# WageIndex Report India Indian Gender Pay Gap - 2018



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# **Bibliographic Information**

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The WageIndicator Foundation started in 2001 to contribute to a more transparent labour market for workers and employers. It collects, compares and shares labour market information through (online & face-face) surveys and desk research. It serves as an online library for wage information, Labour Law and career advice. The WageIndicator Foundation is assisted by world-renowned universities, trade unions and employers' organisations and currently operates in 125 countries, with 60 new countries in the pipeline. Their international staff consists of some 100 specialists spread over the whole world. The foundation has strong relationships with Monster since 2003. The WageIndicator Foundation is a global organisation reaching millions on a monthly basis. For more information please visit: <a href="WageIndicator.org">WageIndicator.org</a>. WageIndicator Foundation has offices in Amsterdam (HQ), Ahmedabad, Bratislava, Buenos Aires, Cape Town, Dar es Salaam, Maputo and Venice.

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# **About Paycheck India**

Paycheck India - www.paycheck.in

The research initiative <u>Paycheck India is</u> based at the Indian Institute of Management Ahmedabad. It forms part of the global <u>WageIndicator network</u>. India was the first Asian country to join the WageIndicator initiative. Paycheck India aims at collecting and providing data about wages, law and career. With a focus on fair salaries, Paycheck India yields salary predictions for 1600 occupations in India's private, public and non-profit sector through its Salary Checker. State wise minimum wages in India, living wage calculation, laws and career advice are updated on a regular basis to continuously increase transparency on the market.

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#### **About IIMA**

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#### **About Monster India**

Monster India, India's leading online career and recruitment resource with its cutting edge technology provides relevant profiles to employers and relevant jobs to jobseekers across industry verticals, experience levels and geographies. More than 200 million people have registered on the Monster Worldwide network. Today, with operations in more than 40 countries, Monster provides the widest and most sophisticated job seeking, career management, recruitment and talent management capabilities globally. Monster India started its operations in 2001. Headquartered in Hyderabad, the company has presence in 10 other cities of India viz., Mumbai, Delhi, Bangalore, Chennai, Pune, Kolkata, Ahmadabad, Baroda, Chandigarh and Cochin. Monster Mobile App was voted Product of the Year under the 'Mobile App Job' category in a survey of over 18000 people by Nielsen. Monster.com was voted Product of the Year in 2015 and back in 2014, mPower Search was voted Product of the Year as well. Monster India and DishTV partnered in convergence of the Internet and TV medium to make job services accessible to TV viewers across all cities, bridging the unmet need of the audience for whom access to the internet is limited. This first ever job search initiative is called 'Monsterjobs Active'. The Indian Air Force Placement Cell (IAFPC) selected Monster India for a collaboration to provide a robust platform to assist retired and shortly retiring Air Warriors seek suitable second career opportunities in the corporate world. Monster along with CII launched ciispecialabilityjobs.in - a platform for the specially-abled people to find relevant jobs. This initiative aimed at empowering the differently abled and bringing newer & better opportunities at their doorsteps. Monster also initiated 'Rozgarduniya.com' - a job portal exclusively for iobseekers in rural India to enable employers in corporate India to connect with rural talent, thus removing the traditional barriers they face in this process. To learn more about Monster India visit: www.monsterindia.com | www.facebook.com/monsterindia | https://twitter.com/monster india

#### **Disclaimer**

This report is a part of standard reports published annually by WageIndicator based on the data collected through WageIndicator's continuous voluntary web survey (paycheck.in). This report uses the standard WageIndicator Report Template, as a result of which some parts of the report (acknowledgements, methodology, definitions, variables analysed, etc.) remain common across all reports.

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#### 1. Introduction

It is rather woebegone that in today's progressive world where we talk about democracy and equality, we find that there still exists a differential wages paid to men and women in the labour market for the same type of work in almost all the countries worldwide. On average, men are paid approximately 20% more than women, regardless of the type of employment, nature of employment or the structure of economic systems in the countries. India ranks amongst one of the countries with the highest gender pay gap (GPG) according to The Global Wage Report 2016-17 published by the ILO.<sup>2</sup>

This report uses data from WageIndicator's continuous voluntary web salary survey (paycheck.in) to analyse GPG of India in 2018.<sup>3</sup>

The main finding of the report are:

- GPG increases with an increase in education level
- GPG is higher at higher skill levels
- GPG increases with higher tenures
- GPG increases with an increase in the firm size (in terms of number of employees)
- GPG varies across various industries

#### 2. General definitions:

**Gross hourly wage and bonuses** – Gross hourly wage, for our purposes, is based and calculated on the grounds of gross wage and working hours reported by respondents. For reporting, the median<sup>4</sup> of gross hourly wage is used. The dataset on which the calculations are based is already cleared of outliers.<sup>5</sup>

