnumbered the number of male homeworkers and stood at 4.2 million in 1999-00 and 5.5 million in 2009-10. Overall, the number of total homeworkers increased from 7 million in 1999-00 to 11 million in 2009-10.

Since the total numbers of female self-employed workers outside agriculture is much lower than male workers, the share of female homeworkers among total self-employed is much higher among females at 32.7 per cent than among males (7.7 per cent).

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<sup>5</sup> The ILO Convention No. 177, adopted in 1996, defines a homeworker as a person who carries out work for remuneration in premises of his/her choice, other than the workplace of the employer, resulting in a product or service as specified by the employer, irrespective of who provided the equipment, material or inputs used. Thus strictly speaking, a homeworker need only be "working at a place of his/her own choice", while in this analysis, we have considered only those dependent workers as homeworkers who work in their dwelling places.

**Table 9. Estimated numbers of homeworkers and independent self-employed by sex, across rural and urban areas, 1999-2000 and 2009-2010**

Status of employment	Sector & sex of worker								
	Rural			Urban			Rural + Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>1999-2000</b>									
Self-employed: Independent	23.1	6.2	29.3	26.6	4.9	31.5	49.6	11.1	60.8
Homeworkers	1.9	2.5	4.4	1.5	1.7	3.1	3.4	4.2	7.6
All self-employed	25.0	8.7	33.7	28.0	6.6	34.7	53.0	15.4	68.4
<b>2009-2010</b>									
Self-employed: Independent	31.8	6.1	37.9	34.0	5.2	39.2	65.7	11.3	77.1
Homeworkers	2.8	2.9	5.7	2.6	2.6	5.3	5.4	5.5	11.0
All self-employed	34.6	9.0	43.6	36.6	7.9	44.5	71.2	16.9	88.0

Source: Estimated from unit data of the NSS 55th (2009-10) and 66th (2009-10) survey on employment and unemployment (Schedule 10).

Note: Homeworkers are defined here as those working in own dwelling unit or structure attached to own dwelling unit and working partly, mainly or wholly under specification.

Most homeworkers are concentrated in manufacturing. In 2011-12, 80.4 per cent of all homeworkers and 92 per cent of female homeworkers were in unorganized manufacturing. Table 10 gives the estimated numbers of homeworkers and independent self-employed workers, as well as their percentages among total self-employed workers. The numbers of both male and female homeworkers in unorganized manufacturing registered a rise between 1999-00 and 2009-10. The number of male homeworkers in manufacturing rose from 2.5 million to 3.7 million while that of female homeworkers rose from 3.9 to 5.1 million over this period. The share of both male and female homeworkers among total self-employed workers in manufacturing also rose for both male and female workers. But in 2011-12, while one in four male self-employed workers in manufacturing were homeworkers, more than half of female self-employed workers were homeworkers.

**Table 10. Estimated numbers and percentage share of homeworkers and independent self-employed by sex in unorganized manufacturing, 1999-2000 and 2009-2010**

	1999-2000			2009-2010		
	Male	Female	Total	Male	Female	Total
<b>Self-employed workers (million)</b>						
Self-employed: Independent	10.0	4.6	14.6	11.1	4.7	15.8
Homeworkers	2.5	3.9	6.4	3.7	5.1	8.8
All self-employed	12.5	8.4	21.0	14.8	9.7	24.6
<b>Percentage to total self-employed employed</b>						
Self-employed: Independent	80.0	54.1	69.6	74.8	47.9	64.1
Homeworkers	20.0	45.9	30.4	25.2	52.1	35.9
All self-employed	100.0	100.0	100.0	100.0	100.0	100.0

Source and Definitions used are same as in previous table

**Table 11. Percentage share of homeworkers across industries, by sex, 1999-2000 and 2009-2010**

Industries	1999-2000			2009-2010		
	Male	Female	Total	Male	Female	Total
Leather & leather related products	3.5	1.5	2.3	3.2	2.1	2.6
Tobacco products	16.9	50.5	37.3	8.8	33.2	22.8
Textiles	34.7	26.4	29.7	30.2	27.7	28.8
Wearing apparel	8.1	4.6	6.0	21.4	23.6	22.7
Coke and refined petroleum products	2.2	0.3	1.0	2.1	0.7	1.3
Chemical and chemical products	11.8	3.5	6.7	8.6	2.2	4.9
Basic metals	0.2	6.5	4.0	0.1	2.6	1.5
Computer, electronics and optical products	2.8	0.5	1.4	3.5	2.1	2.7
Machinery and equipment	4.8	1.4	2.8	4.0	0.6	2.0
Wooden furniture	8.6	2.9	5.1	12.3	4.2	7.6
Other industries	5.4	1.9	3.3	4.5	1.0	2.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source and Definitions used are same as in previous table. Industries are at two digit classification level.

The gendered nature and the changes in homework are also brought out by the industry-wise distribution of male and female homeworkers in 1999-00 and 2009-10, given in Table 11. In 1999-00, more than a third of male homeworkers were in textiles, followed by Tobacco products (16.9 per cent), Chemical and chemical products (11.8 per cent), Wooden furniture (8.6 per cent) and Wearing Apparel (8.1 per cent). Among female homeworkers, more than half were in Tobacco Products, followed by Textiles (26.4 per cent), Basic Metals (6.5 per cent) and Wearing Apparel (4.6 per cent). In 2009-10, while the largest percentage of homeworkers was still concentrated in Textiles (30.2 per cent), this was followed by Wearing Apparel (21.4 per cent), Wooden Furniture (12.3 per cent), Tobacco Products (8.8 per cent) and Chemical and Chemical products (8.6 per cent). While for female homeworkers, Tobacco Products was the largest employer, the percentage of workers in this industry fell to 33.2. Textiles continued to be the second largest employer, and there was a very sharp jump in the percentage of female homeworkers employed in Wearing Apparel (from 4.6 per cent to 23.6 per cent). Together, Textiles and Wearing Apparel accounted for 51.6 per cent of male homeworkers and 60.9 per cent of female homeworkers. In these industries, these homeworkers form the lowest rung of domestic and global value chains.

In the case of homework, since homes are the production space, women and children in households may be able to divide time more flexibly between household responsibilities and chores, schooling, and production. This becomes all the more important if women are also confined to their homes because of cultural constraints on mobility and access to public spaces. From the employers' perspective, homeworkers provide both flexible labour and reduced cost of capital, along with (in many cases) skills. But the workers, who are unprotected by any regulation, receive very inadequate compensation and are subject to occupational health hazards and several other problems. As a matter of fact, home based work is also used by employers and contractors to escape the ambit of labour regulation in areas such as child labour, minimum wages, etc. A review of the conditions of work of homeworkers by NCEUS (2007) points out that homework is more unlikely to involve a larger proportion of the vulnerable sections of the workforce, such as women and child workers. Studies show that homeworkers receive much

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lower wages than workers based in industrial establishments (Labour Bureau, 1996; Unni and Rani, 2005; Mehrotra and Biggeri, 2007).

As Srivastava (2012a) has pointed out, the India-wide macro trends are well corroborated by industry-specific and micro studies which provide evidence of increased ‘home-workisation’ among female workers, especially in export oriented global value chains such as those in apparel manufacturing (Mezzadri, 2007; Hirway, 2010). Mehrotra (2003) has also noted an accelerated pace of sub-contracting and feminized home-work in export oriented value chains based on a five country study in South Asia and describes this outsourcing trend as the ‘dirt road’, driven by the desire of firms to cut costs to bare minimum, and the desire of marginal workers to take up work at any cost.

## 5. Part-time work

Part-time work is usually defined as work performed for less than a certain hours per week (usually thirty-five hours) (ILO, 2015). Part-time work may exist because of insufficient demand/requirement for full-time work (which can be the case both under self-employment) and/or because employers prefer to offer part-time work and it may also, in some cases, match supply side preferences, particularly in the case of women who have to combine work with household social reproduction duties. In India, part-time work has been endemic in self-employed activities both in agriculture and outside agriculture, but there is also a growing trend for part-time wage/salaried employment, with employers preferring to split up the working days and offering half-day work (as in agriculture) or activity based employment (as in employment by households). Some types of part-time employment are better studied, as for example, for women domestic helps, but there is no macro data on part-time work as defined above.

However, the National Sample Survey canvases a block of questions on availability for work and nature of employment for persons working in the usual principal or subsidiary status. One of the questions pertains to whether the worker was engaged mostly in full time or part time work during last 365 days. This question provides some insight into the pattern of part-time work which we analyse below.

Overall, the data does not reveal a systematic temporal trend in part-time work. This could be because of poor reporting of such work and also because of the structural changes discussed in earlier sections, in which agricultural self-employment is gradually declining.

The rural-urban distribution shows that there are more part-time workers in rural areas. This can be expected because of the predominance of agriculture in rural areas (despite its decline) and is confirmed in Table 12. Part-time work is reportedly high among the self-employed in rural areas. But in recent years, a higher percentage of rural casual workers report part-time work.

**Table 12. Percentage of workers in rural and urban areas reporting part time work**

	1993-94	1999-00	2004-05	2011-12
<b>Rural</b>				
Self-employed	6.1	11.4	13.8	10.1
Regular	0.0	2.2	2.0	1.7
Casual	4.2	7.9	6.9	6.6
Total	4.5	9.4	10.7	8.1
<b>Urban</b>				
Self-employed	5.5	10.0	10.1	7.6
Regular	0.0	1.7	1.5	1.5
Casual	4.9	8.0	6.5	5.7
Total	4.0	6.3	6.1	4.7
<b>Rural + Urban</b>				
Self-employed	6.0	11.1	13.0	9.5
Regular	0.0	1.9	1.7	1.5
Casual	4.3	7.9	6.9	6.5
Total	4.5	8.6	9.6	7.1

Source: Computed from unit level NSS employment-unemployment survey data for different years.

**Table 13. Percentage of male and female workers reporting part time work**

	1993-94	1999-00	2004-05	2011-12
<b>Male</b>				
Self-employed	5.1	5.3	4.8	3.9
Regular	0.0	1.1	0.9	0.8
Casual	3.3	6.1	4.9	4.1
Total	3.6	4.8	4.1	3.3
<b>Female</b>				
Self-employed	11.1	23.7	28.4	23.0
Regular	0.0	5.8	5.2	4.6
Casual	6.4	11.4	10.6	12.6
Total	6.8	17.6	21.0	17.4
<b>Persons</b>				
Self-employed	6.0	11.1	13.0	9.5
Regular	0.0	1.9	1.7	1.5
Casual	4.3	7.9	6.9	6.5
Total	4.5	8.6	9.6	7.1

Source: Computed from unit level NSS employment-unemployment survey data for different years.

The data shows that there is a distinct gendered pattern in part-time employment. Part-time work is much more common among women workers - more than five times as high (Table 13). Overall one in five or six women workers report themselves as part-time workers. This is not only the case for self-employment but also for regularly employed women workers as those who are casual workers.

This gendered pattern of part-time work can be seen clearly for the industry level results for 2011-12, given in Table 14. Male part-time work is generally low, but is higher than average (other than agriculture) in community services, employment by households, construction and

education. Female part-time work is very high in a number of industries apart from agriculture. these include (in declining order) manufacturing, community services, employment by households, trade, construction, and hotels. Although, part-time work is generally expected to be low in regular and salaried work, for women workers, part-time work is very high among women workers in community services and employment by households (such work is regular only because it carries a monthly remuneration).

Most part-time work in India is in low remuneration and vulnerable work and is conditioned by worker attributes and the demand for such work. In common with homework, there are few laws that protect part-time workers and collective organizations and unions are rare among such workers. While the available empirical data does not support any systematic trends in such work, for females more distinct overall and industry specific trends are available, highlighting (as with homework) the increasingly gendered nature of such work.

**Table 14. Percentage of male and female workers reporting part time work industry-wise**

Industry group	Male				Female			
	Self-employed	Regular Salaried	Casual	Total	Self-employed	Regular Salaried	Casual	Total
Agriculture	4.8	0.1	4.0	4.5	21.1	1.2	11.2	17.5
Mining	1.3	0.0	2.8	1.6	70.4	0.0	0.0	6.7
Manufacturing	2.9	0.4	4.0	2.0	32.5	2.8	15.9	26.4
Electricity	1.7	0.6	0.0	0.6	100.0	1.2	76.7	2.1
Construction	1.5	1.9	4.1	3.7	7.9	0.0	14.7	14.4
Trade	2.6	0.9	5.0	2.4	16.4	4.2	9.5	14.6
Hotels	2.9	0.2	6.6	2.5	12.9	2.9	17.6	11.4
Transport	1.2	0.4	3.5	1.1	17.5	1.3	6.6	3.9
Finance	1.9	0.4	0.0	0.8	31.3	1.4	1.9	8.1
Real estate	2.3	1.4	4.4	1.9	22.1	1.5	24.8	5.2
Administration	---	0.2	0.0	0.2	---	1.6	0.2	1.6
Education	16.0	2.1	20.3	3.7	48.1	3.0	19.0	8.6
Health	2.1	0.6	0.0	1.1	27.2	3.4	3.8	6.9
Community	4.9	1.3	11.2	4.7	20.8	11.5	31.3	18.8
Household	---	3.4	4.9	3.8	---	13.4	34.2	17.2
Total	3.9	0.8	4.1	3.3	23.0	4.6	12.6	17.4

Source: Computed from unit level NSS employment-unemployment survey data for different years.

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## 6. Contract workers

### 6.1. Regulatory framework and data base

“Contract labourers” are those workers in India who have been hired in connection with work in an establishment through a “contractor” whereas a contractor includes both those who have undertaken to supply workers for work in an establishment, and undertake any work in an establishment to produce a given result with the help of contract labour.<sup>6</sup> Elsewhere in the world, contract workers are referred to as “dispatch workers or labour dispatch”, “labour brokerage” or “temporary agency workers” (ILO, 2015).

