

Gender Pay Gap in India: A Sectoral and Regional Analysis

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Abstract - This paper attempts to measure Gender Pay Gap (GPG) in India using NSSO data for the year 2011-12. Our results show that Gender Pay Gap in India is higher in rural sector as compared to urban sector. In both rural and urban sector agriculture and private households with employed persons account for highest Gender Pay Gap. Our results also show that GPG is higher among illiterates and below matric literate employees. However, state level analysis of Gender Pay Gap shows that economically developed states have lower Gender Pay Gap and the poorer states have higher Gender Pay Gap in India.

Keywords: Gender Pay Gap, NSSO, Rural Sector and Urban Sector

I. INTRODUCTION

Gender pay gap (GPG) refers to the difference between men's pay and women's pay as a percentage of men's pay. The constitution requires equal pay for men and women performing same work. But actually, women earn 57% of what their male colleagues earn for performing the same work (World Economic Forum, India, 2016). The omnipresent 'glass ceilings' and 'sticky floors' put women at disadvantageous position in wage distribution. The icing on the cake is that the share of women in the labour force and labour participation rate of women has been declining for the last couple of decades. This so called 'defeminization' of labour force or crowding out of female labour force has serious implications for the feminist agenda of 'engendering development'. The gender pay gap is an important measure to establish gender inequality in labour market. It is central to United Nations' SDGs, "decent work for all women and men, and lower inequality, as among the key objectives of a new universal policy", which highlight the importance of measuring and devising a mechanism to reduce the pay gap (ILO, 2016).

In this paper we examine the nature and extent of gender pay gap in India. The paper is divided into six sections. Section II gives a brief review of literature of Gender pay Gap. Section III discusses Methodology. Section IV deals with the constitutional and Legal provisions for equal pay in India. Section V gives empirical estimates of Gender pay Gap in India and the final Section gives conclusion of the paper.

II. REVIEW OF LITERATURE

Gender Pay Gap (GPG) makes women an attractive labour force for labour-intensive products and hence feminisation

of labour force brings down the cost. Gender wage gap is not only a developing country phenomenon, rather it is universal. There have even been studies which show that Gender Pay gap contributed significantly to economic growth (Seguino, 2000) and is even highly associated with comparative advantage (Busse and Spielmann, 2006). Human capital theory of Becker (1962) and Mincer (1962) was the first theory which explained the reasons for GPG. According to this theory people's tendency to invest in training and the acquisition of skills depends on the anticipated returns they will receive as a consequence of investment. Since females will get less return on these skills, compared to males, they are less likely to invest in education. The businesses are less likely to hire females as they anticipate getting less return on training investments. However, women being equally educated and better skilled do not get the same pay as of their male counterparts.

The major reasons for GPG include under-valuation of women's work (Chicha, 2006), organisation of workplace and domestic division of labour (Perrons, 2009), taste of employer for discrimination (Becker, 1957), occupational segregation (Bergmann, 1974), the cultural restrictions to participate in the formal economy (Dreze & Sen, 1995, Nihila, 1999), non-rewarding care work (Rees, 1992), poor wage position of women owing to wage discrimination (Madheswaran & Lakshmanasamy, 1996), Stage of career and higher Experience (Duraishamy & Duraishamy, 1998), denial of employment to women for being unmarried (Education International, 2011), and being potential mothers (Goldberg & Hill, 2007), lesser expected lifetime of women in labour force participation (Kao, Polachek and Wunnava, 1994), change in relative positions of women in the labour market due to reforms (Brainerd 2000), age, experience, industry, status of workers' employment (Stanley and Jarrell, 1998), greater female labour supply (Boserup, 1970), women's capacity to perform certain tasks (Prem Chaudhary, 1993) and women's concentration in low-productivity jobs (World Bank, 2012).

Review of Literature suggests that Gender Pay Gap can be for two reasons (According to UNDP (2006) two main reasons for the pay gap are direct gender discrimination in labour markets and occupational segregation)

- (i) Pre market discrimination (difference in skills)
- (ii) Labour market discrimination.

