# Understanding Gender Differentials in Israel's Labour Market: Wage Analysis

Divya Malhotra

## 1. INTRODUCTION

Despite considerable progress in recent decades, labour markets globally remain divided along gender lines. This inequity manifests itself most evidently in the form of significant wage differentials. The question of gender in wage differentials and occupational segregation has been intensively discussed in the economic literature. The extant literature on the subject identifies two potential sources for wage differences; firstly, differences in human capital traits such as education, and secondly, segregation i.e. exclusion of minority groups (such as blacks, Arabs or women) from high paying occupations.<sup>i</sup> Israeli labour market provides a relevant case for study of wage inequality.

According to the Global Gender Gap report 2014, Israel at 65<sup>th</sup> rank secured the top spot in the Middle East and North Africa region, despite a decline in its overall score due to a decrease on the economic participation and opportunity component of the index. However it needs to be noted that it is the second lowest performing country in the overall index on the Wage Equality for Similar Work index.<sup>ii</sup> To demonstrate this complexity and have a better understanding of the problem, it becomes pertinent to probe into the intricacies of labour market.

Israeli society is characterised by an ethnic cleavage between Jews and Arabs, and within the Jewish society between Jews whose parents immigrated to Israel from Europe and America (henceforth, Ashkenazim), and those from Asian and African origin (henceforth, Mizrahim).<sup>iii</sup>

While many scholarly works on the subject have established the income differentials between the ethnic groups, it is important to note that gender-based wage differences are larger than ethnicity-based wage differences and within each ethnic group; women earn significantly less than men.<sup>iv</sup> Various studies have been conducted to quantify the gender based wage differentials in Israeli labour market, and invariably, all the studies indicated a gap in favour of men. Kraus (2002) in his quantitative analysis of the gender differentials for the year 1995 showed that women earnings were at least 50% less than men's earnings.

 $Yw = 0.47 (Ym) \dots 1$ 

Kraus' analysis reveals that for every 100 NIS (New Israel Shekel) earned by a male employee, the female counterpart on an average earns 53 percent less.<sup>v</sup>

Another econometric study (2004) pegged the ratio of female to male hourly earnings at 75% for Westerners and 79% for Easterners;<sup>vi</sup>

Yw = 0.75 (Ym) ..... 2

 $Y_W = 0.79 (Y_m) \dots 3$ 

Equation 1 depicts that for every 100 NES earned by an Ashkenazi man, his female counterpart earns 75 NIS. Similarly, a Mizrahim woman earns only 79 NIS for the same work which pays her male counterpart 100 NIS<sup>1</sup>. The inequity becomes evident in this striking wage gap.

<sup>&</sup>lt;sup>1</sup> Israel's currency, that is, New Israeli Shekel is symbolised as both NIS and ILS. Since Bank of Israel and Finance Ministry in Israel use NIS, this paper will depict Israel's currency as NIS.

## ISSN 2348-3156 (Print) International Journal of Social Science and Humanities Research ISSN 2348-3164 (online) Vol. 4, Issue 1, pp: (213-218), Month: January - March 2016, Available at: www.researchpublish.com

There is enough evidence to believe that the Israeli labour market is heterogeneous and the heterogeneity reflects itself in wage distribution. This paper will attempt to explain the gender based wage differentials in Israel with specific reference to the women's participation in Israeli labour force, and structural and non-structural arrangements which promote wage bias. This will be done by studying the linkages of wage bias with three specific variables; job shifts, job promotion and over time work.

## 2. WOMEN IN ISRAEL'S LABOUR FORCE

The overall participation rate in the Israeli labour force has been relatively low compared to other OECD countries. While the participation rate in labour force in Israel was 57.3 per cent in 2010<sup>vii</sup>, the percent of women in labour force was approximately 10 per cent lower, at 46.7 per cent (World Bank, 2014). More importantly, the rate of participation differs by place of birth. Women born in Asia and Africa, and those born in Israel to fathers from Asia and Africa, have lower participation rates than women of Western origin. The highest participation is observed for women in labour force.