The Contract Labour (Regulation and Abolition) Act, 1970, (CLRA) regulates the employment of contract labour in establishments in India. The Act does not apply to establishments in which work of an intermittent (less than 120 days a year) or seasonal (less than 60 days a year) nature is performed. The Act defines a contractor and a principal employer. The former definition includes both a contractor and sub-contractor, including a works contractor undertaking work in the establishment. Workers covered under the Act do not include managerial or supervisory workers (drawing more than a certain amount of income) or outworkers. The Act provides for establishment of Central and State Advisory Boards. Under Section 10 of the Act, the appropriate government can prohibit the employment of contract labour in any process, operation, or work in an establishment after examining the nature of this work. Ordinarily, the use of contract labour is intended to be prohibited in “core activities” which are of a perennial nature.

The Act provides a modicum of protection to such workers by regulating their conditions of work, including payment of wages, and social security. Establishments employing more than a certain number of contract labourers (usually twenty) as well as contractors supplying more than a certain number of contract labourers (again, usually twenty) are required to register with the Departments of Labour and furnish regular returns on workers employed, wages and social security, as well as facilities provided to such workers.

Thus, under the law, contract labour which comes under the purview of the CLRA is required to be registered and registered contract labour is entitled to certain provision such as minimum wages and overtime, as well as social security provisions such as ESIC and the EPF, which are built into the provisions of these specific laws/statutes.

However, contract labourers do not get protection under the Industrial Dispute Act, 1951, as well, the Industrial Employment (Standing Orders) Act, 1946, which applies to every industrial establishment employing more than 100 workers. Both these Acts relate to employment protection, and the hiring and firing of workers (including lay off and retrenchment).

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<sup>6</sup> The Contract Labour (Regulation and Abolition) Act of 1970 defines contract labour and contractor in Clause 2(b) and (c) of the Act as follows: “(b) a workman shall be deemed to be employed as “contract labour” in or in connection with the work of an establishment when he is hired in or in connection with such work by or through a contractor, with or without the knowledge of the principal employer; (c) “contractor”, in relation to an establishment, means a person who undertakes to produce a given result for the establishment, other than a mere supply of goods of articles of manufacture to such establishment, through contract labour or who supplies contract labour for any work of the establishment and includes a sub-contractor.”

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Employers have sought removal of Section 10 of the CLRA which under Sub-section (2) lays down guidelines for deciding upon the abolition of contract labour in any process, operation or other work in any establishment (Sundar, 2010, 2014; Anant, 2009; AIOE, ud).

Notably India is not a signatory to ILO Convention CO94 (*Convention concerning Labour Clauses in Public Contracts*). This is because the CLRA does not contain provisions analogous to provisions in Articles of the Convention. Article 3 of the Convention calls for payment of wages, allowances and other conditions of labour which are “not less favourable than established for work of the same character in the trade or industry concerned in the district where the work is carried on” and lays down the criteria for determining these conditions.

These issues have been debated in India for many years but amendments to the CLRA have not been forthcoming. The Second National Labour Commission (2002), the Tripartite Indian Labour Conference, and the Ministry of Labour, as well as have all mooted amendments to the CLRA which would provide wages to contract labour on par with regular workers (Sundar, 2010, 2011; AIOE, nd). The Government of India, since 2000, has been discussing the CLRA in the context of the changing requirements of industry in the wake of globalisation. The issue of contract labour was widely discussed in the 41st of the Indian Labour Conference (ILC) held in 2007, and then discussed in the 42nd and 43rd sessions of the Indian Labour Conference in 2009 and 2010. In the 42nd Session of the Indian Labour Conference a Tripartite Group was constituted to examine the provisions in the Contract Labour (Regulation and Abolition) Act, 1970 and to suggest amendment to the Act. But there was no consensus on the proposed Amendments with employers opposing equality of wages between contract and regular workers and advocating abolition of Section 10 of the Act.<sup>7</sup>

However, the State Labour Ministers’ Conference held on 22nd January, 2011, proposed to amend the Act and the Ministry mooted this proposal to government in 2011,<sup>8</sup> but it was kept on hold, pending an examination of its implications. The proposed amendment would have entitled contract labour to the same wage rate, holidays, and hours of work and social security provisions as regular workers and would have effectively brought the CLRA in sync with the ILO Convention, which is restricted to public contracts. However, in the absence of such an amendment, the government of India's legislation is not in line with the convention and cannot be ratified by it.

As regards data on contract labour, the Ministry and Departments of Labour do not provide data on the numbers of contract labourers, contractors or employers registered with them. The All India Organisation of Employers cites a study by the V. V. Giri National Labour Institute that out of an estimated 36 million contract workers in India only about six million are covered by

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<sup>7</sup> Record of proceedings of the ILCs on <http://labour.gov.in/upload/uploadfiles/files/Divisions/LC&ILAS>.

<sup>8</sup> The Ministry proposed the following provision as amendment to the Act: “In case where the contract labour performs the same or similar kind of work as the workmen directly appointed by the Principal Employer, the wage rates, holidays, hours of work, social security and other conditions of service of contract labour shall be the same as is available to the workmen on the rolls of Principal Employer. In case, same or similar kind of work is not being performed by the workmen directly employed by the Principal Employer, the Appropriate Government will notify the wage rates, holidays, hours of work, social security and other conditions of service.”

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the CLRA (AIOE, ud). Data for registrations under the Central Sphere is available from time to time and shows that these workers numbered less than a million in 2005-06.<sup>9</sup>

The only systematic source of data on contract labour is available for organized manufacturing, from the Annual Survey of Industries (ASI) in which factories registered under the Factories Act, 1948, are required to provide data on workers directly engaged by them or engaged through contractors. This data leaves out of its purview all establishments not covered by the Factories Act as well as all workers in factories not registered as contract workers which is a significant omission.

In the subsequent part of this section, we review some of the studies which deal with the employment of contract workers in Indian organised (formal) manufacturing and the impact of such employment, and then analyse the trends in the employment of contract workers, based on secondary data and unit level analysis of ASI data from selected rounds. We also draw upon the results of a recent study of the organized garment industry in the National Capital Region of Delhi, and then conclude with a discussion of policy changes on the anvil and the implications of these recent patterns for policy.

## **6.2. Labour market rigidity, its impact, and contract workers**

Studies on contract labour in India have linked the use of contract (informal) labour to excessive labour market rigidities in India due to employment protection legislations which restrict employment termination. The main focus in the literature has been on the provisions of Industrial Disputes Act (1947) which places restrictions on individual and collective dismissals. Section 15B of the Act which requires factories with more than a hundred workers wanting to retrench workers to seek prior permission from workers has been especially singled out in the debate.

Much of the empirical literature in this context tries to show that (a) the Employment Protection Legislations (EPL) have led to slowing down of formal employment creation in large scale production and higher capital intensity, with employment expanding faster in small-scale factories, below 100 workers, or in the unorganized sector (below 10/20 workers); (b) States in India with more liberal EPL have experienced faster rate of industrial and employment growth; (c) liberalization of labour laws in these states has also led to productivity gains.

The law regulating the use of contract labour has also been criticized for being unduly restrictive, the assumption being that a liberal contract labour law would permit (formal and informal) employment to expand faster in the formal sector. Similarly, the Factories Act, which also regulates conditions of work in factories, including hours of work and overtime is also criticized for not permitting sufficient flexibility to employers. It is also argued that Indian labour legislation also lacks sufficient clarity on fixed term employments with termination of workers on fixed term contracts also deemed to be within the purview of the Industrial Disputes Act, although recently the courts have stepped in and have given significant freedom to employers to hire workers on fixed term contracts (Dougherty, 2008).

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<sup>9</sup> Agenda notes for the 41<sup>st</sup> Indian Labour Conference (in proceedings of the ILCs on <http://labour.gov.in/upload/uploadfiles/files/Divisions/LC&ILAS>).

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In terms of the legal framework, OECD studies (Dougherty 2008) have shown that comparing India with other countries, Indian labour laws are rigid in a number of respects. The OECD methodology evaluates the stringency of a country's labour regulations in three areas viz those for regular (indefinite contracts), for temporary or fixed term contracts, and for collective dismissals.

In early 2007, for regular contracts, Indian labour laws were considered stricter to all but two OECD countries. This was mainly due to the restrictions on lay-offs, even for one worker, placed by Section 5B of the IDA for all factories with 100 or more workers. If these restrictions were not in place, then India would fare at the average level for OECD countries. This was indeed the situation for Indian tertiary sector (Dougherty, *ibid.*).

For temporary or fixed term contracts, India is considered to be just above the average for OECD countries, mainly because of the relaxation of the contract labour legislation, and the permission granted through a Central government notification to allow fixed term contracts for white collar workers, and in principle for other regular workers. A Supreme Court judgment of 2006 has further cleared the ground for renewal of temporary contracts, subject to payment of severance payments as per the law (Dougherty *ibid.*).

On collective dismissals, India's labour laws are shown to be particularly inflexible, more than any other country, and this was the product of several provisions of the IDA, particularly Section 5B (*ibid.*).

Most empirical studies on the above issues focus on manufacturing (EPL for services and other sectors needs to be considered on a different footing) and use a labour rigidity index for Indian states (with or without modification) which was compiled and used by Besley and Burgess (2002, 2004) with data for the period 1949 to 1992 for state level amendments to the IDA. This index has been severely criticized (Bhattacharjea, 2006, 2009) and its state level rankings have also been shown to be inconsistent with other rankings (Papola, Pais and Sahu, 2008, chapter 8). More recently, the OECD has also come up with a labour reforms index for Indian states which has been based on reforms in eight areas of labour laws and their implementation (Dougherty, *ibid.*) which has been used in a few studies. For other variables, studies use data from the Annual Survey of Industries and/or the National Sample Survey.

One of the issues with using an index of labour rigidity/reform across states is that states have been undertaking *de facto* and *de jure* changes in labour market regulation at different speeds and in different sequences after the period of economic reform. These reforms encompass changes in the inspection system, in IDA, in the Contract Labour Act, and in the applicability of labour laws to groups of industries (such as Service sector industries, IT, or those located in Special Economic Zones) (Papola, Pais and Sahu, 2008; Sundar, 2008; Sharma and Kalpana, 2008; Banerjee, 2008). Further, *de facto* changes have occurred due to decline in the availability of personnel and resources in the labour departments, and greater willingness of governments and the courts to support employers (Papola et al., 2008; Dougherty, 2008; NCEUS, 2009b).

In a study to analyse the impact of size dependent labour regulations in Indian manufacturing, Ramaswamy (2013) has used unbalanced ASI panel data of ASI for the period 1998-99 to 2007-08. He finds contract worker intensity is found to be higher in size class 50-99 indicating that firms use contract worker to stay below size threshold of 100. He also finds that the average contract-worker intensity of factories in size group 50-99 is found to be higher in labour intensive industries located in states categorized as inflexible. He argues that not only does the presence of presence of significant threshold effect suggest loss of potential output gain,

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contrary to the job security enhancement, the employment status of average workers in establishment close to 100 workers appear to be worse and more vulnerable.

In an attempt to study whether firms in stricter labour regulations differentially hire more contract workers in response to transitory demand shocks, Chaurey (2013) has used ASI panel data from 1998 to 2008 and three rounds of NSS data. Demand shocks are proxied by rainfall conditions. Chaurey finds that faced with transitory demand shocks, firms located in pro-worker labour regimes differentially hire more contract workers as compared to firms in pro-employer regime but there is no difference in the hiring/firing of permanent workers across labour regimes in response to demand shocks. This suggests that contract workers have indeed added more flexibility to firms hiring decisions, especially in regions where there are restrictions on the firing of permanent workers.

Goldar and Aggarwal (2012) have used the NSS 61<sup>st</sup> Round data on employment-unemployment (2004-05) to examine the impact of import competition and labour market reforms at the state level in India on informalization of labour. They find that while Import competition in the post-reform period has increased informalization of labour in Indian manufacturing, labour market reform at the state level tended to help in the creation of regular salaried/ wage employment opportunities in manufacturing.

Sen, Saha and Maiti (2010) have analysed the determinants of the firm's choice between employment of formal workers and contract workers with special focus on the role of trade openness and labour institutions. They use three digit level ASI data 1998-99 to 2004-05 for 15 major Indian states. Import penetration and export orientation ratios are calculated using trade and industrial output data of the World Bank. Worker's de jure and de facto bargaining power is captured using a modified Besley-Burgess index and the strike to lockout ratio. The results of this study show that more pro-worker labour institutions leads to a higher use of contract workers and a greater bargaining power of firm management leads to a lower use of contract workers. They also show that a higher level of import penetration leads to a rise in the share of contract workers to total workers.

Ahsan and Pages (2007) have studied the economic effects of amendments on different types of labour laws as well as of the increasing use of contract labour in India. They examine which type of labour laws matter the most for economic outcomes and differentiate the effects of legislations regarding settlement of labour disputes from effects of employment protections laws, including restrictions on firm closure. This study also assess whether de facto deregulation dampened the effect of labour laws. They also identify the effect of labour reforms from the effect of contemporaneous unobserved policy on macroeconomic changes. They distinguish between three types of effects of labour laws - price effect, expropriation effect and rigidity effect. Price effect occurs when regulation increases cost of labour. Expropriation effects are related to holdup problems that occur when labour laws make it easier for workers to appropriate part of the returns of employer's investment once they are sunk. Rigidity effects occur when labour laws make adjustment of labour more costly and difficult. While price and expropriation effect reduces demand for labour, the rigidity effect leads to net employment gains. They use a modified Besley-Burgess index and data for the period 1959-97. Their results show that regulations that restrict employer's ability to adjust employment or that increase the cost of solving industrial output are associated with large output losses in the registered sector and an expansion of the unregistered sector. Further, strict regulations are associated with firm closures, lower investment and reduced output in the registered sector which dries up the demand for labour, offsetting any positive effects on worker's bargaining power brought by the laws.

