

The Gender Wage Gap in Israel, 2014–2018

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Taub Center for Social Policy Studies in Israel

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Introduction

Gender differences in the labor market have been the focus of public attention for many years. At first glance, the situation in Israel appears to be improving and in recent years the rate of labor force participation among Israeli women has been among the highest in the OECD. This trend is occurring in parallel to the expanding gap in education — in terms of both high school graduation rates and academic degrees — to the advantage of women.

Nonetheless, the changes in education and employment have not reduced gender wage gaps in Israel, which are still among the largest in the OECD (though they have narrowed since the turn of the century). In this study, we will look at the gender differences in wages (monthly and hourly, gross and net) between men and women in Israel, including among various population groups in Israeli society. We will examine the effect of a number of factors, including work hours, parenthood, occupation, and economic sector, and finally we will conduct a multivariate analysis to estimate the connection between each of the factors and wages with the goal of understanding those factors that influence the gender wage gap.

It is worth noting that even after the factors explaining the gender wage gap have been identified, this does not establish the direction of causality. For instance, do women earn less because they choose particular occupations or do they choose those occupations because they would earn less in others?

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Do women earn less because they work less on average or do they work less because their hourly wage is lower than that of men? In other words, are the differences explained by the choices made by men and women due to their differing interests or is there discrimination that leads to the difference in choices? This important question is beyond the scope of this paper but it should be of concern to policy makers, and if it is found that discrimination is part of the answer, then it is important to find ways to deal with it.

The study is based on the *Survey of Household Income and Expenditure* conducted by the Central Bureau of Statistics (CBS) during the previous decade. The surveys include data on employment, wages, work hours, education, age, gender, marital status, religiosity, number of children under the age of 10 in the household, ethnic group, economic sector, and place of residence for 34,000 individuals of working age.

We found that, between 2014 and 2018, the gender wage gap was stable at about 35%, that it grew from 29% to 36% among the Arab population, and that it shrank from 31% to 24% among the Haredi population. A multivariate analysis showed that number of work hours explains the majority of the gap in all the populations and that economic sector explains a large part of it among non-Haredi Jews and among Arabs. The analysis predicts that in the absence of differences in these factors between men and women, the wage gap would narrow to about 10% among non-Haredi Jews and to 5% among Arabs, and that among the Haredi population the result would be a 2% gap to the advantage of women.

Apart from an in-depth analysis of wage gaps, work hours, and occupation, the study also touches on the effect of parenthood and childrearing on wage gaps and examines that effect according to population group. Overall, the findings are consistent with those of previous studies in Israel and abroad, particularly Fuchs (2016) and Fichtelberg-Barmatz (2016), which is evidence that there has not been any dramatic change in wage gaps in Israel in recent years.

Literature survey

Gender wage gaps have long been a focus of economic research. Although in recent years, the historic gender gaps in wages and in labor force participation have narrowed, they still exist. Studies that have sought the causes of these gaps have looked at a variety of variables, including work hours, pregnancy

¹ For a comprehensive survey of gender wage gaps, see Kunze, 2018.

and childbirth, childrearing, work skills, and discrimination, and they have also documented and quantified the gaps and tracked their trends.

Ciminelli et al. (2021) attempted to estimate the gender gap and to analyze its development over the course of men's and women's careers in 25 European countries, based on the Structure of Earnings (SES) surveys in the EU. The researchers found a gap of about 15% in the average hourly wage between men and women with similar characteristics, part of which could not be explained and part of which could be explained by childbirth and parenting responsibilities, at least in terms of timing. They divided the gap into three main components that are expressed over the course of a woman's career: a fixed component that exists from the beginning of her career which is the result of discrimination and normative differences between men and women; a component that is seen after the birth of the first child, which is the result of employment decisions or parenthood constraints (work hours, type of job, and flexibility); and a component whose effect accumulates gradually beginning with the first child and throughout a woman's career, which is the result of the accumulated gap in human capital (resulting from the second component). Similar results were found by Albrecht et al. (2015) who looked at the effect of maternity leave on delays in wage increases for women in Sweden, with an emphasis on white collar occupations. The researchers found that maternity leave slows the rate of wage increases for both men and women; however, as a result of the women's lower starting wages relative to men, the gender wage gap exists prior to the birth of the first child and continues to widen from there.