The literature on the subject, in general, suggests that women's increasing participation in the labour force is linked to increasing investments in girls' education.<sup>ix</sup> The same logic can be extended to the case of Israel. However, the duality of education can be studied in terms of its varied effect on employability and market returns (wages). In case of Israel, while the level of education has no effect on the chances of women to be employed, it is positively correlated with labour market returns.<sup>x</sup>

Equally important are the human capital endowments. There are gender differences in the returns to the human capital variables such as level of education, quality of education, skill set and experience and two notable variations have been observed in this regard. In terms of employability, women with a degree in economics, business, medicine, or mathematics have either a higher or equal propensity as men to be absorbed in the labour market.<sup>xi</sup> Wage comparisons show that returns to experience are larger for men than for women, returns to education are larger for women.<sup>xii</sup>

The trends in Israel have shown that labour market participation of women is low but increasing, yet the wage differentials have been pronounced. This can be further analysed by studying the static structural and dynamic aspects of sex-based variance in income earnings.

## 3. STRUCTURAL AND DYNAMIC ASPECTS OF GENDER DIFFERENTIALS IN WAGES

The static aspects of wage differentials explain the theoretical possibilities and structural arrangements which perpetuate gender differentials in labour market returns. One hypothesis suggests that the distribution of jobs filled by men and women is the same, and that there is a difference in the salary grade at entry, and therefore in salary.<sup>xiii</sup>

Another hypothesis assumes that the source of the differences lies in the composition of those recruited with respect to the positions they fill i.e. that men enter positions with higher salaries than women, and this phenomena becomes more pronounced as the recruitment age rises.<sup>xiv</sup>

This hypothesis can be explained with a set of equations:

Wt = f(Sw)

Wt = m(Sw)

such that m(Sw) > f(Sw)

f(Sw) and m(Sw) denotes the starting wage for female and male employee respectively, and Wt denotes the wage of the employee during t-year. According to this hypothesis, if the starting salary pay grade of male employee exceeds that of his female counterpart, then the Wage (Wt) at any point of time in life is likely to remain higher for the male employee vis a vis the female colleague. This creates a perpetual wage gap and thus it is important to analyse gender-based deviation in salary at the beginning of the career. Study of specific literature on the subject makes three striking revelations. Temporal analysis reveals that the rate of salary increase of men in general at the beginning of their career is faster than their women counterparts. The trajectory of gender wage ratio during their careers shows that women-men salary ratio decreases (i.e., the gap widens) between age 30 and age 50, and then remains at around 80 % until age 60.<sup>xv</sup>

## ISSN 2348-3156 (Print) International Journal of Social Science and Humanities Research ISSN 2348-3164 (online) Vol. 4, Issue 1, pp: (213-218), Month: January - March 2016, Available at: www.researchpublish.com

These entrance equations are insightful by themselves but it is important to analyse the dynamic factors which influence the persistence of wage differentials. For the purpose of methodological ease, this paper will link the aforementioned structural hypothesis to three dynamic factors/variables and their linkage to wage inequity; job shifts between public and private sector, job promotions and over time work.

#### 4. CHANGE OF WORKPLACE AND PUBLIC-PRIVATE JOB SHIFTS

In Israel, change of workplace accounted for approximately 40 per cent of pay rise.<sup>xvi</sup> This necessitates an enquiry into relative premium of job shifts. Keith and McWilliams (1999) in their research revealed that premium for job change was higher for employed men than employed women and thus former spent more effort on a change to a higher-paying place of employment than the latter.<sup>xvii</sup> Thus wage differentials affect the career choices or trajectories for men and women differently. The public sector-private sector job shifts can also be understood in terms of relative monetary premium of changing jobs. In case of shift from public to private sector, the hourly wages of women who left public administration for private sector were lower than women who continued to work in the public administration i.e. job shift led to lower market returns. On the other hand, men did not face a similar negative trade off.<sup>xviii</sup> Reverse shifts from private sector to public administration were marked by positive wage premium for both men and women vis a vis those who continued to work in the private sector.<sup>xix</sup> Thus while shift to the public sector or administration had positive market returns for both the genders, reverse job transfer to private sector had negative market returns for women.