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A study by Dougherty (2008) analyses the impact of labour market rigidity on job creation and job destruction. Job creation and destruction are measured at aggregate 3 and 5 digit levels and hence is probably underestimated. The study concludes that Indian labour reforms at the state level had an impact, but were not sufficient to outweigh the negative impact of labour market rigidities. It also argues that this rigidity arose not only from the IDA but from the wider range of labour laws. It advocates a comprehensive law which offers moderate levels of protection to all types of workers and does not discriminate by size of enterprise. The law could provide higher compensation for redundancy, and for training. It also advocates a higher use of contract labour and fixed term contracts. It also advocates more state level reforms.

In another paper, Dougherty, Frisancho, and Krishna (2011) analyse ASI panel data and find that the modest easing of labour regulations in Indian states in recent years was enough for firms in reforming states to benefit substantially through gains in productivity. Plants in labour-intensive industries and in faster reforming states were much more productive than their counterparts in slow reforming states. They also find that larger firms which used more contract labour as well as public sector firms which used costly strategies to retrench labour did less well than smaller plants and private plants, which experienced largest productivity gains from state-level labour reforms.

Hasan and Jandoc (2012) find that states with flexible labour regulations have a greater prevalence of large-sized labour intensive forms; although otherwise there is little difference in the size distribution of firms across states. This corroborates the main conclusions of the Dougherty et al. study (ibid.). However, while Hasan and Jandoc note that the use of contract labour has had an adverse impact on the industrial relations climate, their findings do not examine the kind of employment that is created in large sized labour intensive firms in flexible states.

With the exception of Dougherty et al (2011), existing studies do not directly analyse the impact of contract labour, although by implication, they show that the association of rigid labour laws with contract labour hiring leads to a potential loss of output and decline in the quality of employment.

In a recent and as yet unpublished paper Goldar and Suresh (2014) have explicitly analysed both the causes and impacts of contract labour.

First, in order to study the relationship between labour regulation and extent of use of contract labour, they use two digit ASI data of 17 major states for 2010-11 and four alternative labour reforms index. They find that (a) the use of contract workers tends to be relatively greater in capital intensive industries; (b) no empirical support was found to the view that use of contract workers is primarily attributable to labour market rigidities; (c) reforms relating to the factories Act tend to reduce the use of contract workers; (d) other reforms tend to raise the use of contract workers.

They further use unit level ASI data for 2006-07 to analyse the impact of the use of contract labour on productivity and wages. A Cobb Douglas production is used with labour, capital, energy, and materials as inputs, and contract intensity and import intensity as other variables. The study finds that the use of contract labour tends to lower productivity and that beyond a threshold level, use of imported material has a positive impact on productivity.

In a related exercise, they find that wage rate has a positive effect on the productivity of regular workers. They also find that the wage rate of contract workers has a positive impact on wage rate of regular workers, and conversely, the use of contract workers curbs the bargaining

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power of directly employed workers and hence lowers their wages. They also find that the adverse effect of hiring contract workers on the wages of regular workers varies across firms. It is relatively higher in factories paying high wages to regular workers.

Papola, Sahu and Pais (2008) point out that issues of labour market rigidity dominate the academic and much of the policy debate in India, whereas tripartite discussions and various Commissions have highlighted two other issues viz. labour market duality and the need to bring the excluded segments of informal workers into the regulatory framework, and the need to rationalize, simplify, and harmonise existing labour laws (cf. NCEUS 2009, p. 168). Scholars have argued that there is increased de facto flexibility in Indian labour markets due to greater use of temporary, casual, and contract labour, sub-contracting, weakening of the bargaining power of workers, and stronger pro-employer attitudes of governments and courts (Papola et al., 2008; Papola, 1994, Bhattacharjea 2006, Ahsan and Pages 2006). As discussed earlier, de facto liberalisation of labour laws has also occurred, although not to the extent demanded by industry or stressed in many policy documents.

Papola et al (ibid.) point out that most studies on labour market structures and their impacts in India have focused almost exclusively on chapter 5B of the Industrial Disputes Act, which deals with retrenchments. They also point out that the results of these studies are not unambiguous. The methodological limitations underlying several of the influential studies have been discussed by Bhattacharjea (2006).

Following Papola (1994) and Kannan and Raveendran (2009), the NCEUS (2009) suggests that decline and increase in employment has, in fact, taken place, on account of markets and technology (ibid.: 172). In fact, several studies suggest that the growth of employment and output in Indian manufacturing has to be seen in the light of several factors, including business cycles, industrial policies and incentives, availability of infrastructure, and so on, and labour institutions are only one of the factors influencing these variables (Neethi, 2008; Anant, 2009; D'Souza, 2008).

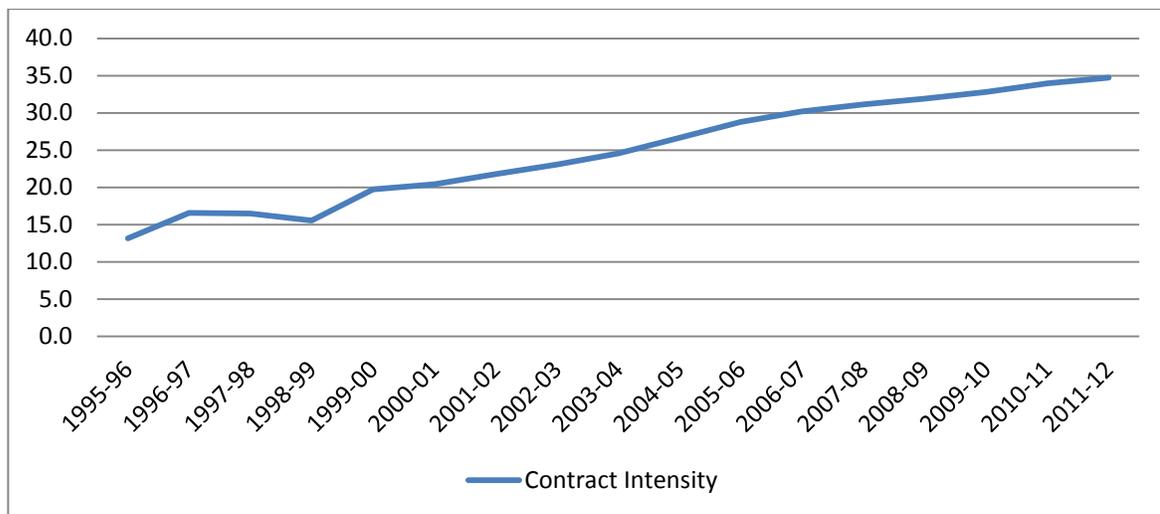
However, the Second National Commission on Labour (SNCL) and the NCEUS have not disputed the need to change the system of labour regulation in India, also necessitated by the new competitive milieu under globalization. Enforcement of the CLRA has weakened with very low and declining levels of inspection and a smaller proportion of prosecutions and convictions (Anant et al., 2006). NCEUS (2009) has pointed out that State governments have been liberally granting permission for lay-offs under Section 5B of the IDA but the Commission has not disputed the need to provide employers greater flexibility in relaxing rules for lay-offs or retrenchment provided the state can act as an employer of the last resort and social security provisions and training provisions can be strengthened.

In the empirical analysis which follows, we show that recent trends in employment of contract labour as well of total employment cast some doubts on the empirical foundations of several studies which are based on the premise that growth of contract labour employment is a response to the rigidity in hiring workers. In fact, it shows that while on the one hand, contract labour serves several functions for employers, on the other, the growth of total employment is more a function of overall economic conditions, as has been argued by Papola et al (ibid.).

### 6.3. Trends in hiring of contract workers in organized manufacturing

Analysis of the ASI data shows that the incidence of contract labour was negligible till the early 1970s. By the mid-1980s, about 12.1 per cent of the manufacturing workers were engaged through contractors. This percentage increased marginally to 13.5 per cent in 1991-92 and then fluctuated between 15 and 17 per cent between 1996-97 and 1998-99. In 1998-99, the percentage of workers engaged in manufacturing was 15.6. Since 1999-00, there has been a sharp increase in contract workers in manufacturing and currently more than a third of the workforce in Indian manufacturing – 34.7 per cent in 2011-12 - is engaged through contractors (Figure 2).

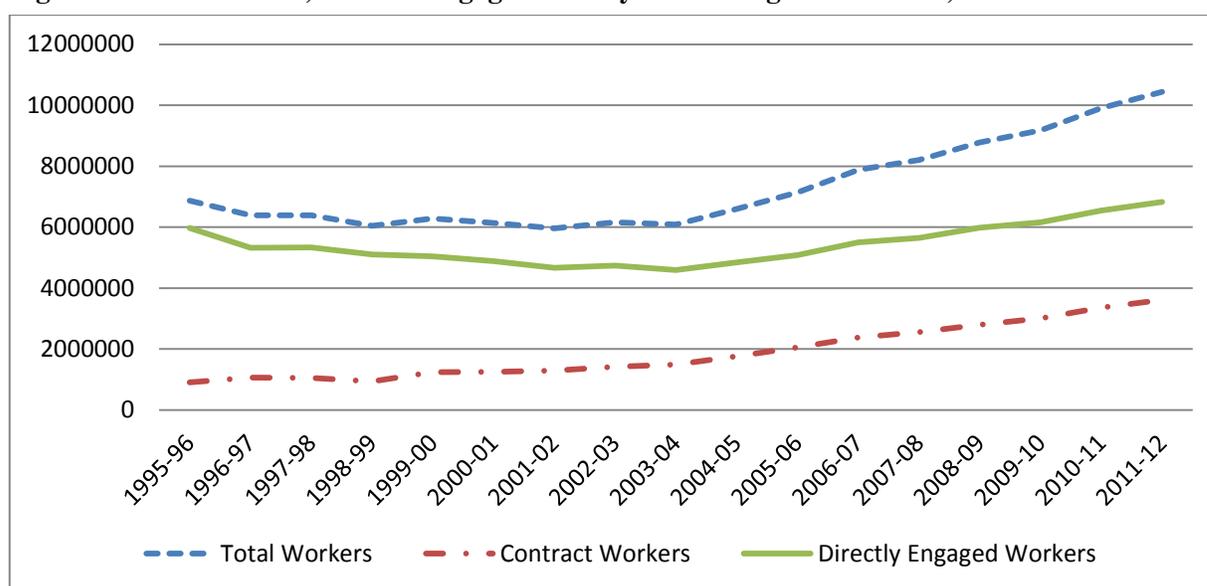
**Figure 2. Percentage of contract to total workers in organized manufacturing**



Source: Computed from unit level ASI data for various years

Between 1995-96 and 2011-12, along with rising contract intensity, the number of contract workers increased from about 900,000 to 3.6 million. However, since most available studies are based on data up till the middle of the last decade, it is important to note that this entire period was characterized by different growth trends in the employment of directly engaged workers and total workers.

**Figure 3. Total workers, workers engaged directly and through contractors, 1996-97 to 2010-11**



Source: Computed from unit level ASI data

Over the period as a whole, employment of workers in registered manufacturing grew at an average annual rate of 2.8 per cent but the employment of workers engaged through contractors grew at the rate of 9.4 per cent while that of directly engaged workers grew by only one per cent per year (Table 15).

But as Figure 3 shows, both the numbers of directly engaged workers and total workers declined between 1995-96 and 2003-04, and then have shown an increase. While the numbers of total workers engaged in organized manufacturing recouped to the 1995-96 level only in 2005-06, that of directly engaged workers recouped to the earlier level only in 2008-09. In the face of total workforce decline, contract workers effectively substituted for directly engaged workers. As per the ASI data, growth rate of employment in organized manufacturing picked up after the growth rate of Indian economy accelerated in 2003-04. But interestingly, it maintained this momentum even after economic slowdown in 2008-09.

**Table 15. Period-wise annual average growth rates in employment of workers, 1996-97 to 2011-12**

Period	Total workers	Contract workers	Directly engaged workers
1996-97 to 2003-4	-1.4	7.1	-3.2
2004-5 to 2011-12	7.0	11.7	5.1
1996-97 to 2011-12	2.8	9.4	1.0

Source: Computed from unit level ASI data

As Table 15 shows, between 1995-96 and 2003-04, the directly engaged workforce declined by 3.2 per cent a year and total worker employment also declined by 1.4 per cent a year but contract workers grew by 7.1 per cent a year. But between 2003-04 and 2011-12, total worker employment grew at a brisk rate of 7 per cent a year, and the employment of directly engaged workers also grew at a very healthy rate of 5.1 per cent a year, while that of contract workers grew by 11.7 per cent a year. As discussed earlier, the NSS also corroborates both the growth of

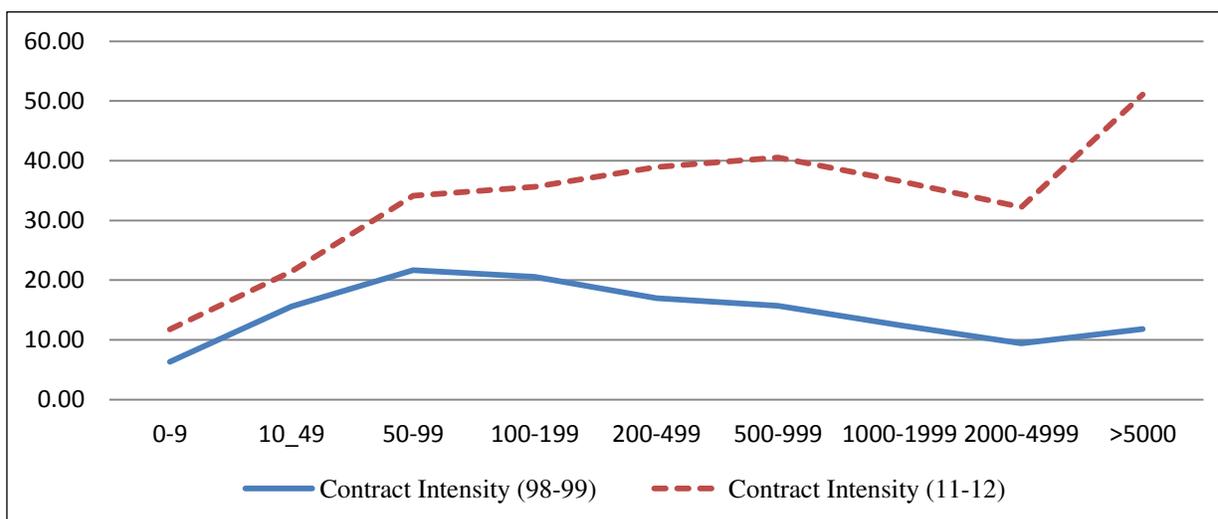
paid employment in organized manufacturing as well as the growth of formal employment, but it also shows that informal paid employment grew at a much faster rate in the organized manufacturing sector. These trends, contrary to observations in studies, are based on earlier trends. While definitions differ, these employment trends are confirmed in several studies (Ghose, 2014; Mehrotra et al., 2013).