The gender pay gap in India provides evidence of both human capital differences and labour market discrimination (Madheswaran & Khasnobis, 2007). However, Labour market discrimination accounts more for GPG than the difference in human capital (Jann; 2008). The works of Kingdon and Unni (2001), Bhaumik and Chakrabarty (2008), Goel (2009) and Khanna (2012) based on NSSO's data for different round testify high Gender Pay Gap in India.

India has the lowest proportion of female employees in the world- only 23% (Zahidi & Ibarra, 2010). This is primarily because of Gender discrimination in labour market. Gender discrimination is an inefficient practice (Mitra; 2006). Because the discrimination whether it is gender discrimination as the complete exclusion of females from the labour market or as the exclusion of females from managerial positions it lowers economic growth, and implies a reduction in per capita GDP, along with distortion in the allocation of talent (Volart; 2004). This further puts woman in disadvantageous position because, the differences in wages have their links with a 'continued pattern of discrimination' (Gibelman; 2003).

III. METHODOLOGY

We have used NSSO's 68th round data for the year 2011-12 to analyse Gender Pay Gap in India. The GPG is now the

main indicator of the extent to which there is equal pay in the labour market and the workplace. Usually, mean and median hourly wages are used to calculate the Gender pay Gap. However, due to data constraint we have used average per day wages/salary (Since women work fewer hours than men, using per day wages could bias (and inflate) the gender wage gap) to calculate Gender pay Gap in India using the following formula

$$GenderPayGap^t = \frac{M^t - F^t}{M^t} \times 100$$

Where M^t and F^t are male and female wages at time t.

Gender pay gaps can be either positive or negative. A negative GPG shows that women on average earn more than men.

IV. INDIAN LAW ON GENDER PAY GAP

Table I gives a brief account of constitutional provisions relating to Gender Equality in India. Article 14, 15 (1), and 16 are fundamental rights whereas article 39 (a), 39 (d), 42 and 51 (a) (e) are part of Directive Principles of State Policy. It means that the Constitution of India not only accords equality to women but also empowers the State to adopt measures of positive discrimination in their favour.

TABLE I CONSTITUTIONAL PROVISIONS FOR GENDER EQUALITY IN INDIA

Article 14	Men and women to have equal rights and opportunities in the political, economic and social spheres.
Article 15(1)	Prohibits discrimination against any citizen on the grounds of religion, race, caste, sex etc.
Article 15(3)	Special provision enabling the State to make affirmative discriminations in favour of women.
Article 16	Equality of opportunities in matter of public appointments for all citizens.
Article 39(a)	The State shall direct its policy towards securing all citizens men and women, equally, the right to means of livelihood.
Article 39(d)	Equal pay for equal work for both men and women.
Article 42	The State to make provision for ensuring just and humane conditions of work and maternity relief.
Article 51 (A)(e)	To renounce the practices derogatory to the dignity of women.

Source: Report of the Steering Committee on Empowerment of Women and Development of Children for the Eleventh Plan

In India various efforts have been made by passing laws in order to ensure equal pay and equal treatment at workplace and eliminate Labour market discrimination. Table II presents major laws relating to the equal treatment of males and females in labour market. Apart from Constitutional and Legal provisions India has ratified various international conventions and human rights instruments committing to secure equal rights of women. Key among them are the Convention on Elimination of All Forms of Discrimination Against Women (CEDAW; 1993) (India did not agree to

Article 29(1) of the Convention, which establishes compulsory arbitration or adjudication by the International Court of Justice of disputes concerning interpretation), the Mexico Plan of Action (1975), the Nairobi Forward Looking Strategies (1985), the Beijing Declaration as well as the Platform for Action (1995) and the Outcome Document adopted by the UNGA Session on Gender Equality and Development & Peace for the 21st century. These have been unreservedly endorsed by India.