Goldin et al. (2017) focused on the development of the wage gap during various stages in the parallel careers of men and women in the US. Using time series data for 1995–2005 they found that, at age 26, women earn between 10% and 27% less than men with the same level of education (gaps differ with education level) and that, by age 39, the gaps have increased by about 34% (to between 13% and 36%). The researchers managed to isolate two channels for the trajectory of wages: choice of workplace and promotion within the workplace. They found that the former is responsible for about 44% of the gap and the latter for the remaining 56%.

In Israel, Fuchs (2016) analyzed the various causes of the gender wage gap using the Blinder-Oaxaca decomposition,² based on data from the CBS *Survey of Household Income and Expenditure* for 2010–2011. She estimated the monthly wage gap to be about 32%–42% and found that the most important

² For more details, see Oaxaca, 1973.

explanatory variable is number of work hours, which accounts for about 57% of the gap, while choice of occupation and economic sector account for about 14%. About 20% of the gap (i.e., about a 6%–8% wage gap) remained unexplained. She carried out an additional test using 2008 data that included the Bagrut (matriculation) and psychometric scores of respondents with a university degree and aged 29–31, as well as income data and other demographic information. The results showed that total work hours is responsible for only 29% of the gap, the choice of occupation and economic sector explain about 56%, and the unexplained residual was reduced to only 6%.

Ficthelberg-Barmatz (2016) examined the gender wage gaps in various occupations for Jews and Arabs separately, based on the CBS *Survey of Household Income and Expenditure* for 2014. She found that the gap in monthly income was about 32% on average, while the hourly income gap was about 27%. She also found that women in feminine occupations (which have a clear majority of women) do not earn less than women in masculine occupations; however, within feminine occupations, wage gaps were larger.

A related issue that is worthy of in-depth research is the representation of women among high-earning workers. Various studies worldwide have examined this issue within a primarily descriptive framework, and have found that, in most cases, women are a minority in the high-earning groups, although that minority has grown over time (Atkinson et al., 2018; Bobilev et al., 2020). A more in-depth study was conducted by Guvenen et al. (2014) in the US, which confirmed these findings, although they also found that the likelihood that the income of women in the highest decile will decline (and that they will drop down to a lower income decile) is significantly higher than for men. Another finding of the study was that the income of women who remain in the highest decile over the years is lower on average than that of men. In the Israeli context, our study of the highest decile of workers in Israel (Debowy et al., 2022b) looked at the differences in the probability of men and women reaching the highest income decile and the wage gap within that decile. It was found that only about one-quarter of workers in the highest decile are women and given the observable traits of the workers, the likelihood of a woman being in the highest decile is about 7% lower than that of a man with similar traits. On the other hand, there were no significant differences in wages between men and women in the highest decile.

Descriptive findings

Figure 1. Gross wage gaps between workers (as a percent of the average wage among men), 2010–2019



Source: CBS, A collection of data for International Women's Day, 2022, Table 20 (in English)

Figure 1 shows that the average gender wage gaps remained relatively unchanged during the past decade. In other words, the relative size of the gaps remained stable and as a result their absolute magnitude increased, alongside the growth in the wages of both men and women. Figure 2a presents the monthly gross wage gap between men and women according to population during the surveyed years.³ The gross wage gap for all women employees during the entire period was about 35%, amounting to NIS 4,100 in 2014 and NIS 4,600 in 2018. In a breakdown by population group, the largest gaps exist among non-Haredi Jews and others (37%) and among Arabs (36%). Although the relative gap between them is similar, the absolute gap among Arabs is only about 60% of that among non-Haredi Jews and others due to the differences in wages between these populations. Among the Haredim, the gender wage gap was the smallest (24%).

The graph relates to all workers, including the self-employed, and therefore the average estimates of the wage gaps do not exactly align with the CBS estimates presented in Figure 1. Nevertheless, the estimates have a standard error of about 2%–3%, such that it is impossible to rule out the hypothesis that the gaps remain identical even when the self-employed are included. The standard errors are higher for hourly wages and even more so when the self-employed are included, so our estimates of this average are less precise.