The latter period has been a period of very high growth and high profits in Indian manufacturing as well as high overall growth of the Indian economy, stimulated by growth of the international economy, and later by internal stimulus (Srivastava, 2013a). These results corroborate the observations of Papola et al. (2008) and Kannan and Raveendran (2009), that the growth rate of employment in organized manufacturing depends on a number of factors, including market conditions and technological conditions, and not only on constraints imposed by labour market rigidity. Although the latter has been reduced by *de jure* and *de facto* changes, it remains high on international benchmarks.

One of the main issues in the engagement of contract labour in India is that due to the operation of the Industrial Disputes Act, there is a threshold effect (Ramaswamy, 2013) with contract intensity higher in firms with less than 100 workers. Further, it is argued that this threshold effect leads to an increase in the clustering of firms with less than a hundred workers (indeed also in the unorganized sector, i.e. in firms with less than twenty workers without power or ten workers with power).

Figure 4 shows the contract intensity by firm size (in terms of number of workers, 1998-99 and 2011-12. In 1998-99, contract intensity did peak for firms employing 50 to 99 workers. But this has changed very significantly in recent years. In 2011-12, the largest size firms (employing more than 5000 workers) showed the highest contract intensity.

**Figure 4. Contract intensity, by size of factory in terms of number of workers - 1998-99 and 2011-12**



Source: Same as Figure 3 above

**Table 16. Factories and workers by factory size-class in 1998-1999 and 2011-2012**

Year	Factory size category in terms of number of workers					All
	0-49	50-99	100-499	500-999	>=1000	
<b>No of factories (,000)</b>						
1998-99	100.4	10.8	10.2	1.2	0.9	123.5
2011-12	133.1	17.5	18.3	2.7	2.3	173.9
<b>No of workers (,000)</b>						
1998-99	1409.3	725.2	1857.1	664.4	1649.0	6305.0
2011-12	1943.1	1201.0	3347.0	1347.4	2603.1	10441.6
<b>Percentage of factories</b>						
1998-99	81.3	8.7	8.2	1.0	0.7	100.0
2011-12	76.5	10.1	10.5	1.6	1.3	100.0
<b>Percentage of workers</b>						
1998-99	22.4	11.5	29.5	10.5	26.2	100.0
2011-12	18.6	11.5	32.1	12.9	24.9	100.0

Source: Same as Table 15.

Further, while small sized firms continue to predominate in Indian manufacturing, recent trends show a clear trend towards declining share of small-sized factories in terms of number of factories and employment. The all India figures are given in Table 16. In absolute numbers, both the number of factories and the number of workers employed has grown in all size categories between 1998-99 and 2011-12. But the percentage of factories employing less than a hundred workers declined from 90 in 1998-99 to 86.6 in 2011-12. The percentage share of factories employing more than 500 workers increased from 2.1 to 5 over this period. Medium-large sized factories also show significant increases in employment over this period, with increasing employment share. Small factories, with less than a hundred workers, employed 33.9 per cent of all factory workers in manufacturing in 1998-99, while in 2011-12, the corresponding share was 30.1 per cent.

The changing structure of the factory sector, along with the growth of both directly engaged and contract workers does not corroborate the view that rigid labour laws are a binding constraint on employment expansion or scale expansion in India's manufacturing sector. At the same time, the proliferation of very small units and the extensive and growing use of contract workers both in manufacturing and in other sectors remain important policy issues.

#### **6.4. State level variations in engagement of contract workers**

There are wide inter-state and inter-industry variations in the incidence of contract labour, attributed in most of the literature, examined earlier, to labour market rigidities induced by labour laws. These variations are shown in Table 17 which shows the percentage of contract labour in registered manufacturing in 1996-97 and 2010-11 as well as the per cent point increase in the incidence of contract labour over this period.

**Table 17. Incidence of contract labour (per cent) in organised manufacturing across States and per cent-point increase, 1998-1999 & 2011-2012**

Year	1998-99	2011-12	Increase
Haryana	30.01	50.35	20.34
Jammu & Kashmir	20.48	49.75	29.27
Andhra Pradesh	14.78	48.33	33.55
Odisha	27.22	48.16	20.93
Bihar	40.44	47.81	7.37
Uttar Pradesh	22.74	42.44	19.70
Maharashtra	16.54	40.68	24.13
Madhya Pradesh	14.02	38.06	24.04
Rajasthan	21.23	37.18	15.96
Gujarat	25.17	35.09	9.92
West Bengal	7.07	33.05	25.98
Punjab	19.08	28.68	9.60
Himachal Pradesh	14.21	23.06	8.85
Karnataka	8.97	21.89	12.92
Assam	7.65	21.01	13.36
Tamil Nadu	9.07	19.54	10.48
Kerala	4.41	14.55	10.14

Source: Computed from unit level ASI data for 1998-99 and 2010-12.

Note: The figures for Madhya Pradesh, Uttar Pradesh and Bihar are for combined (pre-bifurcation) States, as in 1998-99.

In 1998-99, Bihar had the highest incidence of contract labour (40.44 per cent), followed by Haryana (30.01 per cent), Odisha (27.22 per cent), and Gujarat (25.17 per cent). In 2011-12, the states with the highest contract labour incidence were Haryana (50.35 per cent), Jammu & Kashmir (49.75 per cent), Andhra Pradesh (48.33 per cent), Odisha (48.16 per cent) and Bihar (47.81 per cent). Thus, in these four states, almost half the workers were contract workers. They were followed by Uttar Pradesh, Maharashtra, Rajasthan, Gujarat and West Bengal. In each of these states, more than one-third workers in organised manufacturing were contract workers.<sup>10</sup>

In Table 18 we have categorized states on the basis of contract intensity in 1999-00 and per cent change in this intensity between 1999-2000 and 2010-2011. Most states experienced a very increase in contract intensity between these years. The states with the highest per cent point increase include Andhra Pradesh, Jammu & Kashmir, West Bengal, Maharashtra and Madhya Pradesh. Other states which experienced very high change are Odisha, Uttar Pradesh and Haryana. Among these states, West Bengal had a very low incidence of contract labour in 1998-1999.

<sup>10</sup> The figures for Andhra Pradesh in 1998-99 differ significantly from those in preceding or succeeding year, which are much higher with contract intensities exceeding 40 per cent.

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**Table 18. State level contract intensity and change between 1999-2000 and 2010-2011**

Level (contract intensity - % in 1998-1999)	Change in contract Intensity (per cent point), 2011-12 over 1998-99			
	Low (< 8)	Medium-Low (8-16)	High (16-24)	Very High >24
Low (<=10)		Assam, Karnataka, Kerala, Tamil Nadu		WB
Medium-low (10-20)		HP, Punjab		AP, MH, MP
High (20-30)		Gujarat, HP, Rajasthan, Punjab	Odisha, UP	J&K
Very high (30-40)	Bihar		Haryana	

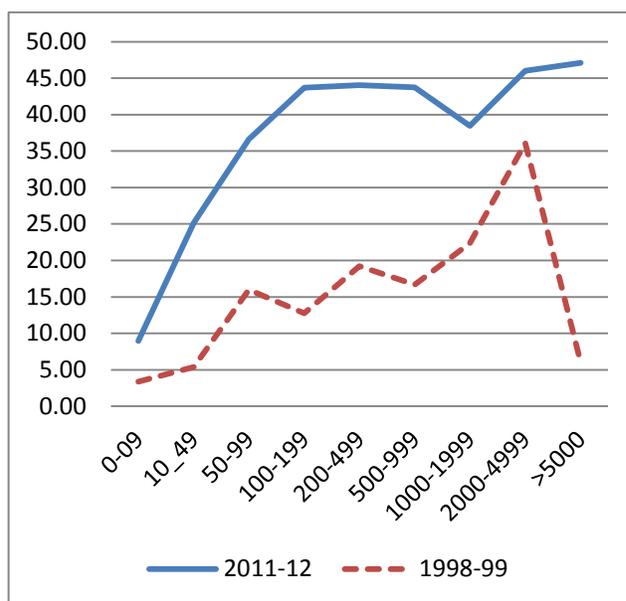
Source: Computed from unit level ASI data for 1998-99 and 2011-12

How does the changing incidence of contract labour relate to rigidity in labour laws? As mentioned earlier, OECD has prepared a labour reforms index score in early 2007 for 21 states, which is based on a number of questions in eight specific areas, including the Contract Labour Act. We have calculated the correlation between contract labour incidence in 2011-12 and the overall index score as well as the score for reforms in the contract labour Act. The former correlation coefficient is -0.05 and the latter is -0.15, both negative and insignificant.

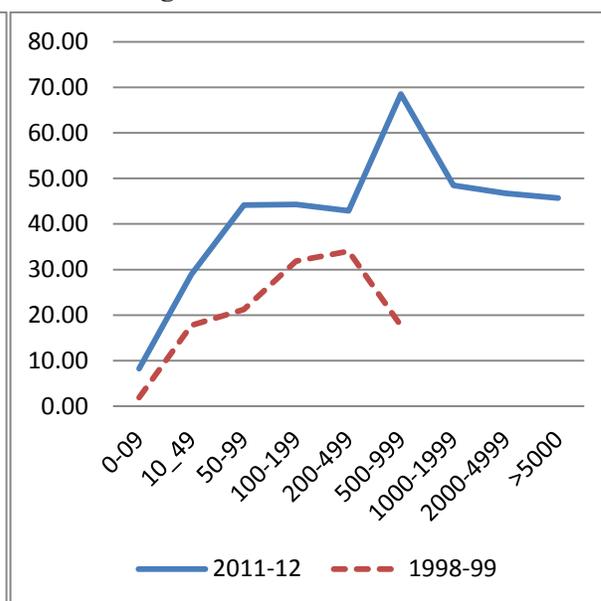
Figures 5(a) and 5(b) below present contract worker incidence in two States – Uttar Pradesh and Chhatisgarh, which have the highest and lowest labour reform scores in the OECD index.

The pattern of shift in these two states is quite similar, with a significant increase in contract worker incidence in the higher factory size groups. These results again suggest that the use of contract labour in industries is not only a response to different degrees of labour market rigidity.

**Figure 5a. Contract worker incidence in UP**



**Figure 5b. Contract worker incidence in Chhattisgarh**



Source: Same as Figure 3

## 6.5. Industry-wise profile of contract workers

We have shown above that between 1998-99 and 2011-12, there has been a change in the pattern of contract labour hiring across factory size. This pattern holds across a large number of industry groups. Further, between 1998-99 and 2011-12, there has been an expansion in contract worker hiring across industry groups so that the incidence of contract labour is less concentrated in 2011-12 than in 1998-99.

In 1998-99, the top ten industries with the maximum contract workers accounted for 71.5 per cent of contract workers while the top twenty industries accounted for 88.3 per cent of contract workers. In 2011-12, the top ten industries in terms of numbers of contract workers, accounted for 56.2 per cent of contract workers while the top twenty industries accounted for 79 per cent of the contract workers.

Table A (Appendix Table) gives contract intensity, percentage of contract workers, and change in contract intensity, in 1998-99 and 2011-12 (in descending order of contract intensity in 2010-11) at the 3-digit NIC code level.

In 1998-99, industry Group 371 (Recycling of Waste and Scrap) had the highest CI (73.6 per cent), followed by Group 153 (Manufacture of grain mill products etc.) (38 per cent), Group 269 - Manufacture of Non-metallic Mineral Products (35.5 per cent) and Group 151 (Production, Processing and Preservation of Meat, Fish etc. - 35.4 per cent).

In 2011-12, building of Ships and Boats (NIC 351) had the highest CI (69.7%), followed by Manufacture of Tobacco Products (NIC 160) – 65.5 per cent, Mining and Quarrying (NIC 142) – 65.2 per cent, Manufacture of Bodies for Motor Vehicles, etc. (NIC 342) – 64.6 per cent. The CI exceeded 50 per cent in nine industries.

The largest increase in contract intensity appears to have taken place in relatively capital intensive industries. Apart from tobacco products, for which as mentioned earlier, estimates for 1998-99 are exceptionally low, these were Mining and Quarrying, Manufacture of Coaches, TV, radio and transmission equipment; Building and Repair of ships, Manufacture of Railway locomotives; Motor Vehicle Parts, Manufacture of TV Receivers etc.

The general issue that arises is why do certain industries resort more to contract labour than others? This issue is explored below by analysing some of the possible correlates of contract labour hiring in two years (1998-99 and 2011-12).

We have correlated some of the key industry characteristics (at NIC 3 digit level) to the contract intensity in 1998-99 and 2011-12, as well to change in contract intensity between these two years (Table 19).