**Purchasing power parity (PPP)** – Is based on differences in prices of goods and services in different countries. Using the PPP index, we can calculate an "international dollar" with the same purchasing power as the US dollar in the United States. The implied conversion rate defined by the latest World economic outlook (WEO) database of the IMF (October 2018) used for India for the year 2018 is 1:18.07

**GPG** – GPG is computed according to the formula:<sup>6</sup>

<sup>&</sup>lt;sup>1</sup> Global Wage Report 2017/2018. What lies behind gender pay gaps, International Labour Organization (ILO). Available at: <a href="https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms">https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms</a> 650553.pdf

<sup>&</sup>lt;sup>2</sup> Global Wage Report 2016/2017. Wage inequality in the workplace, International Labour Organization (ILO). Available at:

https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms 537846.pdf

<sup>&</sup>lt;sup>3</sup> Tijdens, K., & Osse, P. (n.d.). WageIndicator continuous web-survey on work and wages. Amsterdam: University of Amsterdam/AIAS and Stichting Loonwijzer.

<sup>&</sup>lt;sup>4</sup> The median is the numeric value separating the upper half of a sample from its lower half. For example, by definition of the median wage, 50% of the sample earn more and 50% earn less than the median wage.

<sup>&</sup>lt;sup>5</sup> Respondents reporting wage significantly lower or higher than usual

<sup>&</sup>lt;sup>6</sup> Tijdens, K. G., & Van Klaveren, M. (2012). Frozen in time: Gender Pay Gap Unchanged for 10 Years. Brussels: ITUC. Available at: https://www.ituc-csi.org/IMG/pdf/pay gap en final.pdf.

$$Pay \quad gap = \frac{Median \quad wage_{male} - Median \quad wage_{female}}{Median \quad wage_{male}} * 100\%$$

It can be interpreted as the percentage difference between male and female median wages.

**Currency** – All figures stated in this report are in Indian rupees (INR). In the tables no currency symbol is used. In text, the Indian rupee symbol INR is used.

# 3. Methodology and Sample:

The GPG report uses online-survey data collected by the WageIndicator Foundation in the period of January 2017 – December 2018. Only valid observations, which include information on the gross hourly wage, occupation and selected types of employment, have been included in the analysis.

The dataset contains 11017 observations for 2017 and 10541 observations for 2018. The sample is predominantly male, containing 19% of women respondents in both years. The proportion of women in the sample is in line with the low female labour market participation rate, which fell from 36.78% in 2005 to 26.97% in 2018 according to ILO (2018)<sup>7</sup> and it also suggests a gender divide and gaps in access to Indian labour market for women. Research suggests that women's participation to the labour market depends on education levels; in recent years it declined the most among the illiterate and those with lower education level and increased among those with higher education level.<sup>8</sup>

Moreover, the Indian labour market could be characterized by the fact that as much as 90% of the labour force (92% in 2005) is employed in the informal sector and is not covered by labour regulations or written contracts. The absence of earnings data in the informal sector, which makes up about 50% of Indian GDP, adds relevance to the use of self-reported online data on wages.<sup>9</sup>

# 4. GPG

For 2018, overall GPG is estimated at 19% in favour of males that earned gross, median, hourly INR 46.19 more than females. In 2017 the overall GPG was estimated at  $15\%^{10}$ , with an INR 31.76 gross median hourly wage difference in favour of men.

On average the GPG in India is estimated to be 17% between 2017 and 2018 in a selection of industries. However, it should be noted, that the overall estimation is highly dependent on the composition of the sample, and proportion of respondents in higher or lower skilled occupations and based on their experience. For these reasons, GPG is more reliably estimated for specific groups by tenure, education or skill level as used in this report.

<sup>&</sup>lt;sup>7</sup> The World Bank. Labor force participation rate, female (% of female population ages 15+), (modeled ILO estimate). https://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS?locations=IN

<sup>&</sup>lt;sup>8</sup> IZA World of Labor. The Labor market in India since the 1990s. Available at: <a href="https://wol.iza.org/articles/the-labor-market-in-india-since-the-1990s/long">https://wol.iza.org/articles/the-labor-market-in-india-since-the-1990s/long</a>

<sup>&</sup>lt;sup>9</sup> Ibid.

 $<sup>^{10}</sup>$  This estimation (15%) is calculated on all industries taken into consideration by WageIndicator. The GPG varies if calculated only based on 8 selected industries, as in previous report, being estimated at 20% in 2017 and 26.2% in 2018.

Table 1: Overall GPG, 2017 and 2018. Gross median wage per hour in INR. N: respondents.

Overall GPG 2017 2018

Male	Female	GPG	Male	Female	GPG
8934	2083		8566	1975	
213.63	181.87	15%	242.49	196.3	19%

Source: WageIndicator Foundation

# 4.1 GPG and Education Level

Education is a key factor while detecting the GPG. Already in the secondary education level group we observe a GPG of 13%, with males earning INR 81,26 median hourly wage and female INR 70,76 median hourly wage. The salary gap is similar within workers with a Bachelor degree: 12%.

