



Contemporary Issues in Business and Economy

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Good or Bad Jobs: Women in Indian Manufacturing Sector

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1. Introduction

India is the home of largest youth and working population in the world with over 33 per cent population fall under the age group of 15-34 years and 63 per cent of 15-59 years. Women constitute almost half of the same population and play an important role in economic development of the country. It is stated that if India has to seize this opportunity and exploit its demographic dividend, it needs to create more jobs for its available labour force at a much faster pace than ever before (Kapoor, 2014). In particular, women participation in the labour market after the globalization has increased in most of the developing countries (ILO, 2014). They are shifting from traditional agriculture sector to industry or services sector jobs. Women's share has also increased in industry, services and regular jobs in urban India in recent years (World Bank, 2014).

In industry, manufacturing holds a key position in the Indian economy, accounting for nearly 16 per cent of the real GDP and employing about 13 per cent of the country's labour force (Kapoor, 2014). This sector has greater potential of generating more jobs as the past experiences of East Asian countries, Japan, Republic of Korea, Taiwan and also China, Indonesia and Malaysian showed that only manufacturing is capable of productively absorbing this mass of less skill labour (Ghose, 2015). This sector historically cited as growth engine of the economy and has multiplier effect with greater potential of transforming the employment condition in India. The jobs in the sector are often cited as "good jobs" as it provides higher benefits and paid more to the workers than the other sectors of the economy (Dasgupta & Singh, 2006). India's manufacturing sector is characterized by its dualistic structure of formal/organized sector and a large informal/unorganized sector. The scholars and recent available studies argue about informalisation of formal jobs which refers to the deterioration of formal jobs (Ghose, 2015, ILER, 2014). Hence, the concerns are raised by policy makers and others also debating about the nature of women's jobs in industry and services sector.

The debate about nature of good or bad jobs is quite old and taken a center stage in the policy debate in most developed countries many decades ago. Initially most of these countries main policy objective was to create jobs and to reduce unemployment, and had less focus on the good jobs. As the countries progresses, the ideas of not only more jobs but good jobs emerged so it may produce financial self-sufficiency, reduce poverty and social exclusion and also thought to boost competitiveness and economic growth. It argued that higher labour participation with more dual earner families, more formal education and low birth rate women also expect better or good jobs (Kalleberg, 2007). The ILO's report on the world of work argues that quality jobs can drive sustained growth in emerging and developing countries. It also highlights that investing in quality jobs, reducing vulnerable employment and tackling working poverty leads to higher economic growth. Investment in high quality jobs tends be associated with lower income inequalities (ILO, 2014). Kabeer (2012) also

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suggested that, along with education, women's employment appeared to have a positive impact on economic growth. She further highlighted that not all forms of economic activity empower women equally but formal regular waged work or quality jobs has the greatest transformative potential to impact women's lives as well as growth. The women in urban areas of developing countries such as India at present also not only expecting more jobs but also good jobs. In this context, there is an urgent need to explore the nature of women's jobs in urban manufacturing sector in India. It will help in bridging the gap in existing literature and will help policy makers to get better understanding on the women's employment status in Indian manufacturing sector.

2. Review of Literature

The past literature has not discussed much about good and bad jobs in developing countries. It is available more in the context of developed countries for both manufacturing and services sector. In developing countries studies are mostly done on quality of employment, working conditions and decent work. However, studies related to good or bad jobs or quality of employment in manufacturing sector for women are only few. These studies highlighted women participation in manufacturing in both positive and negative context. The positive context is the shift of women from poor quality jobs in agriculture or traditional sector to the more productive jobs in industrial sector, while the negative aspect is growing flexible or inferior jobs referred as part time, temporary and casual in industry and services sector (Momen, 2006; Ofreneo, 2010). In particular, the concerns are raised about growing informalisation which is also referred as precarious or bad jobs in urban areas for women (Nath, 2008; Arnold & Bongiovi, 2013). Some other studies also highlighted that more home based jobs in garment/textile and other manufacturing in urban areas in India is responsible for the increasing poor or bad jobs (Ghosh, 2010; Mazumdar & Sarkar, 2008; Goldar, 2013).

Few other studies also stated that the growth of self-awareness about rights & duties, and participation in collective bargaining association and shifts in gender roles and value structure has helped women to get better opportunities (Kabeer, 2000; Gills, 2002; Unni, 2002). These scholars also mentioned that gender based discrimination still persists in labour market and female concentration in low skilled, repetitive and low paid jobs in manufacturing. Some recent reports also highlighted about high unemployment rate among urban women graduates reflecting that they are waiting for the good jobs (ILER, 2014). Recently few scholars also stated about increase in job quality for urban women in areas with their increasing share in regular jobs in modern sector such as electronics & information technology sector (Rustagi, 2012; Shree, 2015; Ghose, 2015, Mehta, 2012).

The literature review offers many questions about good and bad jobs that whether under the present globalisation era women's job with regularity and social security measures are available; whether flexible labour practices³ have given rise to informalisation or inferior jobs with lower salary and bad working condition for women in manufacturing; and whether women with growing skill and education label are able to access good jobs; and whether still discrimination or exclusion is exist in the labour market based on gender, social groups and poverty .

³ Labour market flexibility (LMF) implies the freedom of enterprises in deciding wage, employment and the labour process, unfettered by any institutional and legal restrictions Any interruption by the state, trade unions or any other formal and informal labour market institutions in the wage, employment and work allocation implies imposition of a limitation on the labour market functioning (Nath, 2008).