**Table 19. Correlation between contract intensity and certain industry characteristics**

	Wage/ GVA	Fixed capital/ workers	Invested capital/ workers	Wages/ total cost	Wage directly engaged/ contract worker	Annual growth in (GVA/ worker)	Annual growth in workers (1998-99 to 2011-12)
<b>Contract intensity (1998-1999)</b>	-0.02	0.124	0.125	- 0.283***	-0.3225**	0.098	0.3595**
<b>Contract intensity (2011-2012)</b>	0.089	0.196	0.173	0.069	-0.8264*	0.3355**	-0.018
<b>Change in contract intensity (%)</b>	0.4612*	-0.032	-0.061	0.2743** *	-0.079	0.5867*	-0.124

Source: Computed from unit level ASI data for 1999-00 and 2010-11

Notes: 1. \* - significant at 10 per cent level; \*\* Significant at 5 per cent level, \*\*\* Significant at 10 per cent level; 2. Contract intensities are correlated with variables values of the same year, whereas change in contract intensity is correlated with base year values.

One may assume that contract labour would be preferred in industries where numerical flexibility is important and this could be in industries where numerical requirement is high (labour intensive industries), or in industries which face demand fluctuations. Increasing contract labour should also reduce capital intensity unless there are other technological confer a cost advantage, which would be relevant if wage costs are high in a industry or if wage premium to directly engaged employees are high. Of course, other factors such as skill requirement and skill gap between directly engaged workers and contract workers could neutralize the cost advantage. On the growth side, flexibility to hire contract labour could encourage growth in employment of workers and also advantages. The second reason why contract labour may be preferred is that it may increase labour productivity – a result shown in some studies.

These results indicate that:

- Industries with a high wage to GVA ratio experienced a higher increase in contract intensity over time. The correlation is both positive and significant.
- Share of wage costs in total costs seems to matter. Industries with high wage to total cost ratio had a high CI in 1998-99 and such industries also showed a high increase in contract

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labour hiring over time. As a result, in 2011-12, the correlation between CI and wage /cost ratio was no longer significant.

- On the other hand, labour intensity by itself is not an important correlate of contract intensity or changes in it. CI is weakly but positively correlated with capital intensity in the both the initial and terminal year. The rise in capital intensity despite this association could be the result of independent technological factors.
- Surprisingly, the wage ratio between directly engaged and contract workers was inversely, significantly related to the contract intensity in both years. Industries with a smaller wage gap had higher contract intensity. The smaller wage gap in such industries could reflect their small skill gap or labour intensive nature.
- If there is a high differential between directly engaged and contract workers, then firms would hire more contract workers. But if there is a large and required skill gap between such firms, then they may not go in for a large proportion of contract workers. Results show that it is firms with a smaller wage gap that have a higher proportion of contract workers.
- Growth in number of workers over the time period was significantly correlated with contract intensity in 1998-99 but was not correlated with change in contract intensity between 1998-99 and 2011-12. This needs a closer examination of pattern of employment growth and change in industries (covering both contract and directly engaged workforce).
- Industries' growth in Gross Value Added per Worker was significantly related both with increase in contract intensity over time, and contract intensity across industries in 2011-12. This calls into examination the pertinent factors which may led to growth in GVA per worker.

Broadly, these correlations (or lack thereof) cannot be explained by a narrow set of variables, limited, for example, only to the labour market. We need a broader set of explanations which include industry specific factors, the (global) economic environment and the pattern of demand, and technological factors.

At the same time, there continue to be significant variations in firm level contract intensity *within* industries. This seems to suggest that firms within an industry can potentially follow different strategies with respect to labour hiring even within the same or similar regulatory regime and economic environment. These variations are also brought out by a study of the organised garment industry in the Delhi National Capital Region which is discussed in the next sub-section. The consequences of the diverse hiring practices within an industry is an understudied topic so far.

The analysis made so far has been limited to examining the trends and patterns, causes, and possible impacts of contract labour at the macro level. Below, we examine the nature of recruitment and of contractors, and the impact of contractor based recruitment on workers and on some of the impact on firms (through worker turnover and impact on training and skill development) based on field studies in two industries.

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## 6.6. Contract labour in the Delhi National Capital Region – the garment and construction industries

Studies on contract work reviewed earlier in this paper based on secondary data, mostly drawn from the Annual Survey of Industries. Estimates of contract workers in the ASI are based on information provided by factories and can be presumed to tally with the employment record maintained by them.

In what follows, we briefly report some results from a study of labour standards in two industries viz, garments and construction carried out in three districts - Delhi, NOIDA and Gurgaon, which are part of the Delhi National Capital Region in India and fall in three separate provinces - Delhi, Uttar Pradesh and Gurgaon. (Srivastava, 2014a, 2014b, *ibid.*)

Results discussed here are drawn mainly from the survey of the organised garment industry, since the results discussed in earlier sub-sections were also drawn from organized manufacturing sector data. The survey was based on interviews with workers, employers, and other informants, including contractors and trade unions. About 300 workers were interviewed from twenty-six factories and eight workshops in the Delhi Capital region (Delhi, Gurgaon, NOIDA). Each of the workshops were large enough to be registered as factories but had evaded registration due to peripheral location. In order to find out details of the labour laws and their implementation, and details of information furnished by contractors and employers covered in the survey, information was also sought from the labour law under a transparency law (Right to Information Act) and this was tallied with the information collected from other sources.

While none of the states furnished information on the “core” and “non-core” functions in the garment industry, and whether this distinction had been changed, the information based on applications filed by contractors for registration with the department, shows clearly that *all manufacturing processes in the garment industry were treated as non-core in all three states, and contract labour was permitted across the board, after due registration of employers and contractors.*

All the factories covered in the survey had more than fifty workers, and most had more than 100 workers for the most part of the year. These were categorised as small, medium and big on the basis of employment size.

The survey identified four types of recruitment processes: (i) Direct hiring by firms or managers; (ii) Hiring through in house labour contractors who could be employees of the firm, and could either be licensed or unlicensed contractors; (iii) Hiring through external labour contractors, who could again be licensed or unlicensed; (iv) Work Contractors - who could function in-house and hence whose employees would be within the purview of the Contract Labour Act, or could be outsourced work contractors (jobbers). *But recruitment practices varied between firms.*

In most factories, five to twenty per cent workers were directly engaged, but in seven factories all workers were found to be engaged directly. Directly engaged workers were either casual worker or regular workers, generally on oral contracts. Thirteen of the factories covered in the survey had licensed contractors. But not all workers recruited and supplied by them were officially on their rolls, and hence not all such workers received social security. Fifteen firms had unlicensed contractors, usually supplying twenty to fifty workers. These were on separate muster rolls and did not receive any social security. Two in-sourced work contractors were covered in the

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survey, both licensed, one of which had most workers on its rolls who also received social security. Only 1.7 per cent workers surveyed had written contracts, but 47.4 per cent were on indefinite oral contracts, while the rest were casually employed.

Workers employed through unlicensed contractors, and some proportion of workers employed through licensed contractors, or even directly engaged, were not on the main rolls of the contractor and/or factory, with their muster rolls and/or attendance sheets being maintained separately. These workers cannot, therefore, also be picked up in ASI data, which therefore most likely, underreports on contract workers, on total number of workers, and the most vulnerable section of the workers. The survey could not obtain an accurate estimate of such workers, but proxies, such as percentage of workers not reporting mandatory deductions for provident fund or health insurance (through subscription to the Employees State Insurance Corporation) could be used as proxy indicators.

The study found that working conditions were usually poorer for contract workers. Working hours were long for all workers, but longer for those recruited by contractors. While 37.8 per cent directly engaged workers received double overtime, only 5.3 per cent workers engaged by contractors received double overtime. No contract worker had a formal written contract. Contract workers and casual workers were worse off in terms of weekly holidays, paid leave, access to medical facilities and exposure to occupational health risks. While 61.5 per cent directly engaged workers made provident fund contributions, only 21.3 per cent contract workers made these contributions. In large, medium and small firms, 90.8 per cent, 92.7 per cent and 45.7 per cent directly engaged workers made provident fund contributions (this percentage being higher among regular workers than among casual workers), only 23.1 per cent, 40 per cent and 11.8 per cent contract workers in these firms respectively made these contributions.

But in terms of wages, the study found very little wage gap between take home wages of directly engaged and contract workers (see also Meenakshi, 2009). However, when social security contributions were added back, gross wages of directly engaged workers in the factory sector were found to be higher. A surprising result of the study was that in the garment industry, in terms of "Cost to Company", contract labour was not cheaper for employers (cost to company comprised gross wages, including social security payments, and commission to contractors, but did not include bonus and long term benefits). Thus cheap labour (excluding the long term cumulative benefits) could not have been a driver of contract labour employment in this industry.

The worker turnover rate in the industry was very high. Only about 40 per cent workers in the industry had worked with their current enterprise for more a year, while 59.9 per cent workers interviewed had worked in the current enterprise for less than a year, while 38.8 per cent had worked in the current enterprise for less than 6 months. Among workers recruited by contractors, 75.5 per cent had worked in the current enterprise for less than a year, while as many as 58.5 per cent had worked in the current enterprise for less than 6 months.

This had implications for the training profile of the workers and training provided by firms. Although large firms claimed that they were running training programmes, these were accessible to a very small number of directly engaged regular workers.

The main survey carried out in 2012-13, was followed by a resurvey of the units in 2013-14. The resurvey reported that, within a year, some employers had changed recruitment strategies, between types of contractors, as also between contractor-based recruitment and direct recruitment (in both directions). The survey found that the organized garment industry had largely been able to dispense with its permanent labour force. The "core" labour force, although more or less in

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regular employment is not treated as permanent. Employers can “mix and match” contracts to achieve near-complete labour flexibility. The “infamous” Industrial Dispute Act which provides employment protection to workers now exists only on paper.

The use of contractors in the garment industry contrasted with their functions in the construction industry. In the construction industry, in which almost the entire labour force consisted of contract labour, recruitment was carried out through a chain of contractors, with the principal contractors being located either in the areas of origin, or at destination. Since labour was mobilized over long distances, contractors bore recruitment and search costs, but also maintained a tight control on the workforce, while the division of work allocation and supervisory functions between them and the firm sub-ordinates could vary.

In the organized garment industry in the National Capital Region, almost all recruitment were made at destination, most often at the factory gates. The principal role of contractors in the garment industry in the NCR was not so much in facilitating recruitment and reducing recruitment costs. But they manage the employment and deployment of workers, both on and off the company rolls, providing a flexible labour force, but also helping to make the directly engaged labour force more flexible. To some extent, they reduced overall current wage costs, but this impact appears to be small.

Primarily, the use of contractors lowered the overall transaction cost for firms, introduced coercive elements in disciplining the labour force, increased labour flexibility, and segmented and fragmented the workforce, reducing the possibility of worker solidarity. The use of contractors also reduced the possibility of firm or industry level bargaining, and reduced the long term fixed wage costs for firms in terms of retirement benefits or retrenchment compensation to workers.

## **6.7. The changing nature of the contractors**

While in the above sub-section, we have drawn out some aspects of the labour contracting process and its impact on workers, mainly based on fieldwork in the garment industry in the Delhi NCR, we now use the results of the above study on garments and construction, and another study of the construction industry to examine the profile of labour contractors in these two industries (Srivastava, 2013b, 2014b, *ibid.*). The labour contracting system shows changes over the years, with much greater concentration now visible both in its organised and unorganised segments. The construction sector is still dominated by individual labour contractors who can either be quite small (employing anything up to a few scores of workers at one or more site) or quite large, deploying anything from a few hundred or up to a few thousand workers in several sites. The principal contractors operate either in the areas of origin, sourcing workers through smaller sub-contractors and agents, or at the destination, with workers being sourced through a network of agents. Smaller contractors recruit workers either from source areas, or locally - through networks or from local labour markets. There are three overlapping legislations in which employers and contractors should register themselves and the workers employed. These are the Interstate Migrant Workers' Act, 1979, the CLRA, and the Building and Other Construction Workers Act, 1996. But the two studies of construction workers in the Delhi National Capital region (Srivastava, 2013b, 2014a) found, that with the exception of a single contracting firm (which was a works contractor) which had registered under the CLRA, none of the other contractors had obtained registration under any of the legislations. This is despite the fact that the firms, in all cases, (principal firms) were medium and large public sector and private sector entities.

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In the garment sector, the firms that were studied ranged from small (employing a hundred to three hundred workers) to large (employing more than 800 workers). The contractors (briefly discussed in the previous section) ranged from small to very large, and from those operating on an informal and unregistered basis, to organised firms supplying labour or on-site work contract to several large factories at a site. But the relationship between contractor, firm and worker was not a simple three-way relationship in many cases, with the contractor often also performing the role of production manager, master tailor, accountant etc. in a factory, and being a salaried employee of a factory, in addition to the role as a registered or unregistered contractor or firm.

In general, three main facts can be observed in the change in the nature of labour contractors. The first is the growth in concentration in the labour contracting agencies, with an observable growth in the organised segment of the industry. This has occurred principally in services and manufacturing.<sup>11</sup> The second is the enormous fluidity in the roles played by contractors and the nature of arrangements between them and the principal employers. While the former is partially helpful in workers accessing some of the benefits under the CLRA, the latter brings into place arrangements which in general reduce the bargaining power of the workers and the benefits that they would otherwise be entitled to. The third is the continued presence of informal labour contracting arrangements, both as sub-contractors and as (smaller) principal contractors. In the last case, the workers employed remain undocumented and unrecorded (also, therefore, influencing studies on employment in the organised sector) and these workers do not gain access to any of the benefits and protection under law.

## **6.8. Conclusion: Contract workers in India**

The limited data that is available for the organised manufacturing sector shows that there has been a phenomenal increase in the numbers of workers engaged through contractors. A very large numbers of outworkers work under sub-contracting arrangements, and many workers in the organised sector remain outside the purview of the CLRA. There is no estimate available of such workers.