Workers holding a master degree (four/five-year degree or equivalent) are the most represented education level group. Men with tertiary education represent 58% of the sample while women with the same education level represent 14% of the overall sample. It is also the education level group that shows the greatest GPG in favour of men: 31%. While males holding a master degree earn INR 346,42, females with the same level of education only INR 240,57.

Male workers with a Master degree earn more than 3 times more than those with only the secondary education. While females with a Master degree earn only approximately 2,5 times more than those with only secondary education.

Comparing the data of 2018 to 2017, we observe a general increase of GPG for all the education levels. While in 2017 for workers with secondary education the GPG in favour of men was only the 3%, in 2018 it raised to 13%. Males and females' workers holding a bachelor degree in 2017 received equal pay while in 2018 there is a gap in favour of males of 12%. Males with a master degree in 2017 earned already 25% more than females with same level of education, in 2018 the gap raises to a remarkable 31%.

Table 2a: GPG and Education level - Gross median wage per hour in INR

Education Level	2017			2018		
	Male	Female	GPG	Male	Female	GPG
Secondary education	74.04	72.17	3%	81.26	70.76	13%
Bachelor's degree, three year degree or equivalent	130.32	129.91	0%	144.34	127.02	12%
Master's degree, four/five year degree or equivalent	288.68	216.51	25%	346.42	240.57	31%

Table 2b: Distribution of the sample per year in percentage

Education level	2017		2018	
	Male	Female	Male	Female
Secondary education	5%	1%	4%	0,48%
Bachelor's degree, three year degree or equivalent	21%	5%	19%	5%
Master's degree, four/five year degree or equivalent	55%	14%	58%	14%

Source: WageIndicator Foundation

# 4.2 GPG and Tenure

The GPG increases with more years of tenure. See Table 3a below.

In 2018, while in the first two tenure groups (0-2 years; 3-5 years) the GPG is quite moderate, with females earning respectively 3% and 5% less than the male workers in the same tenure groups, the GPG increases with the tenure.

In the 6-10 years' tenure group, there is a GPG of 10% (INR 340,65 vs. INR 306) In the last tenure group (+10 years) the GPG reaches the peak, with males earning 15% more than women: INR 577,37 vs. INR 487.88.

The table shows a clear trend towards rising wages with more years of service for both men and women. If we calculate the wage growth in percentage along the years for males, we notice that from the first tenure group (0-2 years, INR 106,87) to the last tenure group (+10 years, INR 577,37) there is an increase of 440,3%; meaning that a male worker with 10 or more years of experience earns approximately 4,5 times more than when he started his career. The wage increase along the time for a woman is more moderate: from the first tenure group (0-2 years, INR 103,93) to the last tenure group (+10 years, INR 487,88) there is an increase of approximately 3,7 times. In other terms, males, along with the years of experience, can aspire to a much greater salary growth than females.

Data of 2017 also showed some GPG in most of the tenure groups, except for the group of 3-5 years: (-4%) in favour of women. The salary gap becomes more relevant in the tenure groups of 6-10 years and +10 years, in which the gap in favour of males was estimated respectively at 11% and at 18%. Compared to the 2018, the pay gap seems quite stable, although we observe a slight decrease in the higher tenure groups: 6-10 years: 10% and +10 years: 15%.

Table 3a: GPG and Tenure groups per year. Gross median wage per hour in INR

Tenure	2017			2018		
	Male	Female	GPG	Male	Female	GPG
0-2	105.85	103.93	2%	106.87	103.93	3%
<i>3-5</i>	173.21	180.43	-4%	192.46	182.83	5%
6-10	312.26	277.14	11%	340.65	306	10%
10+	490.76	400.31	18%	577.37	487.88	15%

Table 3b: Distribution of the sample per year in percentage

Tenure	2017		2018	
	Male	Female	Male	Female
0-2	26%	7%	24%	7%
<i>3-5</i>	18%	5%	18%	5%
6-10	21%	5%	21%	4%
10+	17%	3%	18%	3%

Source: WageIndicator Foundation

# 4.3 GPG and Skill Level (ISCO 2008)

In 2018, for the semi-skilled work, there is no GPG: the wages for both men and women equalize, with an absolute hourly median wage of INR 86.61 for both. As long as the occupation requires more qualification, the GPG becomes greater. Skilled women workers earn 20% less than skilled men workers (INR 287,27 vs. INR 230,95). The GPG becomes more relevant within the highly skilled level, reaching the 30%: a highly skilled man worker earns INR 311,78, while an equally qualified woman earns only INR 219,4.

It is also interesting to notice that the increase of the wage for males from the semi-skilled work to the highly skilled work is much greater than the growth of the females' wage for the same path: males wage increases from INR 86.61 in the semi-skilled work to INR 311,78 in the highly skilled work, with a positive variation of around 2,5 times. Females wages increases from INR 86.61 in the semi-skilled work to INR 219,4 in the highly skilled work, meaning that highly skilled women earn only 1,5 times more than the semi-skilled ones.