TABLE II LEGAL PROVISIONS FOR GENDER EQUALITY IN EMPLOYMENT IN INDIA

Workmen's Compensation Act, 1923	This Act was aimed at providing financial protection to the workman & his/her dependents in case of accidental injury by means of payment of compensation by a certain class of employers. Due to the difference in bargaining power, there are chances that the woman may be subject to exploitation.
Minimum Wages Act, 1948	In accordance with Article 39 of the Constitution, this Act was passed to provide for a statutory fixation of minimum wages, since workers are poorly organized and have less bargaining power. It provides for fixation of minimum wages by the government for employment and provides for machinery for fixing and revision of minimum wages.
Factories Act, 1948	This Act was introduced to regulate the condition of labourers employed in factories. However a number of provisions relating to safety, health & welfare of the workers are generally found to be inadequate in view of the large and growing industrial activities.
Contract Labour (Regulation and Abolition) Act, 1970	This Act provides for the separate provision for utilities and fixed working hours for women.
Equal Remuneration Act, 1976	This Act provides for equal pay to men and women for equal work. Article 42 of the Constitution states that the State shall make provisions for securing just and humane conditions of work and provide for maternity relief. This act was enacted keeping in mind the unequal physical & sociological burden a woman faces at the time of child bearing and rearing.
National Commission for Women Act, 1990	The act provided for the establishment of a National Commission for Women to study and monitor all matters relating to the constitutional and legal rights and safeguards of women. National Commission for women was established in 1992.

Source: Planning Commission (2006)

V. GENDER PAY GAP IN INDIA: EMPIRICAL EVIDENCES

Table III presents Gender Pay Gap in average per day earnings of regular wage/salaried employees of age 15-59 years by industry of work in both rural and urban sector for the year 2011-12. It is clear from the table that the highest

pay gap in rural sector is in private households (61.74 %) followed by mining and quarrying (55.58%) and manufacturing (50.56%). In these three industrial activities gender pay gap is more than 50%. Construction (-15.5 %) and Transport and storage (-25.61 %) are the only industries in rural sector where Pay Gap is in favour of women and women on average get more wages than men.

TABLE III GENDER PAY GAP (%) IN AVERAGE PER DAY WAGE/SALARY EARNINGS OF REGULAR WAGE/SALARIED EMPLOYEES OF AGE 15-59 YEARS BY INDUSTRY OF WORK: 2011-12

Sector of work (Industrial Activity)	Rural	Urban
Agriculture (01-03)	40.03	63.40
Mining & quarrying (05-09)	55.88	50.56
Manufacturing1 (10-18)	33.55	42.44
Manufacturing2 (19-33)	50.56	38.87
Electricity, gas and water (35-39)	46.39	-1.41
Construction (41-43)	-15.5	32.98
Trade (45,46,47,55,56)	19.91	9.14
Transport & storage etc.(49-53)	-25.61	-2.54
Services (58-96)	47.26	23.93
Private hhs. With employed Persons (97)	61.74	51.41
Others (99)	N.A.	N.A.
All	37.46	22.07

Source: Author's calculations based on data from NSSO's 68th Round

In urban sector highest GPG is found in agriculture (63.40 %), followed by private households with employed persons (51.41 %) and mining and quarrying (50.56 %). The sectors with highest Gender Pay Gap are same in both rural and urban sector with only difference of percentage. However,

in urban sector in construction GPG is as high as 32.98 %. Women get higher average wages in Electricity, Gas and water and Transport and Storage. But, the percentage of GPG is very small and almost negligible i.e. -1.41 % and -2.54 % respectively.

TABLE IV GENDER PAY GAP (%) IN AVERAGE PER DAY WAGE/SALARY EARNINGS OF REGULAR WAGE/SALARIED EMPLOYEES OF AGE 15-59 YEARS BY LEVEL OF EDUCATION: 2011-12

Sector	Not Literate	Literate & up to middle	Secondary & Higher Secondary	Certificate/ Diploma	Graduate & Above	All
Rural	48.78	48.50	43.66	4.81	31.33	37.46
Urban	40.56	44.02	14.38	25.35	24.31	22.07