3. Objective of the Study

In this backdrop to address the above questions, the main objective of the present paper is to explore the nature of women's jobs in manufacturing sector in urban India. It attempts to examine the bad or good jobs for urban women workers in Indian manufacturing sector

4. Framework and Methodology

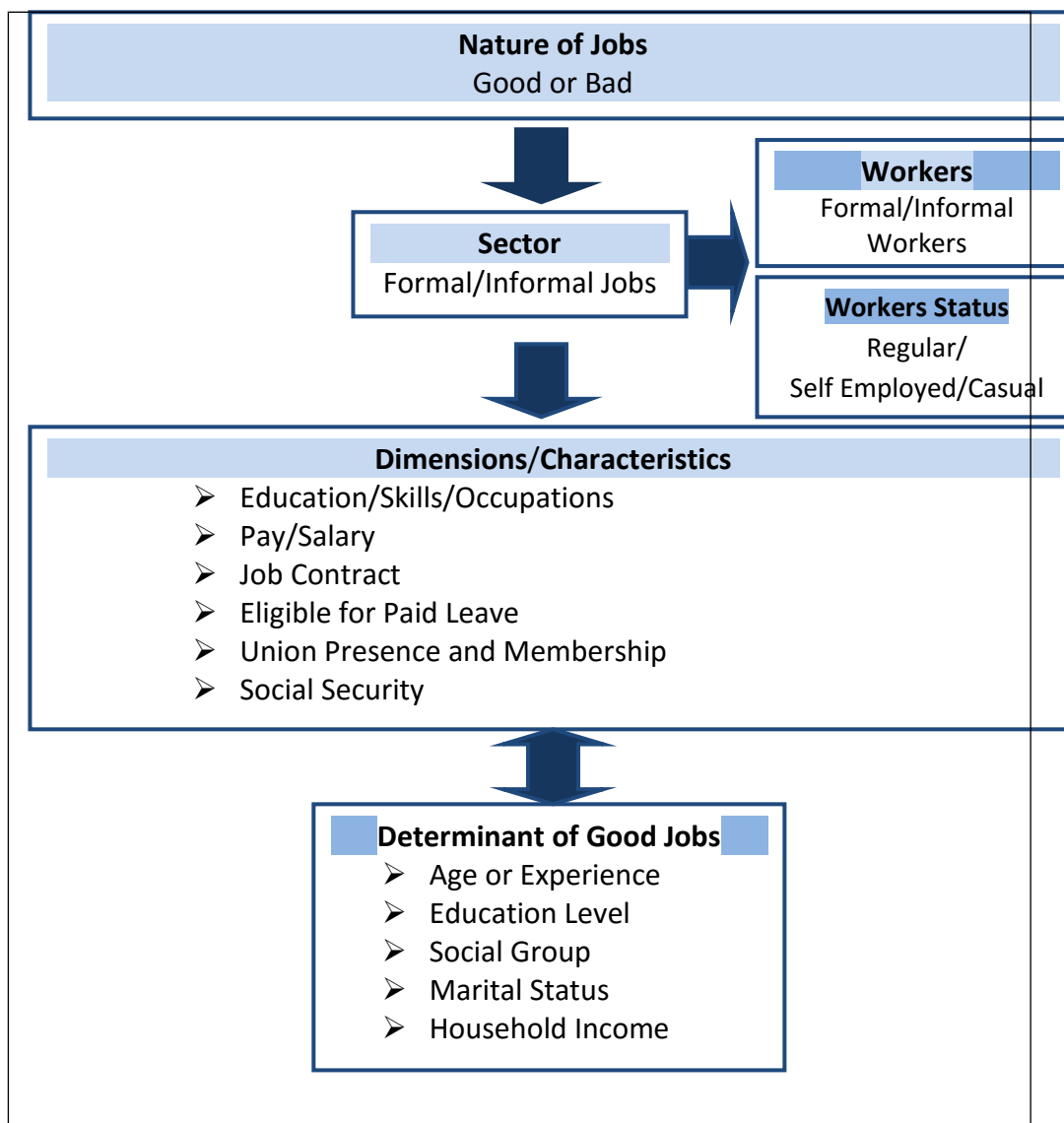
Concept of good job has long history as Marx argued in industrial production under capitalist conditions all the jobs created are considered bad as workers lose control over the nature of work (Braverman, 1974; Giddens, 1997). Smith (1977) explained that pay is positively associated with working conditions and workers who accept bad working conditions paid better to compensate for the unpleasantness. Lewis (1954), Piore (1971) stated about the existence of dual labour market. Lewis provided a powerful framework of analysis on why modern sector or manufacturing that can be a key driver of growth and structural transformation in the developing world. He stated that manufacturing growth pulls workers from low wage/low productivity jobs in traditional or agriculture to high wage/high productivity jobs in manufacturing. However, the limitation of Lewis model is he did not provide an answer on why some countries did better in creating manufacturing jobs than others. On the other hand, Piore stated that existence of primary and secondary sector in the labour market, where the former provides jobs are good quality with high security, good salary and working conditions and opportunities for career development, and latter a secondary sector with low job security, low salary and bad working conditions few possibilities for career development etc. Other argued that under mass production industry trade unions managed to create good jobs or working conditions which is otherwise not possible to maintain flexible working arrangements (Beck, 1992). In recent years, ILO (1999) also come up with 'decent work' concept of five dimensions as opportunity of work, fairness of income, security of work, social protection and freedom of association (union presence) to measure the quality or good employment. Dahl et al. (2007) paper also define concept of quality job in European countries with six dimensions as pay & fringe benefits, job security, work intensity, intrinsic job rewards, skill and autonomy & control. In India, National Commission for Enterprises in the Unorganised Sector (NCEUS) in 2008 has extended the dual labour market theory of formal or organized and informal or unorganised sector to broadly measure the nature of jobs in the country.