The contract labour system serves a number of objectives for employers which are not confined to increasing numerical flexibility alone. It cannot be seen simply as a response to rigid employment protection laws, particularly in recent years. Over time, the laws and their implementation for contract workers has been relaxed, permitting the huge burgeoning of contract workers. Although contract workers reduce short-term and long-term wage costs to employers, the employment of contract workers also carries costs, clearly in terms of working conditions and wages for workers and discriminatory treatment at the workplace, but also apparently in terms of both in terms of industrial performance and productivity. as the AIEO (n.d.) itself admits, and is also brought out by several other studies, the use of contract workers and their treatment in

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<sup>11</sup> The AIOE (n.d.) citing reports by Executive Recruiters Association and Ernst and Young notes that a large number of staffing companies, who are more organised than the usual contractors, had mushroomed in recent years to provide manpower solution to industries. This human resource industry grew at a compound rate of 21 per cent between 2011-2015, with a turnover of around Rs. 22,800 crore. Out of the total manpower supplied by the HR industry, 73 per cent comprises of temporary workforce. One of the largest worker contracting firms to service sector firms in India, Teamlease, contracted out 60,000 workers in late 2011 (Bajaj 2011) and 1.5 million workers to more than 2,200 clients by April 2015 (<http://www.teamlease.com/about-us/about-teamlease/> downloaded on April 10, 2015).

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workplaces may have reduced the possibility of workers raising disputes through the formal industrial relations mechanisms but it has increased the possibility of high intensity and violent industrial conflicts (AIOE *ibid.*; Sundar, 2011; Dougherty et al., 2011).

## **7. Impact of non-standard forms of employment on workers**

There are detailed industry level studies as well as macro-empirical studies which examine the impact of non-standard forms of employment (casual work, homework, informal work) on working conditions, remuneration, safety standards, rights of workers to seek redressal and to form unions and associations. The NCEUS (2007) report on conditions of work in the unorganised sector extensively analyses and documents the conditions of casual workers in agriculture and non-agriculture, regular but informal workers, and homeworkers. These conditions are compared to benchmarks such as minimum wages or poverty line level of consumption expenditure. The NCEUS report focuses on all informal workers, whether waged or self-employed, and whether employed in the organized sector, or in the unorganized sector. Workers in the unorganized sector the Indian economy experience large deficits in working conditions and other labour standards, but these are more or less across the board and are linked to low productivity and absence of regulation.

In contrast, the organized sector of the economy is regulated more comprehensively and has higher productivity. In order to examine the impact of non-standard forms of employment on workers, we have, therefore, carried out an exercise which has been restricted to *paid workers who work in organized sector establishments, where due to a better regulatory framework, greater size and scale we expect better labour standards for workers in general*. In India, in the manufacturing sector, regulation regarding conditions of work kicks off for factories which employ ten or more workers with power, or twenty or more workers without power. In non-manufacturing sectors, most regulation becomes operational for establishments with twenty or more workers/employees. In the exercise carried out for this paper, we have restricted ourselves uniformly to factories and establishments with twenty or more employees. Further NSFE is identified by activity status (regular/casual) and the existence of written contracts. A further classification is made between employees holding long-term contracts and those holding short-term contracts. Most NSFE categories employed by such establishments would fall in the categories of employees holding short-term contracts or no contracts, or casual workers. We do not deal with dependent workers or part-time workers here.

This analysis reported below is, therefore, restricted to an estimated 17.6 million workers in 2011-12 who were employed by the organized non-farm sector, in establishments employing twenty or more workers. Overall, 40.6 per cent of such workers were casual workers, 38.3 per cent were regular workers without any written contract, while 21.1 per cent had a written contract, of which 18.8 per cent had contracts of more than a year's duration while 2.3 per cent had a short term contract (one year or less).

**Table 20. Percentage of non-farm wage/salaried workers in 20+ worker establishments, by occupation, activity and contract status in 2011-2012**

Single Digit Occupation Group	Description	Regular workers with written contract > 1 year	Regular workers with a written contract	Regular workers with no written contract	Casual workers	% to All workers
1	Legislators, Sr. officers, managers	38.6	1.3	58.4	1.7	3.6
2	Professionals	47.7	5.8	45.6	1.0	10.2
3	Technicians & assoc. professionals	46.6	3.6	48.5	1.3	9.5
4	Clerks	42.6	4.9	50.0	2.6	7.9
5	Service workers & shop & Mkt. sales workers	28.2	1.7	61.1	9.0	7.9
6	Skilled ag. & fishery workers	26.2	3.0	22.3	48.4	0.7
7	Craft & related trade workers	2.7	1.3	25.3	70.7	24.9
8	Plant & machine operators & assemblers	8.5	1.1	78.6	11.8	8.8
9	Elementary occupations	3.7	1.2	18.1	77.0	26.5
X	Workers not classified	26.2	0.0	59.6	14.2	0.1
	<b>Total</b>	18.8	2.3	38.3	40.6	100.0

Source: Computed from NSS unit records, 68th round (2011-12), schedule 10 (employment - unemployment)

The distribution of these different categories of workers across occupation groups is given in Table 20. Casual workers were concentrated in three occupation groups at the lower skill levels viz. Skilled Agriculture and Fishery Workers, Craft and Related Trade Workers, and Elementary Occupations (Codes 6, 7, and 9) which comprise 66.2 per cent of all non-farm wage/salaried workers in such establishments. Workers in the high skill occupation groups 1 to 5, particularly in the first three groups, had a high proportion of regular workers with longer term written contracts. Short term contracts were sparse across all skill categories, but were relatively higher in skill codes 2 to 4.

## 7.1. Access to social security

We have earlier seen that access to social security is low among home workers (who are generally not covered by social security provisions), informal workers (who may be partly entitled to such provisions) and contract workers (who are entitled to them). Following the work of the NCEUS (2007), Srivastava (2012b), Srivastava and Naik (2015) and other scholars have shown that due to the increasing informalization of the workforce, an higher proportion of paid workers in India are without any access to social security. *In the category that we are discussing in this section, all workers should be entitled to some social security provisions.*

**Table 21. Percentage workers in establishments employing 20 or more workers with any form of social security (2011-2012)**

Occupational Category	Regular workers with				Casual workers	All employees
	Written contracts > 1 year	Written contracts <= 1 year	Any written contract	No written contract		
Legislators, sr. officers, managers	90.3	81.0	89.8	75.3	1.4	84.1
Professionals	90.7	53.2	87.6	66.3	0.3	79.2
Technicians & assoc. professionals	88.4	29.9	82.0	62.1	5.5	74.4
Clerks	92.3	47.0	88.9	55.3	3.2	76.4
Service workers & shop & mkt. sales workers	84.9	55.1	82.5	49.2	0.4	65.6
Skilled ag. & fishery workers	88.4	0.0	73.4	45.2	8.6	47.3
Craft & related trade workers	90.0	56.7	86.4	36.2	4.0	32.1
Plant & machine operators & assemblers	87.8	51.0	85.5	22.6	4.3	37.6
Elementary occupations	76.8	41.6	72.7	22.4	1.8	19.9
Workers not classified	90.1		90.1	8.2	0.0	38.4
All employees	88.3	47.7	84.8	41.8	2.8	49.9

Source: Computed from NSS unit records, 68th Round (2011-12), Schedule 10 (Employment - Unemployment).

However, as Table 21, while 88.3 per cent of regular workers with longer term contracts had some form of social security, the percentage came down drastically to 47.7 even for worker with short term contracts. Only 41.8 per cent regular workers without contracts accessed some social security while only 2.8 per cent casual workers in these establishments had any social security. Overall, just about half the workers in these establishments accessed any form of social security.

At higher skill levels, a higher percentage of workers – even regular workers without any written contract - accessed social security, three-quarters or more of the workers in the top four NCO groups, but this percentage is lower for lower occupation categories and only 19.9 per cent workers in elementary occupations had any social security. There are, therefore, sharp differences not only across standard and non-standard forms of employment, but also, in the case of informal regular jobs, between skill-based occupation categories.

A probit regression to test how the paid workers' employment characteristics and other characteristics affect the probability of accessing any form of social security has been carried out. The characteristics used are: whether the worker is in a standard employment relation of not (defined here as a regular worker having a written contract); the occupation-cum-skill category; industrial category; sex; and caste status. The results reveal that the probability of receiving any form of social security is lower for the workers who engaged in semi-skilled or lower skilled occupations vis-à-vis those who are engaged in highly skilled occupations. As envisaged, workers in non-standard employment have less probability of enjoying the benefits of social security as compared to workers in standard employment. Gender and industrial classification also seems to be an important determinant of social security benefits. The results reveal that, on an average, a woman worker has a lower probability of getting the social security benefits vis-à-vis their male

counterparts. In case of major industrial classifications, the probability that a worker gets social security benefits increases if the worker is engaged either in manufacturing sector or the services sector in comparison to the construction sector. With regards to caste affiliation, the workers from SC, ST as well as “Others” as the social group have a higher probability to enjoy the social security benefits vis-à-vis the workers belonging to other backward caste category. All the results are statistically significant at 1 per cent level of significance barring for the workers from SC category, which is statistically insignificant.

**Table 22. Results of probit regression for access to any social security among employees in non-agriculture, 2011-2012**

Dep var: Social security benefit	Coefficients				Marginal effects			
	Coef.	Std. error	Z	P> z	dydx	Std. error	Z	P> z
Semi-skilled Occupations	-1.32	0.02	-78.96	0.00	-0.23	0.00	-90.66	0.00
Low-skilled Occupations	-0.54	0.02	-33.44	0.00	-0.09	0.00	-34.28	0.00
Informal sector worker	-0.96	0.01	-77.48	0.00	-0.17	0.00	-86.96	0.00
Others	0.20	0.01	14.02	0.00	0.04	0.00	14.07	0.00
SC	0.03	0.02	1.42	0.16	0.00	0.00	1.42	0.16
ST	0.44	0.02	23.87	0.00	0.08	0.00	24.06	0.00
Female	-0.40	0.01	-26.93	0.00	-0.07	0.00	-27.2	0.00
Service sector	1.57	0.02	78.89	0.00	0.27	0.00	84.8	0.00
Manufacturing sector	1.67	0.02	79.09	0.00	0.29	0.00	85.15	0.00
Constant	-0.64	0.02	-26.85	0.00				
Number of obs	91628							
LR chi2(9)	42938.42							
Prob > chi2	0.00							
Pseudo R2	0.4293							

## 7.2. Average weekly earnings

Table 23 gives the estimated weekly earnings for the different categories of regular workers and for casual workers across skill level, thus controlling for skill differences. For all workers, there is a clear differential, with regular workers having long term contracts earning an estimated Rs 5016 per week, followed by regular workers with short term contracts (Rs 3380 per week), regular workers with no contracts (Rs 2574 per week), and casual workers (Rs 900 per week). These differentials also exist within occupation categories, although for some categories, regular workers with no contracts have higher average earnings than those with short term contracts. In elementary occupations, where the largest percentage (26.5) workers are concentrated, while regular workers with long term contracts earn Rs 2423 per week, those with short term contracts earn Rs 1434 per week, and those without contracts earn Rs 1226 per week. Casual workers in elementary occupations earn only Rs 867 per week. Among service workers, a middle level occupational category, regular workers with longer term contracts earn Rs 3801 per week, while those with short term contracts earn Rs 1539 per week and those without contracts earn Rs 2074 per week. Casual work in service workers earns Rs 1011 per week.

**Table 23. Average weekly earnings of workers in establishments employing 20 or more workers, 2011-2012 (Rs)**

Occupation group	Regular Workers With			Casual workers	Total
	Regular workers with written contract > 1 year	Regular workers with a written contract of 1 year or less	Regular workers with no written contract		
Legislators, Sr. Officers, Managers	9842	8611	6882	752	8706
Professionals	7088	7254	5257	1083	6378
Technicians & Assoc. Professionals	4864	2600	3545	1482	4221
Clerks	4106	2411	2721	1066	3526
Service Workers & Shop & Mkt. Sales Workers	3801	1539	2074	1011	2858
Skilled Ag. & Fishery Workers	3219	892	1752	893	2012
Craft & Related Trade Workers	3522	2462	1680	887	1765
Plant & Machine Operators & Assemblers	3523	2104	1672	1081	2095
Elementary Occupations	2423	1434	1226	867	1294
<b>Total</b>	<b>5016.13</b>	<b>3379.62</b>	<b>2573.86</b>	<b>899.63</b>	<b>3242.32</b>

Source: Computed from NSS unit records, 68th Round (2011-12), Schedule 10 (Employment - Unemployment)

Note: Occupation category is based on current weekly status.

These differences reflect the endowments/characteristics of different categories of workers, as also differentials due to employment status (discrimination). In order to analyse the wage penalty which workers in non-standard employment could be subject to, we have analysed the differential in earnings of two groups of employees viz. casual workers and regular workers with no written contract (considered as non-standard employees, also categorised by us as informal employees) and workers with written contracts (standard employees).

**Table 24. Blinder-Oaxaca decomposition results for wage penalty, 2011-12**

Mean prediction high (H)	8.048
Mean prediction low (L)	7.027
Raw differential (R) {H-L}	1.02
due to endowments (E)	0.479
- due to coefficients (C)	0.469
due to interaction (CE)	0.073
Unexplained (U){C+(1-D)CE}	0.469
Explained (V) {E+D*CE}	0.551
% unexplained {U/R}	45.9
% explained (V/R)	54.1

The decomposition methodology given by Oaxaca (1973) and Blinder (1973) and used in a number of studies to examine the wage penalty of informally employed workers (Marcouiller,

1997; Heitmueller, 2007) has been used here. The following characteristics of the workers have been used as a starting point, so as to see how well they explain wages: age, experience (age squared as a proxy), different levels of educational attainment (proxy for skills and eligibility requirements), sex, and social group of the workers. The premiums are substantial for formal sector workers vis-à-vis informal as the mean log wage rate of formal workers is 1.020 higher than mean log wage rate of informal workers. Using Blinder-Oaxaca decomposition, this difference can be divided between differences in characteristics and differences in rewards to these markets (wage penalty). Approximately 54 per cent of the wage differential can be accounted for by differences in characteristics, whereas differences in rewards (wage penalty) accounts for approximately 46 per cent of the wage gap.