Total Non-Haredi Jews/others Haredim a. Gross monthly wage, NIS b. Net monthly wage, NIS 6,000 3.500 37% 37% 29% 39% 30% 29% 3,000³⁰% 29% 5,000³⁷% 36% 2,500 35% 4,000 35% **36**% 29% 35% 28% **32**% 34% 36% 27% **37**% 33% 35% 2,000 31% 3,000 34% 1,500 26% 25% 2,000 31% 32% 20% 26% 1,000 -18% 24% 18% 24% 1,000 500 O 0 2014 2015 2016 2017 2018 2014 2015 2016 2017 2018

Figure 2. The monthly wage gap between men and women for any number of work hours (part-time/full-time), by population, 2014–2018

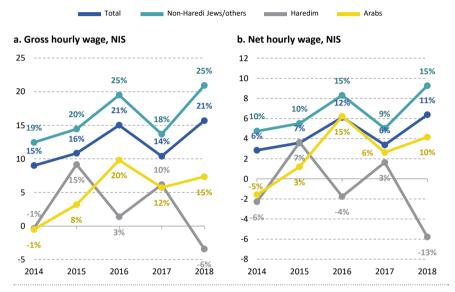
Note: The height of the markers represents the gap in shekels in absolute terms; above or below the marker appears the gap as a percentage of men's average wage in the relevant population group. Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

Figure 2b shows net monthly wage gaps. Examining the two graphs side by side shows that tax policies, which are essentially the mechanism responsible for the difference between gross and net wages, consistently reduce the gender wage gap, although to a different extent across populations. The average gap in net wages for the entire population was about 20% smaller than that in gross wages during this period. Among Haredim, the differences between the gap in net and gross wages shrank by about 17% over the period, while among Arabs, the difference was only about 12% over the entire period.

Figure 3a and 3b show that the gaps in *hourly* wages shrank though they did not disappear. In 2018, the largest gap in hourly gross wages between men and women was among non-Haredi Jews and others and was NIS 21 (25% of the average wage of men in this group). Among Arabs, there was a more pronounced difference between the gap in gross hourly wages and the gap in net hourly wages. Thus, in 2018 the gap in gross hourly wages was NIS 7 (15%) while the gap in net hourly wages was NIS 4 (10%). Among Haredim, the hourly

wage of women was *higher* than that of men. Thus, their gross hourly wage was higher by about NIS 3 (6%) than that of men and their net hourly wage was higher by about NIS 6 (13%).

Figure 3. The average hourly wage gap between men and women for any number of work hours (part-time/full-time), by population group, 2014–2018



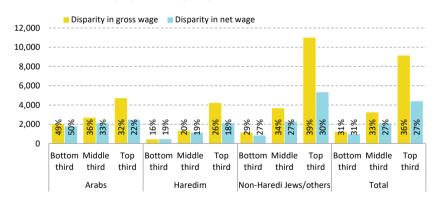
Note: The height of the markers represents the gap in shekels in absolute terms; above or below the marker appears the gap as a percentage of men's average wage in the relevant population group. Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

It is worth emphasizing in this context that only among Haredim was there a decline in the gender wage gap over time (with respect to both monthly and hourly wages). Among Haredim, the gap in the gross monthly wage declined from 31% in 2014 to 24% in 2018, while the gap in the gross hourly wage also declined and even became favorable to women. It is likely that this was the result of the entry of unskilled Haredi men into the labor market during this period. This group tends to work limited hours and for wages lower than those of Haredi women. In contrast to Haredim, the gender gap in the hourly wage among the rest of the Jewish population grew from about NIS 12 (19% of men's wages) to NIS 21 (25%). The gap among Arabs, which was almost non-

existent in 2014 (and perhaps was even to the advantage of women), grew to about NIS 7.3 (15%) by 2018. It may be that this growth was the result of the entry of Arab women into the labor market and their placement in low-earning jobs. Whatever the case, the comparison of gaps in monthly wages to gaps in hourly wages shows that, in the Haredi sector, gender wage gaps are purely the result of differences in number of work hours while among the rest of the population they explain only part of the gap.