Hence, the measurement of nature of job of, good and bad is not an easy task. As discussed, above several concept evolved over the years. In this paper broader concept including indicators from different sources such as ILO 'decent work', Dahl et al. concept of 'Quality of Job' and NCEUS formal/informal sector have been used to examine the good and bad jobs for women in manufacturing sector. To identify good jobs NCEUS formal sector jobs for good jobs and informal sector jobs for bad jobs mainly used in the paper for the analysis. NCEUS (2008) defined government/public Sector enterprises, private limited companies and 10 & more workers as formal sector. On the other hand, informal sector consists of jobs in all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis and with less than ten total workers. The analysis is based on two period (2004/5 and 2011/12) of National Sample Surveys, Government of India data. For the analysis usual principal status (main work status) and working age group (15-59 years) have been used in the paper.

The framework used for the analysis is given in figure 1. First, the good and bad jobs have been identified by formal and informal sector. The same are also classified by status of employment (regular, self-employed and casual) and formal/informal workers to understand

the type of good and bad jobs. The next is characteristics or dimensions of good and bad jobs as per availability of data (Figure 1). These are Skills/Occupations; Pay/Salary; Job Contract Period; Eligible for Paid Leave; Union Presence and Membership and Social Security. Finally, the determinants of accessing good jobs have been examined by using the logistic regression analysis. The formal sector jobs and good jobs; informal sector jobs and bad jobs are interchangeably used in this paper.

Figure 1: Framework for the Analysis



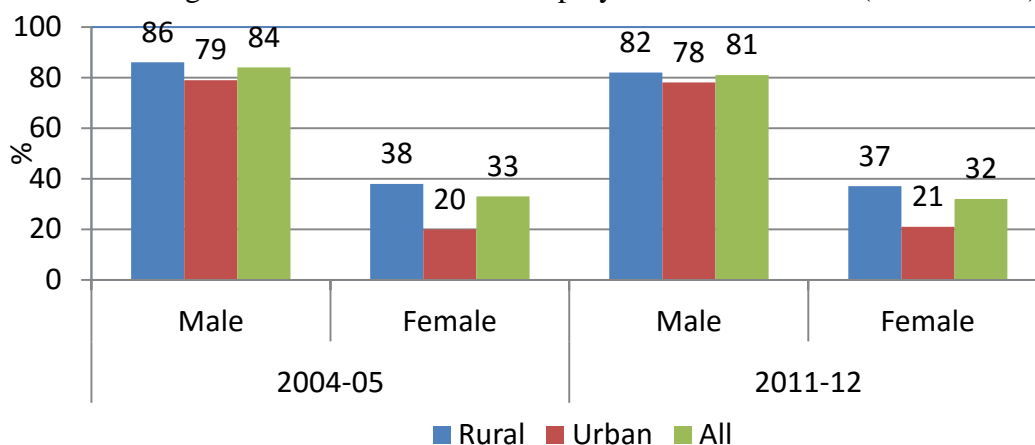
5. Discussion

5.1. Women's Employment Pattern and Trend

Almost one-third of female compared to 81 per cent male in the working age (15-59 years) are employed in India (Figure 2). There is a huge gap in female employment between rural (37 per cent) and urban areas (21 per cent). Over the years (2004/5 to 2011/12), female employment has marginally declined with urban and rural areas showing an opposite trend. The employment in rural areas decreases and urban areas increases marginally during the same period. There is also big gap between female and male employment both in rural and

urban areas with relatively higher in urban (67 percentage points) than rural (45 percentage points) areas. This reflects a disturbing pattern and trend considering the potential of female to contribute to the country’s productivity. It is argued that one of the main reasons for stagnancy and marginal increase of female employment in urban areas is available of limited opportunities in only few sectors sector such as manufacturing, information and communication industry, construction, trade & repair and private household services only (World Bank, 2014).

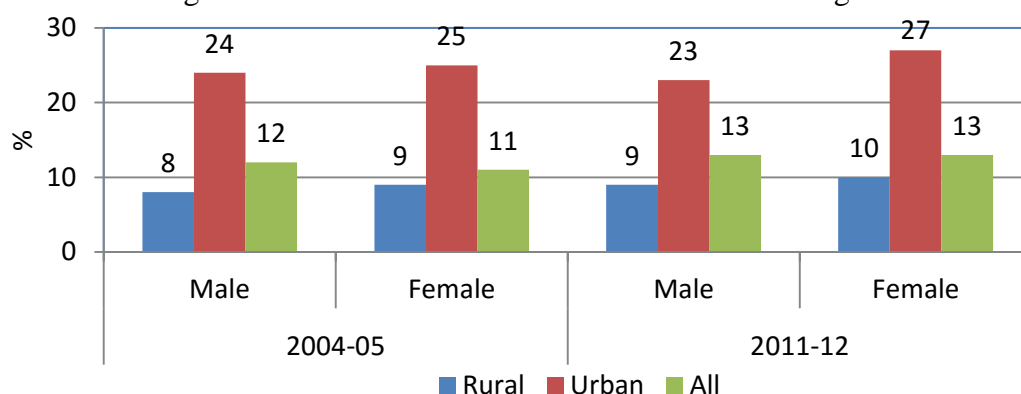
Figure 2: Female and Male Employment Rate in India (15-59 Years)



Source: NSS (2004/5 and 2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation.

Broad industrial classification of workers shows that both female and male are largely employed in primary or agricultural sector followed by services and industry (Table 1). In particular, women are involved significantly more in agriculture in rural areas, whereas almost equal in services and slightly less than their male in industry in urban areas. Over the years (2004/5 to 2011/12) females share has increased in services & industrial sector and declined in agriculture. In industry, women’s share in urban manufacturing is 25 per cent and also higher than their male counterparts (Figure 3). Women participation in urban manufacturing has gone up from 25 per cent in 2004-05 to 27 per cent in 2011-12. As discussed earlier that manufacturing sector jobs are considered productive or good jobs than other sectors of the economy. However, the recent literature argued that these jobs are mainly home based in food processing and garment/textile manufacturing sector only (ILER, 2014; World Bank, 2014), so the question arises about its nature, whether these jobs are good or bad. The subsequent sections focuses on the same issue by examining the nature of formal and informal sector jobs. Hence, the further analysis is primarily focussed on the urban manufacturing only.