**Table 25. Regression results: Wages estimation – standard and non-standard employment – all non-agricultural employees, 2011-12**

Variables	Standard Employees				Non-standard employees			
	Coef.	Std. Err.	t	P> t	Coef.	Std. Err.	t	P> t
Dep Var: log_wage								
Age	0.06	0.00	13.73	0.00	0.04	0.00	18.83	0.00
Age squared	0.00	0.00	-7.21	0.00	0.00	0.00	-11.13	0.00
Female	-0.35	0.01	-24.93	0.00	-0.53	0.01	-58.10	0.00
Primary & secondary education	0.08	0.03	2.63	0.01	0.14	0.01	15.82	0.00
Secondary and higher secondary	0.46	0.03	16.33	0.00	0.40	0.01	41.00	0.00
Graduate and above	0.89	0.03	31.91	0.00	1.04	0.01	94.80	0.00
Scheduled tribe	-0.01	0.02	-0.90	0.37	0.07	0.01	6.08	0.00
Scheduled caste	-0.16	0.02	-8.73	0.00	-0.11	0.01	-10.95	0.00
Other backward caste	-0.19	0.01	-13.70	0.00	-0.08	0.01	-10.02	0.00
Constant	5.82	0.09	64.26	0.00	5.92	0.04	159.09	0.00
Number of obs	17078				41762			
F( 9, 17068)	735.35				1912.58			
Prob > F	0.0000				0.0000			
R-squared	0.2794				0.2919			
Adj R-squared	0.279				0.2918			

Table 25 shows the significant results from the estimation of wages for the formal and the informal sector respectively. The regression results reveal that there exists an inverted U relationship between age and earnings but the predicted turning point occurs beyond the working life span of both formal and informal workers (at ages 81 and 65 respectively). As the age increases by a year, keeping all other things constant, the average weekly earnings of an informal worker increases by Rs.4. However, for a regular worker with written contract, an additional year of age increases the weekly earnings by Rs.6. The male informal sector workers are found to earn significantly higher wages than their female counterparts in the labour market. This is found to be the case for regular (with contract) workers as well and therefore, it signals towards the widely documented gender wage disparity in Indian labour market (Sengupta and Das, 2014). As envisaged, on an average the weekly earnings are higher for all the categories of literate workers vis-à-vis illiterate or less educated worker (below primary) and the average weekly earnings for a more educated worker is more than a relatively less educated informal sector worker. A similar pattern can also be observed for the formal sector workers but the returns to education are higher for informal than formal sector workers. All the results are statistically significant at 1 per cent

level of significance. The mean weekly wages are lower for the backward caste categories like Scheduled Caste and Other Backward Categories vis-à-vis the forward caste given by “Others” for both formal and informal workers. The result for formal sector workers from ST social group is statistically insignificant but for informal workers it is positive and significant at 1 per cent level of significance which implies that the mean weekly wages of ST informal sector worker is higher than a person from “Others” caste category.

Using a similar methodology, we have also examined the wage differences between the two groups of regular workers: regular workers without any written contract (non-standard regular employees), and regular workers with a written contract. The mean log wage rate of the former is 0.886 higher than mean log wage rate of the latter. Using Blinder-Oaxaca decomposition, this difference can again be divided between differences in characteristics and differences in rewards to these markets (wage penalty). Approximately 54 per cent of the wage differential can be accounted for by differences in characteristics, whereas differences in rewards (wage penalty) again accounts for approximately 46 per cent of the wage gap.

**Table 26. Percentage of workers employed in establishments with 20+ workers who are members of unions / associations**

Industry (at two digit level)	Regular Workers				casual	all employees
	> 1 year	<= 1 year	any contract	no contract		
Agriculture (non-farm)	88.0		88.0	9.1	10.5	24.4
Mining	80.1		80.1	6.1	2.0	7.7
Manufacturing	46.1	30.9	43.0	8.3	4.3	9.3
Water supply, sewerage, waste collection	55.8	16.2	54.9	38.4	0.0	46.1
Construction	79.2	0.0	75.2	13.1	4.6	5.6
Wholesale & retail trade, repair of MVs	24.4	0.0	18.9	5.6	23.2	10.1
Transport, storage, posts	55.6	2.9	44.5	29.6	13.3	30.2
Accommodation & food service	26.0	0.0	14.5	1.7	11.7	4.5
Information & communication	29.3	2.1	19.3	20.5		20.0
Financial & insurance services	70.8	31.7	67.2	41.6	0.0	55.3
Real estate	0.0			0.0		0.0
Professional & scientific activities	79.3	0.0	59.8	17.7	0.0	27.5
Admin & support services	56.4	10.2	53.1	4.3	0.0	22.9
Public admin & defence	73.3	17.3	71.7	55.6	16.9	65.6
Education	68.3	18.9	64.7	25.7	1.7	47.2
Health & social service	61.8	7.4	59.9	7.4	0.0	24.0
Arts & entertainment	42.7		42.7	11.4	0.0	14.6
Other service activities	38.7	0.0	21.9	22.5	0.3	17.3
Activities of households as employers	0.0		0.0	0.0	0.0	0.0
<b>All industries</b>	<b>63.9</b>	<b>13.5</b>	<b>58.6</b>	<b>16.5</b>	<b>5.0</b>	<b>20.7</b>

Source: Computed from NSS unit records, 68th Round (2011-12), Schedule 10 (Employment - Unemployment).

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### 7.3. Membership of unions or associations

Workers in non-standard forms of employment find it very difficult to form unions or associations because of job insecurity, segmentation and fragmentation, employer's force, an absence of pre-existing collective organizations in their vicinity.

Estimates from the NSS 2011-12 survey, given below in Table 26, show that while 63.5 per cent regular workers with longer term contracts were members of any union or association in India, only 13.5 per cent regular workers with short-term contracts, and 16.5 per cent regular workers with written contracts were members of any association/union. Among casual workers in organized sector establishments, only 5 per cent workers were members of a union or association. There are also differences across industries and sectors. There is much smaller membership of unions/associations even among workers with long term contracts in industries which are almost exclusively private sector dominated or where union membership is restricted by law – Real Estate, Wholesale and retail trade, Accommodation and Food Service and Information and Communication.

Unionisation rates in organized manufacturing are shown to be very low according to these estimates. Only 9.3 per cent workers in manufacturing establishments with more than 20 workers were members of any association / union. This gives the effective outer bound of workers who could potentially benefit from employment protection legislation.

### 7.4. Formal skill training

The prevalence of formal skill training in India is low, even among workers in the organized sector, and most workers acquire their skills through informal routes. Where employment relationships are not stable, employers are likely to have little incentive to invest in workers' skills. This is borne out by figures of formally trained workers, given in Table 27. Only 4.5 per cent workers in these establishments had received training and another 1.4 per cent was receiving some formal training. At the aggregate level, the percentage of workers already trained was higher for all categories of regular workers with any contract - 8.2 per cent among those with longer-term contracts, 10.1 per cent with those with short term contracts, while 5.9 per cent workers without any contract were trained and only 1 per cent casual workers had acquired any training. For those receiving any training, regular workers with long term contracts again fared comparatively better with 2.6 per cent such workers receiving formal training, compared to only 0.7 per cent workers with short term contracts and 1.5 per cent workers with no contracts and 0.8 per cent casual workers.

Formal training was much higher among some of high skill occupational groups – Technicians and Associate Professionals and Professionals, followed by clerks and Plant and Machine Operators and Assemblers. In service training was the highest among Professionals, possibly because such training is a part of the internship programme in professional courses.

To conclude: the analysis in this section, along with the discussion in the preceding sections, shows that NSFE not only implies higher job and income insecurity for most workers in this category, such workers also have much lower access to social security, lower remuneration, lower possibilities of formal training, and much less likelihood of having a collective voice. In short, such workers suffer from a significantly higher decent work deficit compared to their counterparts in similar jobs.

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Generally speaking, the training figures tell us the same story. Casual workers do not have the wherewithal or incentive to go for formal training while regular workers with long term contracts are likelier to receive training during service.

**Table 27. Percentage of employees in establishments with 20 or more workers who have received or are receiving formal training, by occupation category, 2011-2012**

Single digit occupation group	Regular workers with written contract > 1 year		Regular workers with written contract ≤1 year		Regular workers with any written contract		Regular workers with no written contract		Casual workers		All employees	
	receiving training	received training	receiving training	received training	receiving training	received training	receiving training	received training	receiving training	received training	receiving training	received training
Legislators, sr. officers, managers	0.7	5.0	0.0	30.1	0.7	5.7	0.8	1.6	0.0	0.0	0.7	3.2
Professionals	4.9	10.1	0.0	6.6	4.4	9.7	4.6	10.2	28.1	0.6	4.7	9.8
Technicians & assoc. professionals	1.9	13.0	1.7	14.2	1.8	13.0	3.5	15.2	0.0	0.0	2.6	13.9
Clerks	3.8	7.8	1.5	14.8	3.5	8.5	1.2	6.8	10.8	0.0	2.6	7.4
Service workers & shop & mkt. sales workers	1.2	2.3	0.0	0.0	1.1	2.2	0.7	2.8	0.0	4.3	0.8	2.8
Skilled ag. & fishery workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0	2.5
Craft & related trade workers	0.7	9.6	0.0	9.2	0.5	9.5	0.4	5.7	0.8	0.7	0.7	2.4
Plant & machine operators & assemblers	0.0	5.8	3.0	34.3	0.4	9.1	1.0	3.7	0.0	7.2	0.8	4.7
Elementary occupations	0.0	0.0	0.0	1.3	0.0	0.3	0.0	0.7	0.6	0.8	0.5	0.8
Workers not classified	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	2.6	8.2	0.7	10.1	2.4	8.4	1.5	5.9	0.8	1.0	1.4	4.5

Source: Computed from NSS unit records, 68th Round (2011-12), Schedule 10 (Employment - Unemployment).

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Thus, employees with NSFE experience from various deficits and gaps in comparison to workers other workers. This result is corroborated by other studies. Thus, in a study prepared for the ILO, Sundar (2011) shows that non-regular workers receive lower wages, are more vulnerable to accidents and health hazards, and have low representation in unions and associations. Further, these results are reinforced if account is taken of other workers in NSFE, such as homeworkers.

## **8. Recent changes in policy and law with implications for NSFE**

As pointed out in earlier sections, there are two strands of the discussion on Non-Standard Forms of Employment, both of which acknowledge the stark duality in Indian labour markets. In one stand, reflected in the stand of business associations, some government policy committees such as the Planning Commission Task Force on Employment (Planning Commission, 2001), and academic writings, the focus is on labour markets more flexible, by relaxing the CLRA and the Factories Act, and by removing chapter 5(B) of the Industrial Disputes Act. This debate does not elaborate on the type of labour market that should emerge in India, in terms of the degree of flexibility, industrial relations regime etc.

The other strand, acknowledges the rigidity in labour markets but emphasizes the need to have comprehensive changes in labour laws, including the simplification of laws and their consolidation (SNCL, 2002), and more effective regulation of working conditions with respect to informal employment, preferably by having a comprehensive law that addresses minimum conditions of work and social security (SNCL; NCEUS; Papola et. al.). It also argues that the abrogation of Chapter 5B of the IDA should be accompanied by higher levels of compensation to workers under Chapter 5A of the IDA, as well as provision of unemployment insurance and retraining (NCEUS, 2009b).

The extensive review of labour legislation in a few study states in Papola et al. (2008), Dougherty (2008) shows that states have made changes in labour laws as well as their implementation in order to provide greater flexibility to employers. Our own study of the organised garment sector in the Delhi National Capital Region shows that changes in some of the laws, such as the CLRA, have been more extensive than what is ordinarily described in the literature, and that this is also borne out by the enormous increase in the proportion of the contract workforce.

The current Union government and several of the state governments have adopted labour reforms as a key policy agenda, ostensibly with the objective of bolstering manufacturing in India. In recent months, some state governments, notably Rajasthan and Madhya Pradesh have taken further steps to liberalise three key laws viz. the Industrial Disputes Act, the Factories Act and the Contract Labour Act. These amendments affect not only flexibility of firms in these states to dismiss workers, but also affect regulation of working conditions (under the Factories Act), the raising of disputes, and the formation of trade unions. Further, amendments have also been made to laws/rules concerning the inspection of factories.

The Rajasthan government's amendments to the Industrial Disputes Act, 1947 (IDA), Factories Act, 1948 (FA) and the Contract Labour (Regulation and Abolition) Act, 1970 (CLRA), contain the following provisions:

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- The IDA amendment has allowed industrial establishments employing up to 300 workmen to retrench (terminate) workmen without seeking prior permission of the government. Currently, an industrial establishment employing at least 100 workmen is required to seek prior permission.
  - The threshold of number of workmen engaged as contract labour by an employer for the purpose of applicability of the CLRA has been raised from 20 to 50.
  - The threshold of number of employees for the purpose of applicability of the Factories Act has been increased from 10 to 20 in factories using power, and from 20 to 40 in the case of factories not using power),
  - d. The minimum membership requirement in a factory or establishment for a union to be recognized has been raised from 15% to at least 30% of the total workforce.
  - A three-year statute of limitations has been imposed for raising industrial disputes under the IDA.

The Madhya Pradesh government has also approved amendments to as many as 20 labour laws. Of these, 17 are central government laws, including the IDA and the Factories Act, and three state laws. Under the Amendments to the IDA, lay-offs, retrenchments and even closures will not require any permission in units employing up to 300 workers. The Amendment to the Madhya Pradesh Industrial Employment (Standing Orders) Act, 1961 would permit employers of small and medium enterprises (SMEs) having less than 50 workers to terminate any employee without giving any reason or conducting any enquiry. The amendments to the Factories Act have extended maximum working hours per week from 60 hours to 72 hours and permissible overtime from 75 hours to 125 hours. Exemptions have been given to micro industries from certain labour laws mainly the Contract Labour (Regulation and Abolition) Act, 1970, the Factories Act, 1948, MP Industrial Employment Act, 1961 and the Trade Unions Act, 1926. The labour commissioner in lieu of labour inspector will now have the power to prosecute employers in case of any violation of labour laws. State industries will be exempt from maintaining 68 registrations and furnishing 16 returns under 19 different laws and will need to maintain only one register. These Amendments, however, are yet to be implemented. ([http://www.business-standard.com/article/economy-policy/mp-agrees-to-amend-20-labour-laws-114092200508\\_1.html](http://www.business-standard.com/article/economy-policy/mp-agrees-to-amend-20-labour-laws-114092200508_1.html) & <http://www.livemint.com/Politics/9Nytt54sHdjFpfEKiMIj6H/Labour-reform-in-Madhya-Pradesh-may-be-delayed.html>).