Comparing the data from the period 2017-2018, it is seen that the GPG has increased for all three skill levels groups. The semi-skilled work in 2017 was showing a GPG in favour of females of 6% and it turned to equalize in 2018. The skilled work was showing a GPG of 14% in favour of men in 2017 and it raised to 20% in 2018; also the highly skill level increased the gap from 22% in 2017 to 30% in 2018.

Table 4a: GPG and ISCO 2008 skill level classification per year. Gross median wage per hour in INR

ISCO 2008 skill level	2017	2017		2018		
	Male	Female	GPG	Male	Female	GPG
Semi-skilled	81.36	86.61	-6%	86.61	86.61	0%
Skilled	240.57	207.85	14%	287.27	230.95	20%
Hiahlv skilled	264.63	205.29	22%	311.78	219.4	30%

Source: WageIndicator Foundation

Table 4b: Distribution of the sample per year in percentage

ISCO 2008 skill level	2017		2018		
	Male	Female	Male	Female	
Semi-skilled	14%	3%	12%	3%	
Skilled	25%	6%	25%	6%	
Highly skilled	42%	11%	45%	11%	

# 4.4 GPG and Supervisory position

The GPG is also influenced by the level of responsibility covered in the company's hierarchy. According to Table 5a, female supervisors in 2018 earned 22% less than male supervisors, (INR 334,87 vs. INR 259,82). The level of GPG still lasts but decreases to 10% between non-supervisors, with men earning INR 186,55 vs. INR 168,46 earned by woman.

The wage difference in percentage between male supervisors and male non-supervisors is 79,5%, (meaning that supervisors men earn almost the double of the non-supervisors); while the wage difference between females' supervisors and non-supervisors is 54,2%. It reveals that even when a female worker covers a supervisory position, this same position of responsibility is not awarded as much as it is in the case of a male worker and the corresponding non-supervisor workers.

From 2017, we observe a substantial raise in the GPG for supervisors (GPG of 13% in 2017 vs. GPG of 22% in 2018). While for non-supervisors the GPG is almost the same: 7% in 2017 raised to 10% in 2018.

Table 5a: GPG and Supervisory position per year. Gross median wage per hour in INR

Supervisor	2017	2017		2018		
	Male	Female	GPG	Male	Female	GPG
Yes	274.25	239.61	13%	334.87	259.82	22%
No	168.21	148.65	7%	186.55	168.46	10%

Source: WageIndicator Foundation

Table 5b: Distribution of the sample per year in percentage.

Supervisor	2017		2018		
	Male	Female	Male	Female	
Yes	40%	8%	39%	7%	
No	41%	11%	43%	12%	

Source: WageIndicator Foundation

#### 4.5 GPG and Firm-size

Companies' size does have an impact on wages: median hourly wages rise with companies' growing size, i.e., the more employees, the higher the wages. Reasons for this trend are that larger companies are often (partly) foreign-owned. Therefore, being a player in the international arena, growth is enhanced generating higher revenues and the possibility to pay higher wages. It is also noted that in bigger companies there is a higher GPG.

In 2018, for firms with less than 10 employees the gap seems much more relevant in percentage terms (16%) rather than in absolute terms INR 86,61 for men vs. INR 73.04 for women. In firms with 10-50 employees, we even see that the GPG turns in favour of women of the 8%; the same consideration can apply, given the small amounts.

As the size of the firm grows, the GPG in favour of men workers becomes more relevant. In companies with 1000-5000 employees, the GPG in favour of men reaches the 14%; in

companies with more than 5000 employees the GPG reaches the 15%, with men that earn in one-hour work INR 427,25 vs. IDR 364,7 earned by women.

The data of companies with more than 5000 employees is the most significant considering the number or the respondents of the two groups, with 23% of respondents of our sample for men and 4% for women.<sup>11</sup>

From 2017 we can observe a general increase of the GPG in favour of males in the bigger companies. For the firms with 1000-5000 employees the gap raised from 8% in 2017 to 14% in 2018, while in the companies with more than 5000 employees the gap raised from 11% to 15%.

Table 6a: GPG and Firm-size per year. Gross median wage per hour in INR

Firm Size	2017			2018		
	Male	Female	GPG	Male	Female	GPG
<10	86.61	86.61	0%	86.61	73.04	16%
10-50	120.28	112.91	6%	132.31	142.88	-8%
50-200	161.18	170.41	-6%	168.4	161.66	4%
200-1000	214.41	202.08	6%	239.61	215.82	10%
1000-5000	307.93	284.52	8%	334.87	288.68	14%
5000 or more	346.42	306.97	11%	427.25	364.7	15%

Source: WageIndicator Foundation

Table 6b: distribution of the sample per year in percentage.