Figure 3: Share of Female and Male in Manufacturing Sector in India

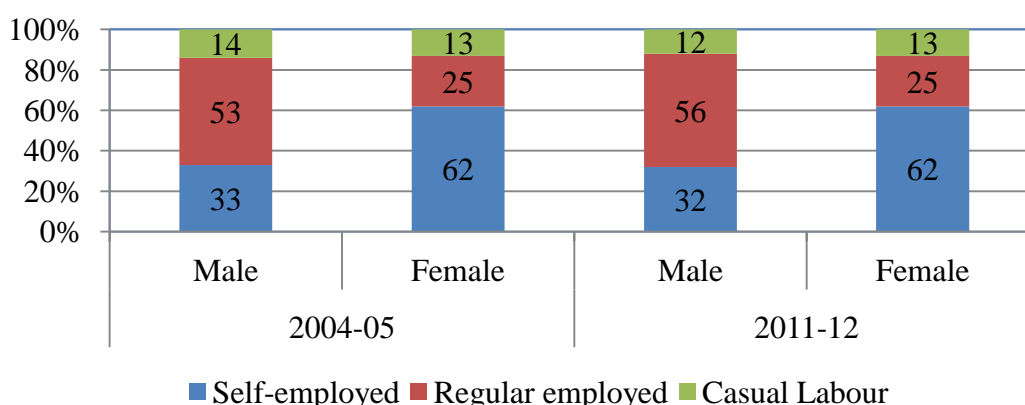


Source: NSS (2004/5 and 2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation.

5.2. Nature of Jobs

First indicator used to examine the nature of jobs is status of work that provides an insight about quality of jobs as regular jobs considered good jobs due to its regularly and social security provisions followed by self-employed, while casual labour referred as inferior jobs because of no regularity and without any social security (Mehta, 2012). In urban areas women around half of the women are involved in regular employment followed by self-employed and casual. Over the years (2004/5 to 2011/12) women's share in regular jobs has increased in urban areas (Table 2). In urban manufacturing sector, women share in regular jobs is around 25 per cent (Figure 4), while majority (62 per cent) are involved in self-employment and least in casual labour (13 per cent). The percentage of regular jobs among women workers is less than male, while opposite is true in case of self-employment. This pattern of status of jobs has been almost stable over the years.

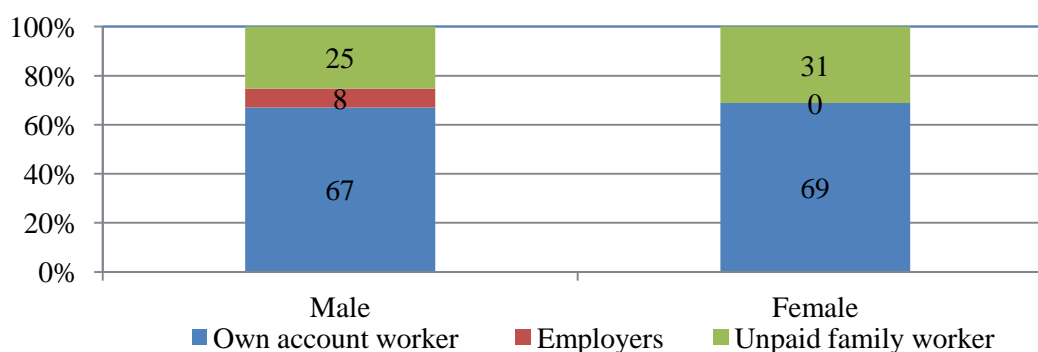
Figure 4: Female and Male Job Status in Urban Manufacturing Sector



Source: NSS (2004/5 and 2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation.

Further, detail analysis of self employed women in manufacturing shows that majority of them are involved in own account and unpaid family activities and no employers (Figure 5).

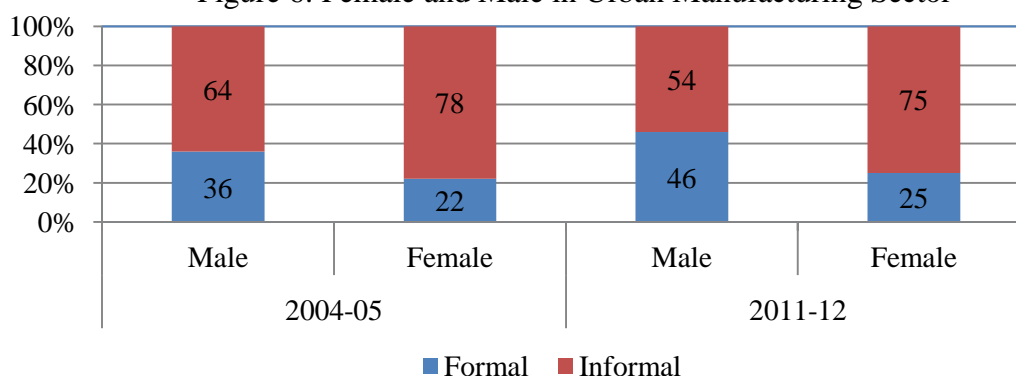
Figure 5: Self Employed Female and Male in Urban Manufacturing



Source: NSS (2004/5 and 2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation.

Second indicator is formal/organised and informal/unorganised sector jobs with former considered good, while latter inferior or bad type. Female in formal sector jobs in urban manufacturing are just around 25 per cent compared to almost twice male (46 per cent) (Figure 6). The percentage of formal sector jobs for female has increased over the years by only 3 percentage points that is relatively low compared to their male counter parts. Overall, the women still dominate in informal sector jobs in urban manufacturing sector.