The Central government has also introduced amendments to the Factories Act, 1948; Apprentices Act, 1961; and the Labour Laws (exemption from furnishing returns and maintaining registers by certain establishments) Act, 1988. The Factories Amendment Bill, 2014, allows State governments to raise the threshold of coverage from 10 workers to 20 workers in factories operating with power and from 20 to 40 in factories not using power. As a result, the bulk of factories and workers stand to be exempted from the purview of the Act, which essentially is a piece of legislation that regulates working conditions. A draft proposal for small-scale industries has been put up on the Labour Ministry's website, exempting units employing up to 40 workers from at least 14 basic laws, which include exemption from the Factories Act, the Industrial Disputes Act, the ESI Act and the Maternity Benefits Act.

It has now proposed the consolidation of 44 labour laws into four labour codes on wages and remuneration, industrial relations, industrial safety and welfare, and social security. The proposed Wages Code Bill amalgamates provisions of the Minimum Wages Act 1948, The Payment of Wages Act 1936, The Payment of Bonus Act 1965, and The Equal Remuneration Act 1976 and the government has held consultations on the draft. The proposed Code on Industrial

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Relations Bill, 2015, combines Industrial Disputes Act, 1947, the Trade Unions Act, 1926, and the Industrial Employment (Standing Orders) Act, 1946. A draft of the Code on Industrial Relations Bill has been put on the Ministry of Labour's website (<http://labour.nic.in/content/whatsnews/comments-on-draft-labour-code-on-industrial-relations.php>). The Ministry has sought comments on the Bill till May 26, 2015, and is holding tripartite consultations on it. The Bill proposes that factories employing up to 300 workers would not require prior government sanction to retrench workers. However, it also raises the severance pay from 15 days per year of employment to 45 days. It also raises requirements for formation of trade unions and the required notice period for strikes, and also broadens the definition of strike to include actions such as mass casual leave. Drafts of the other proposed bills are still to be unveiled. The amalgamation of different labour laws into comprehensive codes and their simplifications has earlier been suggested by the National Commission of Labour (2002) and also by the NCEUS (2009). But trade unions are opposed to these changes on the grounds that the current exercise has not been participatory, and that it is broadly driven by the objective of reducing regulation of working conditions and making unionization of workers and industrial action more difficult.

While some of these amendments (which follow state level de jure and de facto changes) reduce the transaction cost of firms in maintaining registers mandated by law, and reduce inspections, they may run counter to ILO Convention C. 47 ratified by India, and may have negative consequences not only for regulating conditions of work, but also for safety, and accidents (Sundar, 2014).<sup>12</sup> Most of the changes introduce greater labour market flexibility and restrict workers' rights to form trade unions and engage in strike action.

There is no immediate move to introduce more comprehensive and effective regulation regarding conditions of work. It remains to be seen whether the changes that are being introduced will expand employment adhering to core labour standards and decent work.

## 9. Conclusion

Trends in NSFE in developing economies such as India have to be seen in the context of a rapidly changing economic and occupational structure, leading to a shift away from agriculture, the growth of an organised segment in manufacturing and services, and the requirement of paid work with certain characteristics within it. These characteristics of employed workers are also currently being influenced by the pattern of global production and competition, which is encouraging outsourcing and vertical and horizontal production networks. This national and global dynamics interacts with historically situated Indian polices, and labour and other institutions, which are now rapidly changing to allow for faster responses to market conditions through greater flexibility in labour markets.

The general outcome of all this is a trend towards greater homework (with distinct gendered features); informalization of employment (even among regular wage/salaried workers),

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<sup>12</sup> Sundar (2014) points out that there has been a substantial reduction in inspections over the years, with the proportion of registered factories that have been inspected, declining steeply from 63.05 per cent in 1986 to 17.88 per cent in 2008. Inadequate number of inspectors, and infrastructure and changes in policy with respect to specific locations, industries and states has contributed to this. At the same time, there has been a rise in industrial accidents, with a doubling of the percentage of accidents to workdays between 1980 and 2008.

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and recruitment of workers through contracting and sub-contracting chains. These workers experience deficits in labour standards, including core labour standards, particularly in the freedom of association and the right to collective bargaining; and also in the elimination of discrimination in the workplace.

In the specific case of contract labourers in the organised sector, since laws are being liberalised, and their implementation is weak, and in any case, the law does not provide for similar wages and working conditions to contract workers, the outcome for these workers falls short on every ground. More significantly, these workers do not have recourse to the formal industrial relations machinery and employers make every effort to deny them any collective, or any individual recourse, to seek redress of grievances, this situation has led to explosive industrial conflicts in recent years. Further, as studies show, the impact of the hiring of a segment of flexible contract workers also spills on to the regular segment of the workforce, in general, reducing their ability to organise and bargain. This has generally affected workers' freedom of association and right to collective bargaining, and for contract workers, led to persistent discrimination at the workplace.

There are very few studies which examine the impact of NSFE - mainly contract workers - on employers and firm productivity but some attest to a negative impact (generally considered against the positive impact on firms' gaining numerical flexibility). But the high turnover of workers, impact on skill creation, and other factors such as loyalty to the firm, acquiring production ethics etc., are less studied, but possibly important consequences of the increased hiring of such workers.

As we have seen in section 8, there have been major recommendations in the past calling for simplification of labour laws, comprehensive and effective regulation of conditions of work, minimum conditions of work in the informal sector, and the introduction of higher levels of social security and termination benefits, along with greater flexibility in hiring and firing to employers (NCEUS, 2009b; NCL 2002). But the reforms that are currently being considered by states and the federal government principally aim at greater labour flexibility and very little attention has been paid either to introducing minimum conditions of work, or to effective regulation of prescribed conditions laid down by existing law. Furthermore, the proposed reforms are not based on wide ranging and in-depth tri-partite consultations through well-established mechanisms such as the Indian Labour Conference which are required given the wide ranging nature of the changes that is being contemplated. They also do not seem to appreciate the current context in which the right of workers to form associations and collective bargaining is already severely curtailed. While on the one hand, these changes could aggravate the existing imbalance in industrial relations, on the other, the increased informality and high turnover of workers could overturn the advantage that is hoped to be gained from higher labour flexibility.

Labour policy in India should aim to reduce the chasm between under-regulated and over-regulated sectors, by making minimum conditions of work applicable to all workers, simplifying and modifying labour laws which are applicable to the formal sector, with the objective of introducing an optimum degree of flexi-security, making regulation of conditions of work more effective, and making the machinery for implementation of industrial relations and labour laws efficient, speedy, and more accessible to workers. Tripartism should continue to be the bedrock of labour policy and labour law reform. The Contract Labour (Regulation and abolition) Act 1970, which obfuscates the relationship between the worker and firm/establishment, should be comprehensively reviewed and its scope restricted. The employer-employee relationship should be clearly defined, covered by a formal contract, and wherever possible, linked to a universal social security card, which would combine the smart card now

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available to workers under the formal sector social security schemes and the one proposed by the NCEUS for unorganised sector workers. These proposals are not entirely new and have been extensively deliberated upon in the Commissions cited earlier (SNCL, 2002; NCEUS, 2007, 2009a, 2009b). These changes could balance the interests of employers and employees to a greater degree, introduce a higher formalisation of production and of employment relations, and incentivise production, skill development and productivity improvement.

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## Appendix

**Table A. Contract intensity and percentage of contract workers by 3 digit NIC Group, 1999-2000 & 2010-2011**

NIC Group (3 digit)	Industry Group	1998-1999		2011-2012		Increase in CI over 1998-1999
		Contract intensity	Contract worker share	Contract intensity	Contract worker share	
351	Building and repair of ships & boats	24.0	0.4	69.7	0.5	45.7
160	Manufacture of tobacco products	12.8	5.7	65.5	7.9	52.7
142	Mining and quarrying, n.e.c.	4.8	0.0	65.2	0.2	60.4
342	Manufacture of bodies (coach work) for motor vehicles; manufacture of trailers and semi-trailers	15.1	0.3	64.6	1.1	49.5
269	Manufacture of non-metallic mineral products n.e.c.	35.5	11.0	58.2	11.6	22.6
281	Manufacture of structural metal products, tanks, reservoirs and steam generators	28.7	2.3	52.7	3.6	24.0
232	Manufacture of refined petroleum products	26.6	0.7	52.0	0.7	25.5
300	Manufacture of office, accounting and computing machinery	26.2	0.2	51.4	0.2	25.2
155	Manufacture of beverages	25.4	1.4	50.1	1.7	24.7
322	Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy	1.9	0.1	49.3	0.4	47.4
315	Manufacture of electric lamps and lighting equipment	14.5	0.3	48.5	0.6	34.0
151	Production, processing and preservation of meat, fish, fruit vegetables, oils and fats	35.4	4.9	47.6	2.6	12.2
352	Manufacture of railway and tramway locomotives and rolling stock	10.0	0.2	47.5	0.4	37.5
261	Manufacture of glass and glass products	27.0	1.2	47.2	0.8	20.1
241	Manufacture of basic chemicals	22.6	3.4	46.4	2.8	23.8
343	Manufacture of parts and accessories for motor vehicles and their engines	11.0	1.4	46.3	5.9	35.3
271	Manufacture of Basic Iron & Steel	22.6	7.5	45.9	6.9	23.4
359	Manufacture of transport equipment n.e.c.	28.1	5.2	45.4	2.2	17.3
140	Agricultural and animal husbandry service activities	18.0	1.8	42.3	1.1	24.4
323	Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	6.8	0.2	41.5	0.2	34.7

273	Casting of metals	23.5	2.0	41.5	2.3	17.9
153	Manufacture of grain mill products, starches and starch products, and prepared animal feeds	38.0	9.4	41.5	3.6	3.5
313	Manufacture of electricity distribution and control apparatus	10.8	0.4	40.4	0.8	29.7
272	Manufacture of basic precious and non-ferrous metals	20.3	1.2	40.2	1.1	20.0
289	Manufacture of other fabricated metal products; metal working service activities	9.5	1.1	37.7	3.2	28.2
361	Manufacture of furniture	22.6	0.4	37.5	0.4	14.9
242	Manufacture of other chemical products	15.8	5.6	37.4	6.3	21.7
311	Manufacture of electric motors, generators and transformers	9.2	0.5	36.6	1.5	27.4
152	Manufacture of dairy product	18.7	0.8	35.8	1.1	17.1
319	Manufacture of other electrical equipment n.e.c.	12.8	0.2	34.8	0.4	22.0
292	Manufacture of special purpose machinery	8.7	1.2	34.7	2.3	25.9
191	Tanning and dressing of leather, manufacture of luggage handbags, saddlery & harness	7.2	0.3	34.3	0.8	27.1
291	Manufacture of general purpose machinery	7.8	1.6	34.1	2.4	26.2
314	Manufacture of accumulators, primary cells and primary batteries	22.8	0.3	32.2	0.3	9.4
293	Manufacture of domestic appliances, n.e.c.	12.2	0.3	31.0	0.3	18.7
353	Manufacture of aircraft and spacecraft	0.0	0.0	30.9	0.0	30.9
251	Manufacture of rubber products	10.0	0.9	30.5	1.3	20.5
252	Manufacture of plastic products	11.7	1.3	30.4	2.4	18.7
210	Manufacture of paper and paper product	18.7	2.5	27.5	1.6	8.9
221	Publishing	5.7	0.2	27.4	0.1	21.7
341	Manufacture of motor vehicles	11.8	0.6	27.4	0.9	15.6
231	Manufacture of coke oven products	10.7	0.2	26.9	0.2	16.3
202	Manufacture of products of wood, cork, straw and plaiting materials	7.3	0.2	26.4	0.4	19.1
321	Manufacture of electronic valves and tubes and other electronic components	2.8	0.1	22.6	0.4	19.8
222	Printing and service activities related to printing	1.8	0.1	22.2	0.7	20.4
172	Manufacture of other textiles	16.7	0.9	21.6	1.4	4.9
369	Manufacturing n.e.c.	15.3	1.1	20.5	1.0	5.2
331	Manufacture of medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes except optical instruments	5.4	0.1	19.8	0.3	14.4

243	Manufacture of man-made fibres	15.2	0.4	18.9	0.1	3.6
371	Recycling of metal waste and scrap	73.6	0.0	18.8	0.0	-54.8
154	Manufacture of other food products	8.5	4.8	17.3	3.3	8.8
332	Manufacture of optical instruments and photographic equipment	0.7	0.0	16.9	0.0	16.2
181	Manufacture of wearing apparel, except fur apparel	4.6	1.1	15.2	2.6	10.6
171	Spinning, weaving and finishing of textiles.	10.0	10.4	13.4	3.8	3.4
201	Saw milling and planing of wood	1.4	0.0	12.6	0.0	11.2
192	Manufacture of footwear	13.4	0.9	12.1	0.6	-1.3
173	Manufacture of knitted and crocheted fabrics and articles	6.8	0.3	9.7	0.5	2.9
182	Dressing and dyeing of fur; manufacture of articles of fur	7.0	0.0	0.1	0.0	-6.8
223	Reproduction of recorded media	0.0	0.0	0.0	0.0	0.0
All		15.8	100.0	34.7	100.0	18.9

Source: Computed from ASI unit records for 1998-99 and 2011-12.

Note: ASI Concordance has been done on the basis of 2004-05 classification.

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