An examination of the gaps by income level makes the picture even clearer. Figure 4a presents the gap in monthly gross and net wages in 2017–2018 according to income thirds for each population and compares between men and women within each of them. For example, Haredi women in the highest income third for Haredi women relative to Haredi men in the highest income third for Haredi men. Indeed, it appears that for some of the population groups, the gaps are fairly large. The analysis reveals very large gaps among the Arab population (at least NIS 2,000 or 32% of the gross wage in each income third). Similarly, the analysis shows that the largest gap is to be found in the highest income third among the non-Haredi Jewish population, in which men earn on average about NIS 11,000 (39%) more than women.

Figure 4a. The average monthly wage gap between men and women, by income thirds and population group, NIS, 2017–2018



Note: The graph presents the gross and monthly wage gaps between men and women by population group for 2017–2018; each population group is divided into income thirds by monthly wage and hourly wage. The comparison is between women in a given population group in each income third and men in that same population group and in the parallel income third.

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

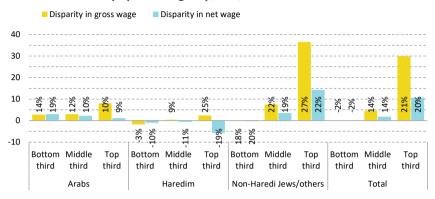


Figure 4b. The average hourly wage gap between men and women, by income thirds and population group, NIS, 2017–2018

Note: The graph presents the gross and monthly wage gaps between men and women by population group for 2017–2018; each population group is divided into income thirds by monthly wage and hourly wage. The comparison is between women in a given population group in each income third and men in that same population group and in the parallel income third.

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

Figure 4b presents a parallel comparison for the gap in hourly wages. It can be seen that it is smaller than the gap in monthly wages for all populations and all income levels. The largest differences between the gaps are to be found among Arabs at all income levels and among Haredim in the lowest income third (where the wage gap flips to the advantage of Haredi women). In contrast, among non-Haredi Jews and others the gaps in hourly wages are closer to those in monthly wages, particularly among the two highest income thirds where the gap in the hourly wage is smaller than that in the monthly wage by about 30%. In these groups, the gaps in hourly wages are the largest also in absolute terms: non-Haredi Jewish men in the highest income third earned on average NIS 36.5 more per hour than non-Haredi Jewish women in the highest income third.

Wages, work hours, and parenthood

As noted previously, the gaps in hourly wages are smaller than those in monthly wages. That is, the number of work hours explains part of the gap. In view of the gender norms in parenting, it is likely that part of the wage gaps is the result of pregnancy, childbirth, and childrearing. Figure 5 presents the gaps in gross hourly and monthly wages between men and women by number of children under the age of 10 in the household. The graphs lead to three conclusions. First, there are wage gaps even among individuals who are not parents — 39% in terms of monthly wages and 18% in hourly wages, such that the difference in work hours explains only about one-half of the gap. Second, among parents of between one and three children, this ratio is more or less maintained. Lastly, the differences in work hours explain the lion's share of the gap among parents of four or more children.

Although the latter finding supports the theory that gender norms in parenting lead to a gender gap in number of work hours (and in turn to a wage gap) among parents of four or more children, the other two findings indicate that the picture is more complex than that. No clear relationship was found between the presence of children in a household and gender gaps in work hours or wages, since the gaps continue to exist even when there are no children in the household, and the presence of fewer than four children does not increase those gaps significantly.

Due to data limitations, it is impossible to attribute with certainty the number of children of a certain age to every individual in the sample. As a result, we used number of children under the age of 10 living in the household as a proxy for parents of small children. This means that grown children over the age of 20 living with their parents together with siblings up to the age of 9 will necessarily be classified as "parents." However, we assume that these cases are rare and randomly distributed. In our previous study (Debowy et al., 2021), it was shown that this variable has predictive power for employment (particularly in the case of women), which supports its relevance to some extent.