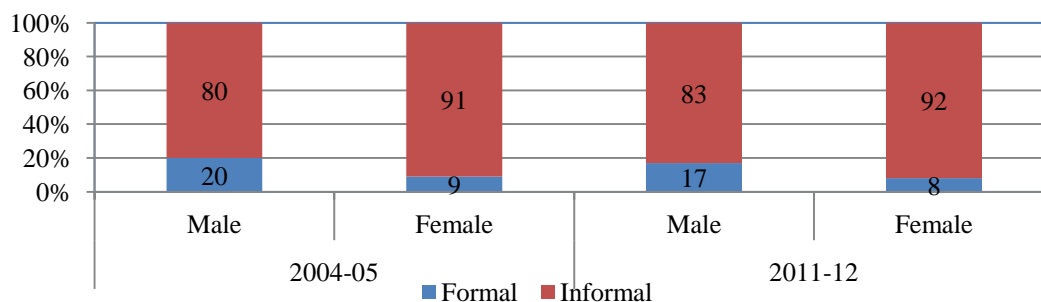
Figure 6: Female and Male in Urban Manufacturing Sector



Source: NSS (2004/5 and 2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation.

Third indicator is formal and informal workers, where former are those who have paid jobs and get social security benefits considered working in good jobs otherwise informal workers or bad jobs. The formal workers are just 8 per cent compared to 17 per cent (Figure 7). However, the percentage of formal women workers in urban manufacturing has declined over the years indicates the deterioration of jobs type. This has been explained by some scholars that increasing flexible practices such as contractualism and hiring temporary workers are the reasons behind this phenomenon (ILER, 2014; Ghose, 2014).

Figure 7: Female and Male Workers⁴ in Manufacturing Sector



Source: NSS (2004/5 and 2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation.

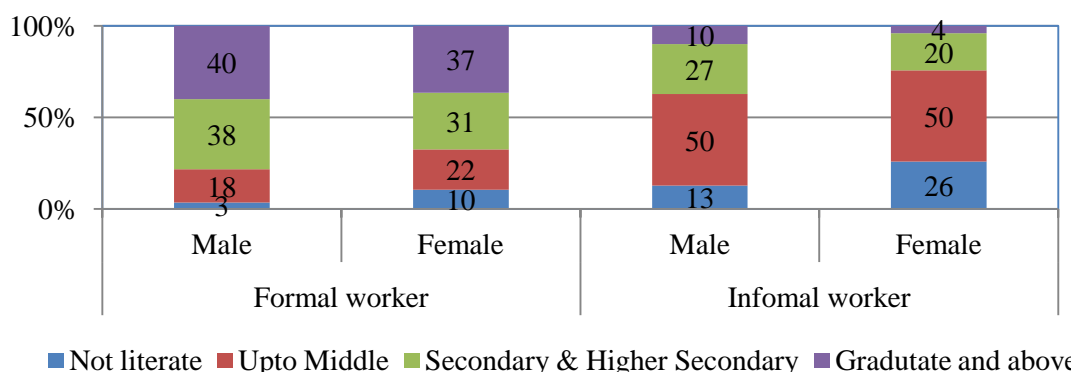
So, in this context the subsequent section analyses the characteristics to understand this phenomenon for women in urban manufacturing sector.

5.3. Characteristics of Jobs

5.3.1. Education Level

The education level of women in urban manufacturing sector shows that level of education is closely associated with nature of jobs. As Walby as cited in Banerjee (1999) also draws attention that how much education/training of a women determine her position in the labour market and coming out of patriarchy. As majority of the women workers having formal sector job in urban manufacturing have secondary and graduate level qualification, while large proportion of up to middle qualified are in informal sector jobs (Figure 8). More illiterate and upto middle qualified female are in informal sector jobs, whereas more higher qualified in formal sector jobs. There is some difference exist between female and male educational qualification at higher and lower level between formal and informal jobs.

Figure 8: Education Level of Female and Male in Urban Manufacturing



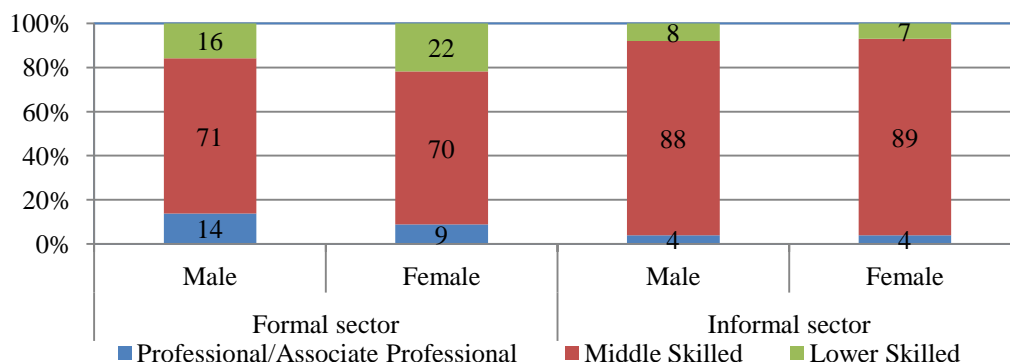
Source: NSS (2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation.

⁴ Formal workers are salary or wage workers getting social security benefits (NCEUS, 2008).

5.3.2. Occupation/Skill Level

Skill identified nature of jobs for women in formal and informal sector based on occupation. It can be seen that better skilled or professional and associate professional female dominate in formal sector jobs with more than 3 times higher presence (Figure 9). While the middle skilled jobs such as clerk dominated in informal sector jobs. However, the presence of lower skilled jobs also exists comparatively higher in formal sector jobs. There is much difference between male and female in good or bad jobs on the basis of skill or occupations. The dominance of middle level skilled occupations confirm the argument made earlier that manufacturing sector has the capacity to absorb mass middle and low skilled in India. In addition, it is argued that these jobs would be more productive and remunerative than the traditional sectors. This can be examined in the subsequent section of salary and earnings.