Firm Size	2017		2018	
	Male	Female	Male	Female
<10	6%	2%	7%	2%
10-50	13%	4%	12%	4%
50-200	15%	4%	14%	4%
200-1000	16%	3%	15%	3%
1000-5000	10%	2%	10%	2%
5000 or more	21%	4%	23%	4%

Source: WageIndicator Foundation

# 4.6 GPG and Occupations (ISCO 2008 Digit-1)

According to the ISCO 2008 1-digit classification system, all major occupations groups show some extent of GPG in favour of males, except for the Technicians and associate professionals group, which favours women by 16%. (males INR 144.34 vs. females INR 167.44). See Table 7, below.

Managers and the Professionals are the most represented occupations of our sample<sup>12</sup>. Both occupations show also a relevant GPG, respectively 34% for Managers (males earning INR

<sup>&</sup>lt;sup>11</sup> In absolute numbers: 2440 respondents for men and 440 respondents for women.

<sup>&</sup>lt;sup>12</sup> With respectively 1599 males and 378 females' respondents for Managers, and 4629 males and 1097 females for Professionals

392,61 vs. females earning INR 259,82) and 30% for Professionals (males earning 311,78 vs. females INR 219,4).

It is also interesting to notice that Clerical support workers receive basically the same wage (men INR 98.15 vs women INR 96.23)

The occupations with the lowest median hourly wage for both males and females are represented by Craft and related trades workers, Service and sales workers, and Elementary occupations. They all show a GPG in favour of men, respectively 28% for Craft workers, 13% for Service and sales workers and 26% for Elementary occupations.

Table 7: GPG and Occupations (ISCO 2008 Digit-1), 2018. Gross median wage per hour in INR.

ISCO 2008 digit-1	Male	Female	GPG
Managers	392.61	259.82	34%
Professionals	311.78	219.4	30%
Technicians and associate	144.34	167.44	-16%
professionals			
Clerical support workers	98.15	96.23	2%
Service and sales workers	69.28	60.62	13%
Craft and related trades workers	76.98	55.34	28%
Elementary occupations	78.19	57.74	26%

Source: WageIndicator Foundation

# 4.7 GPG and Economic Activity (NACE 2001)

Analysing the data according to the economic activity, it is noted that some extent of GPG is present in almost all the economic activities taken into consideration by the NACE 2001 classification system. See table 8 below.

The Information and Communication ICT sector is the most represented group of our sample with 2420 males' respondents and 532 females' respondents. It reveals a substantial GPG in favor of males, estimated at 25%. Also the economic activity of Manufacturing is well represented, with 1450 male observations and 185 females. It also shows an estimated GPG of 24% in favor of men.

In some economic activities, we observe that the GPG is marginally in favour of women but with percentages very close to the wage equality between the genders rather than consisting in a relevant pay gap in favour of women (i.e. Construction -3%; Wholesale and retail trade -10%; Financial and insurance activities -1%; Real estate activities -3%; Other service activities -3%). Furthermore, the excessive fragmentation of the sample into small groups with small numbers of respondents affects the representativeness of the data for the same categories.

Table 8: GPG and Economic activity (NACE 2001 classification), 2018. Gross median wage per hour in INR. N: Number of observations.

NACE 2001, Economic Activity	Gross hourly wage		GPG	Number of observations	
,	Male	Female		Male	Female
Agriculture, forestry and fishing	135.68	105.37	22%	62	16
Manufacturing	192.94	147.23	24%	1,450	185
Construction	190.44	196.3	-3%	480	107
Wholesale and retail trade; repair of	107.12	118.36	-10%	325	85
Transportation and storage	161.66	93.82	42%	233	26
Accommodation and food service activities	105.85	103.93	2%	228	55
Information and communication	386.02	288.68	25%	2,420	532
Financial and insurance activities	288.68	292.96	-1%	655	180
Real estate activities	144.34	148.09	-3%	89	26
Professional, scientific and technical	202.08	149.69	26%	226	61
Education	144.34	128.3	11%	270	165
Human health and social work activities	202.08	161.66	20%	335	137
Other service activities	84.2	86.61	-3%	69	20

#### 4.8 GPG and Sectors

Going through a sectoral analysis of the GPG, we observe that salary inequalities in favor of men are present in all the selected sectors. See below, table 9. The highest GPG is observed in "Transport, Logistics & Communication" where men earn 35% more than women (INR 163,62 vs. INR 106,81). The "ICT Services" is the sector that shows the highest median hourly retributions for both male and female. It also shows a remarkable 26% salary gap in favor of men (INR 392,61 vs. INR 288,68). The "Financial services, Banking & Insurance" is the only sector in which there is almost a perfect equality of retribution (only 2% in favor of men), with men earning gross hourly wage INR 293.93 vs. INR 288.68.

Some extent of GPG is observed in all the other sectors: "Legal and market consultancy, business" (20%); "Healthcare, caring services, social work" (21%); "Education, research" (16%); "Construction, technical consultancy" (11%); "Manufacturing" (24%).

Each and every sector will be further analyzed in the following tables of this section according to Education Level and Tenure, in order to provide sectoral-focused information on status and trends of the GPG in India in 2018.