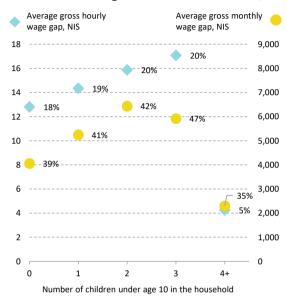


Figure 5. Hourly and monthly wage gaps between men and women by number of children under the age of 10 in the household, 2017–2018

Note: The graph presents the gross hourly and monthly wage gaps between men and women in shekels. The wage gaps are in percent (of men's average wage in the group) and appear to the right of each marker.

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

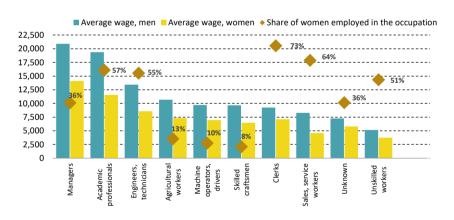
Occupation and economic sector

Another issue that was examined was the connection between occupation and place of work on the one hand and the gender wage gap on the other. Figure 6a presents the average monthly wages of men and women and the share of women in each occupation. In occupations where the wage is lower than the average, i.e., clerical, sales and services, and unskilled workers, most of the workers are women, and in all of them women earn less than men (the gap is particularly large in sales and services). Nonetheless, there are also occupations in which wages are not higher than the average and in which men constitute a clear majority, such as tradesmen, machine operators, and drivers. Among the high-earning occupations, women constitute the majority in the professional occupations. This is the most common occupation among

women, accounting for about one-third of the women in the sample (see Appendix Table 1). In managerial occupations, which are also characterized by high wages, women account for less than one-half of the workers. Thus, only about 5% of women in the sample work in management, as opposed to about 8% of men.

With respect to wage gaps within occupations, the smallest relative gaps are to be found in the lowest-earning occupations. This includes workers whose occupation is not known (26%), clerical workers (30%), and unskilled workers (37%). In contrast, the largest relative gaps are in the sales and services occupations (80%), which are characterized by low wages, in professional occupations (68%), and for technicians and associate professionals (57%), in which the wages are relatively high. Overall, it can be said that the gender wage gap exists in every occupation and there is no clear and consistent relation between the gender distribution of workers in an occupation and the gender wage gaps within it.

Figure 6a. The distribution of the gross monthly wage, by occupation, NIS, 2017–2018



Note: The height of the columns represents the average gross monthly wage of all workers in an occupation (the y-axis). The markers represent the percentage of women within all workers in that occupation.

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

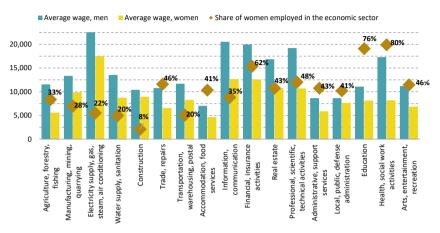


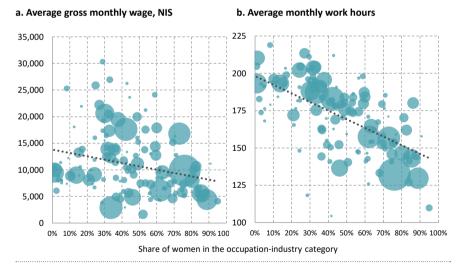
Figure 6b. The distribution of the gross monthly wage, by economic sector, NIS, 2017–2018

Note: The height of the columns represents the average gross monthly wage of all workers in a sector (the y-axis). The markers represent the percentage of women within all workers in that sector. Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

Figure 6b adds the perspective of economic sector to the picture. The two most "feminine" sectors, i.e., education and health and social work services — which together account for almost one-third of women working (see Appendix Table 2) — are characterized by their low wages for women. In the health and social work services, the gender wage gap is particularly large — men earn on average more than twice what women earn (NIS 17,300 vs NIS 8,200). In sectors where men earn high wages, such as professional, scientific and technical services, and real estate, about one-half of the workers are women. In the finance and insurance sector, which is characterized by high wages, almost two-thirds of the workers are women but only about 4% of all women are employed in this sector and their monthly wage is significantly lower than that of men in the sector. Women account for about one-quarter of the workers in the electricity, gas, steam, and air conditioning sector and about one-third of the workers in the information and communication sector, which includes many high tech companies.