Figure 9: Skills/Occupation of Female and Male in Urban Manufacturing



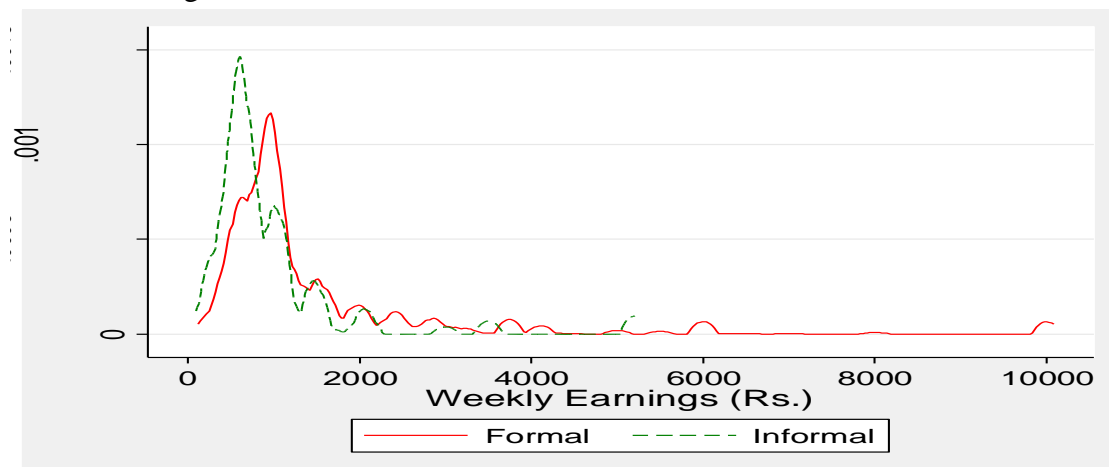
Source: NSS (2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation.

Note: Middle skilled includes Clerks; Service Workers and Shop & Market Sales Workers Craft and Related Trades Workers and Plant & Machine Operators & Assemblers. Kindly add few names for professionals and as well as lower skilled.

5.3.3. Earnings or Salary

Figure 10 shows that formal sector jobs concentration at higher levels of earnings, while informal sector jobs mainly concentrate at lower earnings. At the lower earnings the informal sector jobs concentrate more, whereas at higher earnings formal sector jobs as the bulges and concentration line reveals. Particularly, after around Rs. 5000 salary informal sector jobs does not exist. This clearly depicts the inferiority of informal sector jobs with its concentration at lower earnings.

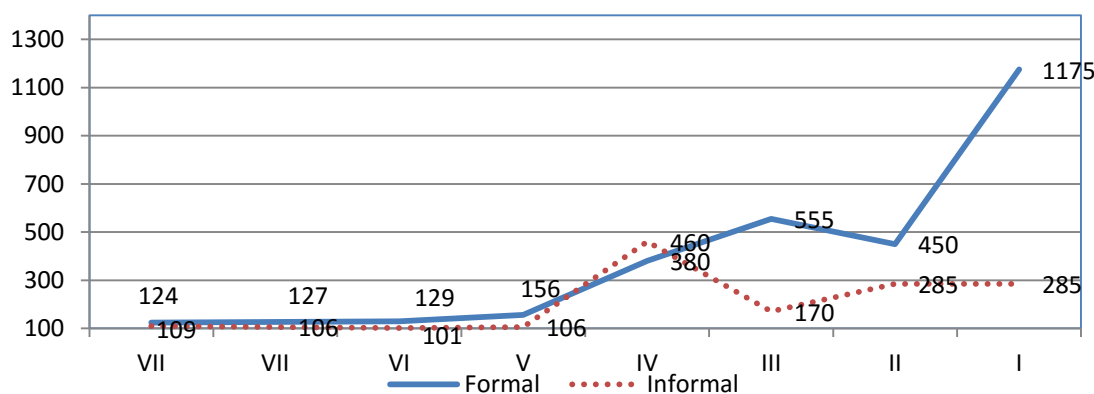
Figure 10: Kernel Graph of Weekly Average Earnings of Women Workers in Urban Manufacturing



Source: NSS (2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation.

The same can be further analysed by average daily salary levels of these jobs by skill/occupational level. The higher occupation/skilled jobs in formal sector have significantly more average salary than similar informal sector jobs (Figure 11). However, the difference at lower skilled jobs is not much. This clearly shows that lower skilled jobs in both formal and informal sector do not have much difference. But at higher level not only average per day salary is more with wider gap. Basically the higher skilled and professional jobs considered good but it matters only in formal sector jobs not in informal sector. There exists difference in average earnings between male and female at same skill level indicating existence of gender discrimination in jobs (Table 4)

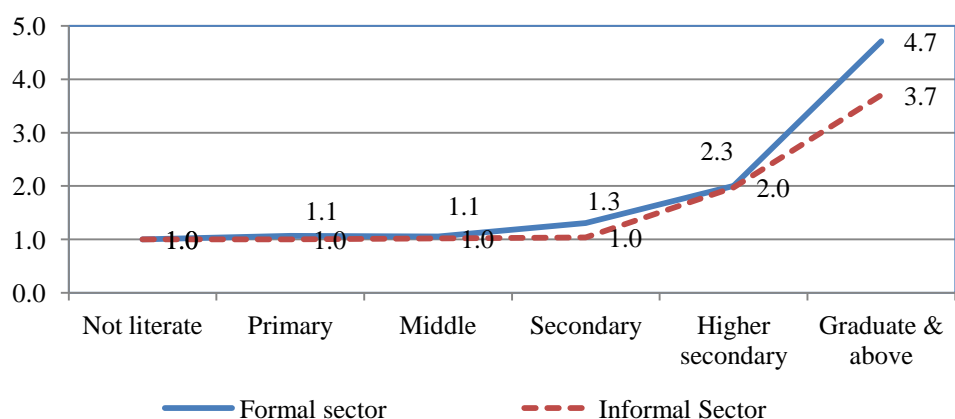
Figure 11: Average Earnings of Women by their skill level in Urban Manufacturing



Note: Senior Managers I; Professionals II, Associate Professionals III; Clerks IV, Service Workers V, Trades Workers, VI, Operators & Assemblers VII, Elementary Occupations VII
 Source: NSS (2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation.