#### 5. JOB PROMOTIONS

Furthermore for study of income differentials, it is equally important to analyse the effect of job promotions on differentials in wages i.e positive, negative or neutral. There is extensive literature dealing with gender gaps in job promotions; however there is no consensus regarding correlation between the two variables. Blau and DeVaro's study (2006) shows that probability of promotion for men was higher than that of women, but given a promotion in salary, there was no difference in pay rise between men and women.<sup>xx</sup> However conflicting studies also need to be factored in. Mazar (2007) found that probability of promotion and frequency of promotions was uncorrelated with gender. On the other hand, Hersch and Viscussion (1996) had reported both promotion probability and wage gap in favour of men; Cobb-Clark's study (2001) found that there is a positive pay rise differential in favour of women.<sup>xxi</sup> Hence evidently, discrimination in terms of opportunities may not necessarily manifest itself in direct monetary benefits like salary hike.<sup>xxii</sup>

#### **Overtime work:**

Another important variable is the overtime work and its effect on promotional hike and wages. Statistical analyses by various authors strongly suggest that the overall effect of working overtime on probability of promotion is negligible and thus there is no real premium for overtime work. Since men work more overtime than women, there is a reverse discrimination in favour of women.<sup>2</sup>

## 6. ISRAEL'S PUBLIC SECTOR: IDENTIFYING LEGITIMATE GAPS IN WAGE DISTRIBUTION

The wage gap trends can be further analysed by studying the extent of wage differentials in public and private sector. In his comprehensive analysis, Mazar (2006) stated that public sector in Israel exhibited two different trends in wage distribution during 1990-2005 time period. The post-1990 decade clearly shows bias in the entrance equation i.e. clear differential in favor of men at the time of entry in the public sector. However since 2001 there has been no difference between men's and women's starting wage.<sup>xxiii</sup> Mazar (2010) in another study on wage gaps in Public administration showed that during the period 1995-2005, there was a drop in wage gap between men and women employed in Israeli public administration.<sup>xxiv</sup> Even though the entry level salary bias has shown a steep drop and the overall wage gap between men and women has also shrunk; on an average, women in public administration earned less in 2005 than men.

<sup>&</sup>lt;sup>2</sup> It needs to be borne in mind that both male and female employees are paid for overtime work. Thus even though there are short term, monetary benefits; overtime does not translate into promotion and promotion-related salary hikes.

## ISSN 2348-3156 (Print) International Journal of Social Science and Humanities Research ISSN 2348-3164 (online) Vol. 4, Issue 1, pp: (213-218), Month: January - March 2016, Available at: www.researchpublish.com

It is important to note that wage gaps manifest themselves at two levels or in two forms: the legitimate gap and unjustifiable gap. The difference in wages which arises out of human capital creates a legitimate gap, and when there is variance between men-women wages despite the same level of human capital it is labeled as an unjustifiable gap, mainly accrued to discrimination.<sup>xxv</sup> The accelerated academization among women after 1990s has improved their human capital endowment, thereby narrowing the wage gap at entry level.<sup>xxvi</sup> But persistence of wage gaps during subsequent stages of career hints at gender based discriminatory practices. Also, both the gaps have a tendency to coexist; thus differentiating between the legitimate gaps and discriminatory gender gap can be a separate subject of research.

## 7. CONCLUSION

The Israeli society is ethnically diverse and it is an ideal case for studying the role of rising inequality on the widening earnings gaps between dominant and subordinate groups.<sup>xxvii xxviii</sup> While the issue of wage differentials has been discussed extensively, limited scholarly attention has been devoted to statistically measure the extent of gendered discrimination in wage distribution. Clearly, wage differentials have subtle manifestations. If simple wage discrimination is the major source behind wage inequality, then implementation of the equal wage norms can be used to correct the disequilibrium. However if wage inequily is largely the result of involuntary occupation segregation, then wage laws cannot be used as a corrective measure. Equally important is the fact that differential in human capital endowments, such as educational qualification etc, are major factors which promote a differential salary/wage policy. In such a situation, better access to quality education can help to bridge the labour market gaps in the long run. Yona Rubinstein, in his study, established that it takes more than one generation to close human capital gaps and labour market outcomes.<sup>xxviii</sup> Thus an incisive study of various components of wage inequity is needed, both conceptually and empirically, to determine the true character of Israeli labour market.

#### END NOTES

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