Table 9: GPG and Sectors, 2018. Gross median wage per hour in INR.

Sector	Male	Female	GPG 2018
Legal and market consultancy, business a	202.08	161.66	20%
ICT services	392.61	288.68	26%
Healthcare, caring services, social work	202.08	160.22	21%
Education, research	144.34	121.85	16%
Financial services, banking, insurance	293.93	288.68	2%
Transport, logistics, communication	163.62	106.81	35%
Construction, technical consultancy	202.08	180.43	11%
Manufacturing	196.3	149.15	24%

# 4.8.1 Legal and market consultancy

Table 10 analyses the GPG within the "Legal and market consultancy & business" sector according to the level of education. As observed also in previous analysis, the GPG increases with higher level of education. In the Bachelor degree education level group, the GPG in favor of men is estimated at 11,1%. It raises to 16.9% within workers holding a Master degree.

Table 10: GPG in Legal and market consultancy & business sector by Education Level, 2018. Gross median wage per hour in INR.

Education level	Male	Female	GPG
Bachelor's degree, three year degree or equivalent	122.69	109.06	11.1%
Master's degree, four/five year degree or equivalent	239.61	199.19	16.9%

Source: WageIndicator Foundation

# 4.8.2 Information & Communications Technology (ICT)

Also within the Information & Communications Technology (ICT) sector, the GPG follows a trend that we have already observed in many of our previous analysis: the GPG increases with more years of tenure. According to table 11a, the only exception is represented by the tenure group 3-5 years, in which the wages almost equalize, with a slight GPG in favor of men (3.3%). The pay gap reaches the peak in the tenure group +10 years, with a salary discrepancy of 25,9%. See table below.

Table 11a: GPG in Information & Communications Technology (ICT) sector by Tenure Groups, 2018. Gross median wage per hour in INR.

Tenure	Male	Female	GPG
0-2	173.21	149.57	13.6%
3-5	256.61	248.27	3.3%
6-10	444.57	381.06	14.3%
10+	779.45	577.37	25.9%

Within the ICT sector, the GPG in favor on men increases with higher level of education: the table 11b shows around 7% GPG increase from workers holding a Bachelor degree (GPG 19,5%) and workers holding a Master degree (GPG 26,7%). See table below.

Table 11b: GPG in Information & Communications Technology (ICT) sector by Education Level, 2018. Gross median wage per hour in INR

Education level	Male	Female	GPG
Bachelor's degree, three year degree or equivalent	230.95	185.87	19.5%
Master's degree, four/five year degree or equivalent	433.03	317.55	26.7%

Source: WageIndicator Foundation

# 4.8.3 Healthcare, Caring Services & Social Work

For "Healthcare, Caring Services & Social Work" sector, according to tenure groups, it is noted a clear trend towards a GPG increase in favor of men with more years of tenure. In the tenure groups of 0-2 years and 3-5, the GPG is slightly in favor of women, respectively 20% and 2,8%. The salary gap in favor of men starts in the 6-10 years' tenure group (27%) and increases in the +10 years' tenure group, reaching the 33,3%. See table below.

Table 12a: GPG in Healthcare, caring services, social work sector by Tenure Groups, 2018. Gross median wage per hour in INR

Tenure	Male	Female	GPG
0-2	100.08	120.28	-20.2%
3-5	173.21	178.02	-2.8%
6-10	363.74	265.59	27.0%
10+	433.03	288.68	33.3%

Within the sector of "Healthcare, Caring Services & Social Work", men workers holding a Master degree earn 30% more than women with the same education level. See table below.

Table 12b: GPG in Healthcare, Caring Services & Social Work sector by Education Level, 2018. Gross median wage per hour in INR

Education level	Male	Female	GPG
Master's degree, four/five year degree or equivalent	288.68	202.08	30.0%

Source: WageIndicator Foundation

#### 4.8.4 Education & Research

Education & Research is the only sector in which almost all tenure groups show a GPG in favor of women, with the exception of the 0-2 years' tenure group in which men earn 21,2% more than women. The biggest pay discrepancy in favor of women is reached in the highest tenure group (+10 years) with women earning a remarkable 41,7% more than men (INR 490,76 vs. INR 346,42). See table below.

Table 13a: GPG in Education & Research sector by Tenure Groups, 2018. Gross median wage per hour in INR

Tenure	Male	Female	GPG
0-2	109.94	86.61	21.2%
3-5	118.66	144.34	-21.6%
6-10	197.27	212.59	-7.8%
10+	346.42	490.76	-41.7%

Source: WageIndicator Foundation

The sector of Education & Research shows 19% GPG in favor of men within workers with a Master degree. See table below.