In addition, the education level matters but how the return to education ⁵ differs with educational qualification. Overall return to education of workers increased significantly after secondary level educational qualification. There are differences in formal and informal sector jobs with gap increased slightly more after secondary and higher secondary (Figure 9). It is highest for graduates with wider gap with almost 1 point more for formal sector jobs compared to informal sector jobs for graduates & above. There is also higher return to education for male compared to female in the urban manufacturing sector again indicating gender discrimination as with same qualification the salary differs (Table 3).

Figure 12: Return to Education for Women in Urban Manufacturing



Source: NSS (2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation.

5.3.4. Job contract

This indicator provides the regularity of jobs by written contract period. However, the results show that job contract for formal sector job is provided only to 15 per cent women in urban manufacturing with just 10 per cent have more than 3 years contact period. This

⁵ This is a relative term and calculated by comparing the average per day earning level of a higher qualified to lower qualified. In the above average earning of a women with illiterate qualification has been compared with higher qualified such as primary, middle, secondary, higher secondary and graduates.

percentage is quite low in informal sector jobs with just 1 per cent female have the same contract period. It is surprising that even 82 per cent women are in formal sector jobs are without any written job contract. This percentage has been increasing over the years showing the deterioration of good jobs and increasing bad job in for women in urban manufacturing sector (Table 5).

5.3.5. Eligible for Paid Leave

Another important variable is eligibility for paid leave in the jobs. Only quarter of the formal sector jobs provided paid leave to their women workers, while the same is just 2 per cent in informal sector. The percentage of eligibility for paid leave in formal sector jobs has been declining over the years (29 per cent to 25 per cent) reflecting again the deteriorating of formal sector jobs and increasing informal jobs. The share of non applicability of the eligibility of paid leave has also been increased over the years (0 per cent to 4 per cent) (Table 5).

5.3.6. Union and Membership

The bargaining power of the workers reflects through the presence of any union or association in the sector. The union presence in formal sector jobs is just 22 per cent and 16 per cent in informal sector. In the formal sector jobs the union presence has gone up slightly and declined in the informal sector. However, the membership with these unions in both formal and informal manufacturing sector is almost equal. But over the years the membership pattern in the formal sector has been declining again showing the weakening of bargaining power of workers. This also has been confirming about increasing informal jobs in the formal sector (Table 5).

5.3.7. Social Security

The social security benefits are the major indicators of security of jobs. In manufacturing sector, only around 29 per cent of women in formal sector in manufacturing and just 6 per cent in informal sector reported eligible for social security benefit. In formal sector job, any social security benefits reported almost 6 times higher than informal sector jobs, while major social security benefits⁶ 3 times more. However, the not eligibility of social security benefits reported very high and increasing over the years. Even within formal sector jobs non-eligibility of social security benefits reported 71 per compared to 94 per cent in informal sector (Table 5).

The above finding reveals that education and skill levels matter for formal or good jobs but showing increasing informal jobs or deterioration of formal jobs over the years. So, it is necessary to examine that what are the indicators for likelihood of accessing good job. The next section tries to examine the same through logistic regression analysis.

5.4. Determinant of Good Jobs

To examine the determinant of probability of accessing good and formal sector jobs a logistic regression has been done. Assuming formal job is a function of education, year of experience, salary level, social groups, marital status and household income. This is represented as:

⁶ Note: Provident Fund/ pension, gratuity, healthcare and maternity benefits (Mehta, 2012)

$$\text{formal}_i = \beta_0 + \beta_1 \text{education}_d + \beta_2 \text{age} + \beta_3 \text{earning/salary} + \beta_4 \text{socialgroup}_d + \beta_5 \text{maritalstatus}_d + \beta_6 \text{household income level}_d + \mu$$

Here i denote a binary variable with 1 for formal sector jobs or good jobs and otherwise 0 for informal sector jobs or bad jobs; d as dummy for each category; μ is error term

The categories used for dummies for marital status - married/unmarried/separated and widows), education-illiterate, up to middle, secondary/higher secondary/ graduate and above), household income quintile- poorest 1 and 5 highest, and social groups (SC/ST, OBC and Others). Logistic regression has been done for male and female separately. Marital status is not included in the independent variable for male. The results are reported in the Table 6.

These results are all statically significant and the odd ratios show that probability of accessing formal sector jobs for women increased with 1.2 times with age or experience increases; educational level has no effect up to middle level but probability of accessing good jobs increased after secondary level and graduates by 1.2 times and 1.5 times respectively. The same is true in case of formal male but with higher probability than female; single women (unmarried, widows/separated) have higher probability of accessing good job compared to married as both have 1.2 times higher chances of getting good jobs; social group of the women also play an important role as upper caste women have 3 times higher probability of getting good jobs compared to disadvantaged groups as schedule caste /tribes. Similar is the case for male. The household income also play major role for getting good jobs but it is true for only top two groups mean women belongs to rich or affluent families have 1.3 and 1.4 times higher probability of accessing good jobs.