Source: Author's calculations based on data from NSSO 68th Round

TABLE V AVERAGE WAGE/SALARY (IN RS.) RECEIVED PER DAY BY REGULAR WAGE/SALARIED EMPLOYEES OF AGE 15-59 YEARS: 2011-12

State	Rural	Rank	Urban	Rank
Andhra Pradesh	10.45	6	42.9	29
Arunachal Pradesh	29.4	12	10.81	9
Assam	47.75	24	8.71	8
Bihar	58.17	27	11.53	10
Chhattisgarh	39.07	19	28.31	21
Delhi	26.96	11	-20.09	1
Goa	31.27	13	5.02	7
Gujarat	35.57	17	16.69	12
Haryana	9.85	4	21.62	14
Himachal Pradesh	42.33	21	28.04	19
Jammu & Kashmir	50.97	26	2.59	5
Jharkhand	42.91	22	34.11	27
Karnataka	36.07	18	24.41	17
Kerala	34.74	16	20.65	13
Madhya Pradesh	59.93	29	30.26	26
Maharashtra	16.9	9	28.31	22
Manipur	11.72	7	2.95	6
Meghalaya	19.67	10	15.77	11
Mizoram	9.03	3	28.2	20
Nagaland	9.99	5	30	25
Odisha	9	2	37.42	28
Punjab	47.95	25	-13.27	2
Rajasthan	45.88	23	1.02	4
Sikkim	4.53	1	22.58	15
Tamil Nadu	31.83	15	29.26	24
Tripura	31.57	14	26.4	18
Uttar Pradesh	42.24	20	23.87	16
Uttarakhand	14.23	8	0.4	3
West Bengal	59.72	28	28.83	23
India	37.46	-	22.07	-

Source: Author's Calculations based on data from NSSO's 68th Round

Table IV presents Gender Pay Gap in salary earnings of regular wage/salaried employees of age 15-59 years by level of education in rural and urban sector for the year 2011-12. It is clear from the Table that both in rural and urban sector highest Pay Gap is among illiterate workers. For certificate and Diploma holders in rural area and Secondary & higher

secondary in urban area it is as low as 4.81 % and 14.38 %. The overall GPG in rural sector (37.46%) is higher than the urban sector (22.07%). This can be due to the structure of employment and unorganised nature of the agriculture labour. Another reason can be that, in rural sector agriculture is the main occupation and most of the work needs physical strength. So females are paid lesser than their male counterparts.

Table V reveals that Madhya Pradesh (59.93 %), West Bengal (59.72%) and Bihar (58.17 %) have highest Gender Pay Gap. These states are also among the most undeveloped states of India. Whereas, Sikkim (4.53%), Odisha (9 %), Mizoram (9.3 %), Haryana (9.85%) and Nagaland (9.99%) have lowest Gender Pay Gap. Only Odisha being an exception the north eastern state and Haryana are among the economically developed state of India.

Similarly, in Urban Sector Delhi (-20.09%) and Punjab (-13.27%) showing a negative GPG are states of highest per capita income. As stated earlier, the Gender Pay Gap is comparatively lower in urban sector but still remains high in Andhra Pradesh (42.9), Odisha (37.42%) and Jharkhand (34.11 %). Both Odisha and Jharkhand are economically poor state of India. An interesting point to note here is that Orissa which has second lowest Gender Pay Gap in rural sector has second highest gender pay gap in urban Sector.

VI. CONCLUSION

It is true that Indian Constitution and Laws do not permit discrimination in labour market. But at the same time it is also true that more than 90% of the labour market in India is in unorganised sector and there is no law that governs unorganised sector. Females are over-represented in housework and agricultural occupations and under-represented in services. In services sector most of the females are employed in part time work and in low paid jobs of nursing, anganwadi worker, preschool and domestic help particularly. Patriarchy, social, cultural and personal constraints on female participation in labour market, both horizontal and vertical occupational segregation, large care and unpaid work and undervaluation of female's work add to the discrimination and make it worse. This leads to payment of low wages to women and high Gender Pay Gap. Whatever be the reason or region the fact is no country has been able to close down the gender pay gap completely (Tijdens & Klaveren, 2012). Despite all the efforts, laws and unprecedented economic growth, Gender Pay Gap in India is still as high as 30 %. Unless and until, progress on

social front is not made Gender Pay Gap will continue to exist in India. The efforts to close Gender Gap will take time and to eliminate it completely in a country like India is a far distant dream.

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