Table 13b: GPG in Education & Research sector by Education Level, 2018. Gross median wage per hour in INR

Education level	Male	Female	GPG
Master's degree, four/five year degree or equivalent	192.46	155.89	19.0%

Source: WageIndicator Foundation

# **4.8.5 Finance**

In the first two tenure groups of the Finance sector (0-2 years; 3-5 years) wages between men and women almost equalize. The GPG in favor of men starts in the 6-10 years' tenure group and increases in the +10 years' tenure group, reaching the 20,5%. See table below.

Table 14a: GPG in Finance sector by Tenure Groups, 2018. Gross median wage per hour in INR

Tenure	Male	Female	GPG
0-2	144.34	147.23	-2.0%
3-5	240.57	250.78	-4.2%
6-10	404.16	355.08	12.1%
10+	635.1	505.2	20.5%

Source: WageIndicator Foundation

Women workers with a bachelor degree, working in the finance sector, earn 23,3% more than men. The salary gap switches in favor of men in highest education level group with men earning 24,7% more than women. See table below.

Table 14b: GPG in Finance sector by Education Level, 2018. Gross median wage per hour in INR

Education level	Male	Female	GPG
Bachelor's degree, three year degree or equivalent	173.21	213.63	-23.3%
Master's degree, four/five year degree or equivalent	433.03	325.89	24.7%

# 4.8.6 Transport

The Transport sector shows a relevant GPG in favor of men when analyzed through education levels. Men holding a bachelor degree earn already 37,8% more than women; the salary gap increases substantially to reach a remarkable 53,2% within workers holding a Master degree. See table below.

Table 15: GPG in Transport sector by Education Level, 2018. Gross median wage per hour in INR

Education level	Male	Female	GPG
Bachelor's degree, three year degree or equivalent	142.93	88.87	37.8%
Master's degree, four/five year degree or equivalent	288.68	135.17	53.2%

Source: WageIndicator Foundation

# 4.8.7 Construction

In the first tenure group (0-2 years), within the Construction sector, we observe a slight GPG favorable to female workers (11,8%). The wages of male workers increase in the tenure groups of 3-5 years and 6-10 years, revealing a GPG in favor of men respectively of 13% and 16,7%. Wages settle towards pay equality in the +10-year tenure group, in which compensations between men and women almost equalize. See table below.

Table 16a: GPG in Construction sector by Tenure Groups, 2018. Gross median wage per hour in INR

Tenure	Male	Female	GPG
0-2	92.38	103.28	-11.8%
3-5	165.83	144.34	13.0%
6-10	311.78	259.82	16.7%
10+	519.63	513.22	1.2%

The Construction sector shows a clear trend towards an increasing GPG in favor of men with higher level of education. The GPG in favor of men raises from 11,4% within the workers with a Bachelor degree to 26% within workers with a Master degree. See table below.

Table 16b: GPG in Construction sector by Education Level, 2018. Gross median wage per hour in INR

Education level	Male	Female	GPG
Bachelor's degree, three year degree or equivalent	144.34	127.9	11.4%
Master's degree, four/five year degree or equivalent	273.15	202.08	26.0%

Source: WageIndicator Foundation

# 4.8.8 Manufacturing

In line with a very well-known trend of our analysis, also in the manufacturing sector the GPG in favor on males increases with more years of tenure, reaching 20,5% within workers with +10 years of service. Only the first tenure group (0-2 years) show a little GPG in favor of females (5,6%). See table below.

Table 17a: GPG in Manufacturing sector by Tenure Groups, 2018. Gross median wage per hour in INR

Tenure	Male	Female	GPG
0-2	86.61	91.42	-5.6%
3-5	144.34	120.28	16.7%
6-10	230.95	202.08	12.5%
10+	508.08	404.16	20.5%

The Manufacturing sector shows a clear trend towards an increasing GPG in favor of men with higher level of education. The GPG in favor of men raises from 8% within the workers with a Bachelor degree to 31,1% within workers with a Master degree. See table below.

Table 17b: GPG in Manufacturing sector by Education Level, 2018. Gross median wage per hour in INR

Education level	Male	Female	GPG
Bachelor's degree, three year degree or equivalent	144.34	132.79	8.0%
Master's degree, four/five year degree or equivalent	259.82	178.98	31.1%

Source: WageIndicator Foundation

# 5. Conclusions

This report has analysed the GPG in India in 2018. The overall GPG in 2018 sample stands at 19% (INR 46.19) on average and increased by four percentage points compared to sample of 2017 when it was 15%, with men workers earning gross, median, hourly INR 31,76 more than women.

It should be noted that women are underrepresented in the Indian working force<sup>13</sup> (amounting to approximately one fourth of it) and they are underrepresented also in our sample where men represent around the 80%, signifying a further gap for women in accessing the labour market and/or those with access to the internet to complete the voluntary webbased survey.

In the secondary education level group we observed a GPG of 13%, with males earning INR 81,26 median hourly wage and female INR 70,76 median hourly wage.

The salary gap is similar within workers with a Bachelor degree: 12%. Within workers with a Master degree, the GPG in favour of men reaches the 31%: INR 346,42, vs. INR 240,57.