6. Conclusion

This analysis shows that for urban female opportunity has increased marginally but limited to only self-employment manufacturing mainly home based work like garment and other manufacturing. The formal sector job has increased but formal workers in manufacturing declined over the years indicating the deterioration of formal or good jobs. The formal sector or good jobs require more higher qualified (at least secondary and above) and skilled (professional/associate professional) workers; paid higher salary with the same skill level, written job contract; paid leave and union presence and social security benefits. In addition regression exercise reveal that higher salary, more experienced, secondary and graduates have higher probability of getting access to good jobs. However, social exclusion still persists in job quality as above medium income households and upper caste have higher chances of getting good jobs compared to others. This also reflect that even after so many years of reservation in organized and formal sector jobs, the disadvantaged group still not able to get full advantages. So, the problem lies somewhere else means provide better education to them instead of reservation in jobs. The urgent policy requirement is to provide social security benefits to unorganized self-employed and casual workers with more focus on skill training and encouragement of manufacturing enterprises who promote women employment by providing those suitable facilities such as transportation, security and crèche facilities. Overall, the urban India requires transfer of labour from the informal sector jobs to the formal sector jobs, which can happen only when the rate of growth of organised sector jobs or good exceeds that of the labour force in the economy. This will not only create more good jobs but also contribute to the growth of the country and empowerment of women.

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Annexure

Table 1: Broad Industry wise Distribution of Workers (15-59 Years)

	Rural			Urban			Total		
	Male	Female	All	Male	Female	All	Male	Female	All
2004-05									
Primary	65	81	70	5	14	7	49	71	55
Industry	17	11	15	35	30	34	22	14	19
Services	19	8	15	60	56	59	30	15	26
Total	100	100	100	100	100	100	100	100	100
2011-12									
Primary	57	74	61	5	8	5	41	59	45
Industry	23	15	21	36	33	35	27	19	25
Services	20	11	17	59	59	59	32	22	29
Total	100	100	100	100	100	100	100	100	100

Source: NSS (2004/5 and 2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation

Table 2: Status of Work of Workers (15-59 Years)

	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
2004-05									
Self-employed	55	56	56	43	39	43	52	53	52
Regular employed	10	5	8	42	44	42	19	11	16
Casual Worker	35	39	36	15	17	15	29	36	31
Total	100	100	100	100	100	100	100	100	100
2011-12									
Self-employed	52	53	52	40	36	40	48	49	49
Regular employed	11	8	10	45	50	46	21	18	21
Casual Worker	37	39	37	15	14	15	30	33	31
Total	100	100	100	100	100	100	100	100	100

Source: NSS (2004/5 and 2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation

Table 3: Educational level in Manufacturing in Urban areas

	Formal sector		Informal Sector	
	Male	Female	Male	Female
Not literate	184	125	181	113
Primary	226	133	196	113
Middle	250	132	194	115
Secondary	296	163	243	117
Higher secondary	440	219	243	223
Graduate & above	861	589	332	419
All	433	235	213	142

Source: NSS (2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation.

Table 4: Occupational/ Skill level in Manufacturing in Urban areas

	Formal		Informal	
	Male	Female	Male	Female
Senior Managers	1374	1175	343	285
Professionals	864	450	343	285
Associate Professionals	658	555	213	170
Clerks	342	380	272	460
Service Workers	422	156	198	106
Trades Workers	194	129	187	101
Operators & Assemblers	257	124	218	109
Elementary Occupations	198	127	173	106
Total	410	203	197	115

Source: NSS (2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation.

Table 5: Characteristics of Formal sector Jobs

Characteristics	2004-05		2011-12	
	Formal	Informal	Formal	Informal
Job Contract				
Not specify	0	80	4	81
No written job contract	74	20	82	17
For 1 year or less -2 written job contract	3	0	3	0
More than 1 year to 3 years	3	1	2	1
More than 3 years	20	1	10	0
Total	100	102	101	99
Paid Leave Eligible				
Not Applicable	0	80	4	81
Yes	29	2	25	2
No	71	20	71	17
Total	100	101	100	100
Union				
Yes	18	18	22	16
No	75	75	75	82
Not known	7	8	2	2
Total	100	101	100	100
Membership				
Yes	77	52	52	52
No	23	48	48	48
Total	100	100	100	100
Social Security				
Some Benefits	22	9	23	4
All Major Benefits**	10	1	6	2
Not Eligible	67	90	71	94
Total	100	100	100	100

** *PF/ Pension, Gratuity, Healthcare and Maternity Benefits

Source: NSS (2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation.

Table 6: Logistic Regression Results

	Female			Male		
	Odds Ratio	Std. Err.	P>z	Odds Ratio	Std. Err.	P>z
Age	1.17	0.00	0.00	1.08	0.00	0.14
age2	1.00	0.00	0.00	1.00	0.00	0.00
Salary	1.10	0.00	0.00	1.20	0.00	0.00
Illiterate(rf)						
Upto Middle	0.96	0.01	0.00	0.93	0.00	0.00
Secondary/Higher Secondary	1.20	0.01	0.00	1.43	0.00	0.00
Graduate/Professional	1.53	0.02	0.00	1.80	0.01	0.00
Married(rf)						
Unmarried	1.17	0.01	0.00	-	-	
Widow/separated	1.18	0.01	0.00	-	-	
SC/ST(rf)						
OBC	1.54	0.01	0.00	1.19	0.00	0.00
Others	3.04	0.02	0.00	2.04	0.00	0.00
Poorest households						
2Qt	0.90	0.01	0.00	0.89	0.00	0.00
3Qt	0.93	0.00	0.00	0.86	0.00	0.00
4Qt	1.33	0.01	0.00	1.10	0.00	0.00
Richest(rf)	1.37	0.00	0.00	1.26	0.00	0.00

Number of observation	1168338	10564939
LR chi2(14)	142534.12	1392530.3
Prob > chi2	0.00	0.00
Pseudo R2	0.11	0.11
Log likelihood =	-606637	-5630954.4

Source: NSS (2011/12). *Employment and Unemployment in India*; Unit level data, New Delhi: National Sample Survey Organisation.