The picture of occupation and economic sector is complex and wage gaps also exist within occupations and economic sectors. Therefore, we conducted an additional analysis classifying workers into categories that combined occupation and economic sector, with each category treated as a single unit. Figure 7a presents the average monthly wage of all workers in such categories and the proportion of women within all workers in each of those categories. The graph shows that there is some relation between a higher proportion of women and lower wages, although the differences in the average wage are also evident between occupation and economic sector categories with the same proportion of women. Figure 7b presents the average monthly work hours in each category and the proportion of women within each of them. It shows a far clearer tendency, according to which "feminine" occupations are characterized by fewer work hours.

Figure 7. The average gross monthly wage and work hours and the proportion of women among all workers, by occupation and economic sector category, 2017–2018



Note: The graphs present the ratio between average number of work hours for all workers and the proportion of women among all workers in various categories of occupation and economic sector. The size of the bubble represents the share of the category within the total labor force.

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

In order to statistically test the correlation between the proportion of women in an occupation and wage gaps, we carried out an estimation using Weighted Least Squares (WLS), where the proportion of women is the independent variable, and wages, the wage gaps, and the gaps in the number of work hours are the dependent variables (see Appendix Table 3). The estimation results confirm that there is a significant statistical correlation in the case of each of the dependent variables. Thus, an increase of 1 percentage point in the proportion of women in an occupation is linked to a decline of 0.5% in the average monthly wage (a decline of 0.3% in the average wage of women only), a decline of 4.6% in average monthly work hours, and a decline of 0.06% in the average hourly wage (a very small but statistically significant gap). We also tested whether there is a correlation between the proportion of women in an occupation and the wage gaps within that occupation and found that an increase of 1 percentage point in the proportion of women is linked to an increase of 0.1% in the hourly wage gap and 0.04% in the monthly wage gap. This last finding is roughly in line with the findings of Fichtelberg-Barmatz (2016), which, as noted previously, found larger wage gaps in "feminine" occupations, though the estimation methods and data that we used are very different from hers, and, therefore, it is difficult to directly compare the two studies.

Multivariate analysis

Thus far, we have presented the correlations between wage gaps for each factor separately. In order to carry out a more precise analysis, which controls for the relationships between the factors themselves, we carried out a multivariate analysis using the Blinder-Oaxaca decomposition, as in Fuchs (2016). Under this method, a pair of wage forecasting models are estimated that are constructed in an identical manner to the model presented in Debowy et al. (2021). Based on these models, the effect of each explanatory variable on the wage gap is estimated, while accounting for the differences both in the distribution of the explanatory variables between men and women and in the effect of each variable on the wage.

Figure 8 presents the estimation results for each population group separately and for the labor force as a whole. It was found that for the total labor force, with a gender wage gap of 35%, the number of work hours explains about 22%, economic sector explains about 8% and the remaining 5% is unexplained. This overall average is almost identical to that found in the separate estimation for

-30%

Haredim

Arab men and women. Among non-Haredi Jews and others, the unexplained portion was about 10% and the rest of the components remained similar. The separate estimation results for the Haredi population are particularly interesting. In this population the wage gap is only 25% and the differences based on economic sector hardly contribute to explaining it, while number of work hours essentially explains the entire gap. Similarly, among Jews (both Haredim and non-Haredim), it was found that marriage explains a statistically significant though negligible portion of the wage gap (slightly less than 1%), which is apparently the result of differences in the marriage premium in wages between men and women, as explained in detail in Debowy et al. (2022a).

Unexplained Education Occupation ■ Industry branch Work hours 50% 40% 30% 19% 20% 22% 22% 8% 10% 9% 8% 25% 0% -3% -14% -10% 2% -4% -4% -20% -5%

Figure 8. The contribution of various factors to the gender wage gap, by population group, 2017–2018

Note: the graph presents the monthly wage gap between men and women alongside the relative contribution of various observable characteristics, based on the Blinder-Oaxaca decomposition for 2017–2018. The decomposition was conducted using a two-stage wage model identical to the one presented in Debowy et al. (2021).