Comparing the data of 2018 to 2017, we observe a general increase of GPG for all the education levels. While in 2017 for workers with secondary education the GPG in favour of men was only 3%, whereas in 2018 it raised to 13%. Males and females' workers with a Bachelor degree in 2017 received equal pay while in 2018 there is a gap in favour of males of the 12%. Males with a Master degree in 2017 earned 25% more than females, but in 2018 the GPG raises to a remarkable 31%.

The GPG increases with more years of tenure. In 2018, while in the first two tenure groups (0-2 years; 3-5 years) the GPG is quite moderate, with females earning 3% and 5% respectively less than male workers in the same tenure groups; but the GPG increases with

<sup>&</sup>lt;sup>13</sup> The World Bank. Labor force participation rate, female (% of female population ages 15+), (modeled ILO estimate). https://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS?locations=IN

an increase in tenure. For tenure group 6-10 years, there is a GPG of 10% (INR 340,65 vs. INR 306). In the last tenure group (+10 years) the GPG in favor of men reaches the peak, with males earning 15% more than women: INR 577,37 vs. INR 487.88. Compared to 2017, the pay gap seems quite stable, although we observe a slight decrease in the higher tenure groups: 6-10 years: 10% and +10 years: 15%, while in 2017 tenure groups of 6-10 years and +10 years, showed a gap in favour of males respectively of 11% and 18%.

GPG also increases within higher skill level works. This is true for both the years 2018 and 2017. In 2018, while for the semi-skilled work there is no GPG, with wages that equalize (INR 86.61 for both genders), as long as the occupation requires more skills, the GPG becomes greater. Skilled women workers earn hourly 20% less than skilled man workers (INR 287,27 vs. INR 230,95). The GPG becomes even greater for the highly skilled occupations, reaching the 30% (INR 311,78 vs. INR 219,4). Comparing the data of 2018 to 2017, it is observed that the GPG has increased for all the three skill levels. The semi-skilled work in 2017 was showing a GPG in favour of females of 6% and it turned to equalize in 2018. The skilled work was showing a GPG of 14% in favour of men in 2017 and it raised to 20% in 2018; also the highly skill level increased the gap from 22% in 2017 to 30% in 2018.

The GPG is also influenced by the level of responsibility covered within the company hierarchy. Female supervisors earned 22% less than male supervisors (INR 334,87 vs. INR 259,82). The level of GPG still lasts but decreases to 10% between non-supervisors, with men earning INR 186,55 vs. INR 168,46 earned by woman. From 2017 we observe a substantial raise in the GPG for supervisors (GPG of 13% in 2017 vs. GPG of 22% in 2018).

Reconfirming findings from previous reports<sup>14</sup>, companies' size does have an impact on wages: median hourly wages rise with companies' growing size, i.e., the more employees, the higher the wages. It is also noted that in bigger companies there is a higher GPG.

In companies with more than 5000 employees the GPG reaches the peak of 15%, with men that earn in one-hour work median INR 427,25 vs. INR 364,7 earned by women workers with a gap of INR 62,55. From the 2017 we can observe a general increase of the GPG in favour of males in the bigger companies, which are also the most represented of our sample. For the firms with 1000-5000 employees the gap raised from 8% in 2017 to 14% in 2018, while in the companies with more than 5000 employees the gap raised from 11% to 15%.

The analysis also showed a relevant pay gap according to the profession: the most prestigious occupations are the most affected by salary inequalities. In particular, Managers and Professionals showed a relevant GPG, respectively 34% for Managers (males earning INR 392,61 vs. females earning INR 259,82) and 30% for Professionals with males earning 311,78 vs. females INR 219,4.

Considering the economic activity, the Information and Communication ICT sector is the most represented group of our sample with 2420 males' respondents and 532 females' respondents. It revealed a substantial GPG in favor of males, estimated at 25%. Also the economic activity of Manufacturing is well represented in our sample, with 1450 male observations and 185 females. It also showed an estimated GPG of 24% in favor of men.

Going through a sectoral analysis of the GPG, we have observed that salary inequalities in favor of men are present in all the selected sectors. The highest GPG is observed in "Transport, Logistics & Communication" where men earn 35% more than women (INR 163,62 vs. INR

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106,81). The "ICT Services" is that sector that shows the highest median hourly retributions for both male and female. It also shows a remarkable 26% salary gap in favor of men (INR 392,61 vs. INR 288,68). The "Financial services, Banking & Insurance" is the only industry in which there is almost a perfect equality of retribution (only 2% in favor of men), with men earning gross hourly wage INR 293.93 vs. INR 288.68. Some extent of GPG is observed in all the other sectors: "Legal and market consultancy, business" (20%); "Healthcare, caring services, social work" (21%); "Education, research" (16%); "Construction, technical consultancy" (11%); "Manufacturing" (24%).

Each and every sector has been further analyzed according to Education Level and Tenure, in order to provide sectoral-focused information on status and trends of the GPG in India in 2018.

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