Non-Haredi Jews

Total

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

Arahs

A more surprising finding that emerges from the estimation concerns the factors that predict a wage gap to the advantage of women, such that achieving equality between men and women would increase the gender wage gap. For example, among the Haredi population, the unexplained portion of the gap is -2% (Figure 8) where the differences in number of work hours and choice of economic sector predict a gender wage gap of about 26% (not including education and occupation) in contrast to the actual observed gap of about 24%. Another pair of factors that reduces the gap is choice of occupation and

education. These factors provide women with an advantage without which the aggregate wage gap between men and women would be about 13 percentage points higher in the case of the total population, about 7 percentage points higher in the case of non-Haredi Jews and others, 4 percentage points higher in the case of Arabs, and 19 percentage points higher in the case of Haredim.

Conclusion

The findings of the research are similar to those of Fuchs (2016), a study based on data from the *Survey of Household Income and Expenditure* for 2010–2011. The monthly wage gap (35% in our study and 32%–42% in Fuchs) is largely explained by number of work hours (60% in our study; 57% in Fuchs), choice of economic sector (22% in our study; 14% in Fuchs), and includes an unexplained residual (15% in our study; about 20% in Fuchs). The gender wage gap and the factors that explain it remained relatively unchanged between 2010 and 2018, at least according to this estimation method. Nonetheless, we have shown that factors such as education and occupation work to reduce the gap and were it not for the advantage that women have in these areas, the gender wage gap would have been even larger.

It can therefore be stated that the relative wage gaps between men and women have remained relatively unchanged in recent years. As we have shown, in 2018, they were about 35% in terms of gross monthly wages and 28% in terms of net monthly wages. The largest wage gaps were observed among non-Haredi Jews and others and the smallest among Haredi Jews. Moreover, in recent years there have been opposite trends observed among the Arab and Haredi populations, i.e., growing wage gaps among Arabs and shrinking wage gaps among Haredim.

We have also presented the correlations between the monthly and hourly wage gaps on the one hand and the number of children under the age of 10 in the household (as a proxy for parenthood). The analysis showed that the gaps exist even in the absence of children, although they are significantly smaller in households with a large number of children (a category in which Haredi Jews are prominent). We also showed that wage gaps exist not only within occupations and economic sectors but also between them, such that more "feminine" occupations are characterized by a relatively low number of work hours, somewhat lower wages, and somewhat larger wage gaps.

Finally, we carried out a multivariate analysis to estimate the relation between each factor and the monthly wage gap. We found that the most important factor is number of work hours, which explains about 60% of the wage gap, while the choice of economic sector explains 22%. We also found that women have an advantage in education and choice of occupation, and were it not for this advantage, the monthly wage gap would be about 13 percentage points greater.

About 15% of the gap (which constitutes about 5 percentage points of the average wage for men) remains unexplained by observable characteristics, which is similar to the estimate arrived at in Fuchs (2016). It may be that this residual is influenced by various unobservable factors, such as differences in individual preferences, gender and cultural norms (which are reflected in differences in negotiating power, self-advocacy, socialization, and teamwork) and discrimination. The literature includes empirical evidence for some of these factors, such as gaps in promotion and punishment of misconduct (Egan et al., 2017) and sexual harassment (Folke & Rickne, 2020). It is worth adding that the explained portion of the gap (work hours and economic sector) may not be explaining the source of the gap but instead may be a mechanism for its creation. In other words, it is impossible to confirm or rule out the hypothesis that these factors reflect the unobserved characteristics described above or other characteristics.

In order to arrive at clear conclusions regarding the causal sources of the gender wage gap — and, even more importantly, to achieve full wage equality between men and women — additional empirical work is needed. This includes a micro-panel data analysis or an analysis of productivity indices other than wages. It is hoped that, in the future, such analyses will be conducted and that organizations with reliable data, including private businesses, will do their best to make that data available to researchers and experts (including any necessary modifications).

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Appendix

Appendix Table 1. The distribution of men and women among occupation groups and the average wage of men and women in each occupation group, 2017–2018

	Percent of men in the occupation	Average monthly wage for men in the occupation, NIS	Percent of women in the occupation	Average monthly wage for women in the occupation, NIS
Managers	8%	21,637	5%	16,145
Academic professional	23%	19,753	32%	11,980
Engineers, technicians, agents	12%	13,571	15%	8,845
Clerical, office workers	4%	9,777	10%	6,996
Sales, service workers	13%	8,166	24%	4,775
Agricultural workers	1%	13,205	0%	10,941
Skilled workers	14%	9,935	1%	5,582
Machine operators	9%	9,611	1%	7,503
Unskilled workers	5%	5,370	6%	3,798
Unknown	10%	7,269	5%	5,610

Note: The table presents the distribution of men and women among occupations (the percentage of all workers in each occupation), alongside the average monthly wage for men and women in that occupation group.

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Source: CBS

Appendix Table 2. The distribution of men and women among economic sectors and the average wage of men and women in each economic sector, 2017–2018

	Percent of men in the sector	Average monthly wage for men in the sector, NIS	Percent of women in the sector	Average monthly wage of women in the sector, NIS
Education	6%	10,631	21%	8,286
Health, social work activities	5%	18,608	18%	8,206
Trade, vehicle repairs	11%	11,263	9%	7,083
Local, public administration, security	12%	8,877	9%	7,635
Professional services, science, technicians	7%	18,079	7%	11,493
Manufacturing, mining, quarrying	15%	13,236	6%	10,354
Finance, insurance	2%	20,482	4%	12,251
Other services	2%	9,633	4%	5,962
Support, assistance services	5%	8,590	4%	6,326

Appendix Table 2 (continued). The distribution of men and women among economic sectors and the average wage of men and women in each economic sector, 2017–2018

	Percent of men in the sector	Average monthly wage for men in the sector, NIS	Percent of women in the sector	Average monthly wage of women in the sector, NIS
Accommodation, food services	5%	6,655	3%	4,846
Information, communication	6%	22,291	3%	14,026
Household as employer	0.4%	5,612	3%	4,740
Other branches	3%	16,956	2%	9,298
Arts, recreation, entertainment	2%	11,527	2%	6,153
Transportation, warehousing	6%	11,310	1%	8,621
Construction	9%	10,982	1%	9,217
Real estate	1%	16,110	1%	13,894
Agriculture	1%	14,014	1%	7,130
Electricity, gas, steam, air conditioning	0.4%	22,129	0.3%	17,146
Water, sewage, waste management services	1%	13,062	0.4%	10,388

Note: The table presents the distribution of men and women among economic sectors (the percentage of total workers employed in an economic sector), alongside the average monthly wage in those economic sectors.

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

Appendix Table 3. Results of the WLS model, the percentage of women in occupation and economic sector categories

Dependent variable	Natural log of average hourly wage, men and women	Natural log of average hourly wage, women only	Natural log of average monthly wage, men and women	Natural log of average monthly wage, women only	Natural log of average monthly work hours	Wage gap in hourly wage between men and women (percent)	Wage gap in monthly wage between men and women (percent)
Percent of	-0.0661***	0.0660*	-0.5280***	-0.3109***	-0.4638***	0.0986***	0.0376***
women in the category	(0.0097)	(0.0379)	(0.0102)	(0.0105)	(0.0024)	(0.0092)	(0.0053)
Intercept	4.1279***	3.9552***	9.3937***	9.1082***	5.3523***	0.2170***	0.1379***
	(0.0061)	(0.0062)	(0.0065)	(0.0067)	(0.0012)	(0.0031)	(0.0024)
R ²	0.0011	0.0019	0.0554	0.0212	0.6006	0.0028	0.0014
No. of observations	135	135	135	135	135	135	135

Significance levels: *p < 0.10; **p < 0.05; ***p < 0.01.

Note: Each cell contains the point estimate of the coefficient and below it is the standard deviation in parentheses.

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS