

The Labor Market: An Overview

Hadas Fuchs and Gil Epstein

A chapter from the *State of the Nation Report 2019*

Jerusalem, December 2019

Taub Center for Social Policy Studies in Israel

The Taub Center was established in 1982 under the leadership and vision of Herbert M. Singer, Henry Taub, and the American Jewish Joint Distribution Committee. The Center is funded by a permanent endowment created by the Henry and Marilyn Taub Foundation, the Herbert M. and Nell Singer Foundation, Jane and John Colman, the Kolker-Saxon-Hallock Family Foundation, the Milton A. and Roslyn Z. Wolf Family Foundation, and the American Jewish Joint Distribution Committee.

This paper, like all Center publications, represents the views of its authors only, and they alone are responsible for its contents. Nothing stated in this paper creates an obligation on the part of the Center, its Board of Directors, its employees, other affiliated persons, or those who support its activities.

Translation: David Simmer
Editing and lay-out: Laura Schreiber

Center address: 15 Ha'ari Street, Jerusalem, Israel
Telephone: 02 5671818 Fax: 02 5671919
Email: info@taubcenter.org.il Website: www.taubcenter.org.il

 Internet edition

The Labor Market: An Overview

Hadas Fuchs and Gil Epstein

The Israeli labor market

The labor market remained stable in 2019. The rates of labor force participation and employment were high (81 percent and 78 percent, respectively, among the 25–64 age group) and the rate of unemployment was particularly low (3.4 percent; Figure 1).¹ The rate of labor force participation has remained almost unchanged and it appears that the growth in the supply of labor in the primary working age group among non-Haredi Jews has been exhausted. The future potential for growth in employment lies in the supply of labor from Arab Israelis and Haredim (ultra-Orthodox Jews), which has still not been maximized; these two populations are the focus of the recommendations made by the Employment 2030 Committee. The number of work hours per employee has declined somewhat in the public sector and remains stable in the business sector. The share of vacant job positions has decreased but its level remains high (Central Bureau of Statistics, 2019). Alongside the stability in the rates of employment and labor force participation, the real wage has continued to rise, although at a slower rate than in previous years (Figure 2). This year, as in 2018, the largest increase in wages occurred in the information and communication industry, which includes computer programming as a sub-industry. The wages in this industry rose by 3.8 percent during the first eight months of 2019 (CBS, seasonally adjusted data, Employment and Wages Survey). The rate of wage increase in this industry has been the fastest in the economy since 2014 and the level of wages in this industry is second only to the mining and quarrying industry.

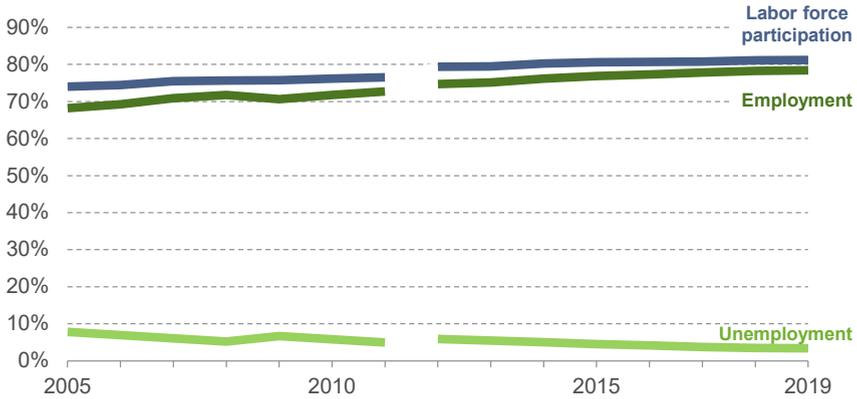
The share of self-employed men within total employment is on a slight downward trend and during the first three quarters of 2019 it stood at 14.6 percent. The share of self-employed women continued to rise slowly and

* Hadas Fuchs, Researcher, Taub Center for Social Policy Studies in Israel. Professor Gil Epstein, Principal Researcher, Taub Center; Department of Economics, Bar-Ilan University.

1 Unless otherwise specified, the data for 2019 relate to the first three quarters of the year and do not include regular samples. The data source is the Central Bureau of Statistics.

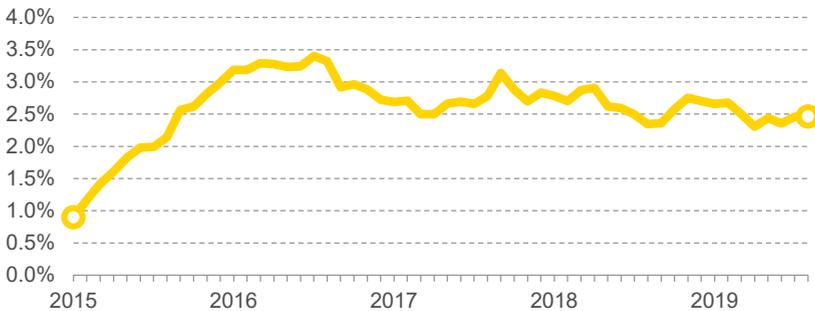
stood at 9.1 percent in 2019 as compared to 7.8 percent in 2012.² Various studies of the labor market expect a shift to self-employment, although this has not yet occurred, or at least not terms of workers' primary employment.³

Figure 1. Employment indices among 25-64-year-olds



Note: No fixed samples. Data through the third quarter of 2019. Due to changes in the *Labor Force Survey* methodology in 2012, there is a break in the data. Data have been concatenated to their level after the break. | Source: Hadas Fuchs and Gil Epstein, Taub Center | Data: CBS

Figure 2. Rate of change in real wages for employed persons
Relative to the same period in the previous year, 12-month moving average



Note: Data are seasonally adjusted. Data through August 2019.
Source: Hadas Fuchs and Gil Epstein, Taub Center | Data: Bank of Israel

² The figures are taken from the CBS database and data series.

³ The CBS *Labor Force Survey* only includes data on the primary working age group. It may be that employees are working in more than one job and are self-employed in one of them. The available data do not make it possible to check this.

In an analysis by sector, the employment rate among non-Haredi Jews is higher than among the other groups and it rose somewhat in 2019. The rate of employment among Arab Israeli women and Haredi men remains low.

Arab Israeli employment

The employment rate among Arab Israeli women rose significantly between 2015 and 2018, though it remained almost unchanged in 2019 (Figure 3). Most of the increase in employment among Arab Israeli women in recent years occurred as a result of their rising education levels (Fuchs & Weiss, 2018). In view of the continuing improvement in their levels of primary and high school education (Fuchs, 2017; Yanay, Fuchs & Blass, 2019) as well as the rise in the share of Arab Israeli women entering higher education, it can be assumed that their employment rate will continue to rise in the coming years. Indeed, an examination of the likelihood of employment according to various background characteristics (Appendix Table 1, column 2⁴) shows that the rate of employment among Arab Israeli women who are college graduates is 47 percent higher than among those with no higher education. The gap in employment between Bedouin women in the Negev (not including the Bedouin geographic periphery⁵) and among non-Bedouin Arab Israeli women is 6 percent but when observed variables are controlled for, the difference is not statistically significant. The rates of employment among Christian women and Druze women are higher than among non-Bedouin Muslim women by 20 percent and 9 percent, respectively. Non-married women (single, divorced, and widowed) are employed at higher rates than married women, and mothers of children (primarily young children) are employed at lower rates.

The rate of employment among Arab Israeli men is also relatively low and even lower than in 2017. A high share of Arab Israeli men are employed in unskilled jobs (construction, agriculture, etc.; Fuchs & Weiss, 2018) and the improvement in their education has been slower than among Arab Israeli women (Fuchs, 2017; Yanay, Fuchs, & Blass, 2019). The employment rate among Arab Israelis ages 20 to 24 fell from 67 percent in 2017 to 61 percent

4 The table presents the results of a linear regression. Similar results were obtained from a logistic regression. Unless otherwise specified, the data source is the CBS *Labor Force Survey*.

5 In this study, Bedouins are defined as the Muslims residing in the Negev. The data do not include the Bedouin periphery which is not sampled by the CBS *Labor Force Survey*. If the Bedouin periphery, which was sampled in 2008, is included, then the rate of employment is 56 percent among Bedouin men and 22 percent among Bedouin women.

in 2019⁶ and, as can be seen in the *Spotlight* later in this chapter, they are also leaving the labor market at a relatively young age. The rate of employment is particularly low among Bedouin men and their employment rate in the Negev (without the periphery) stood at only 71 percent in 2017 as compared to 78 percent among non-Bedouin Arab Israeli men. The Bedouin population belongs to a weak socioeconomic population that is characterized by low employment, and even after controlling for age, education, and marital status, the rate of employment among Bedouin men is 9 percent lower than among non-Bedouin Arab Israeli men (Appendix Table 1, column 1). Druze and Christian men have higher rates of employment. In contrast to the situation of Arab Israeli women, the rate of employment among married Arab Israeli men is higher than among non-married Arab Israeli men.

Haredi employment

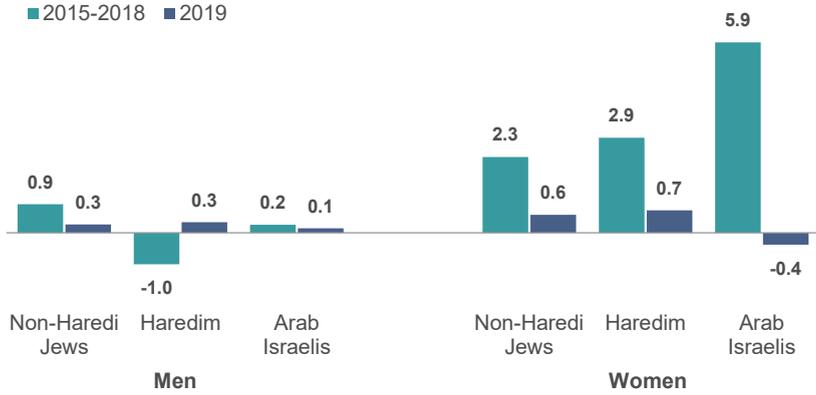
The rate of employment among Haredi women is high bearing in mind their fertility rates; since 2014, their employment rate has risen by 3 percentage points.⁷ It should be mentioned that there is no discernible difference in employment rates between married and non-married Haredi women (Appendix Table 1, column 4). In contrast, the rate of employment among Haredi men is lower than it was in 2015 and during the last three years, it has fluctuated around 51 percent. There is a negative correlation between the rate of employment among Haredi men and whether they studied in a *kollel*, which is an indicator of level of religiosity. In an analysis that controls for background variables, education, and marital status, the rate of employment among men who studied in a *kollel* was 31 percent less than that among Haredim men who had not (Appendix Table 1). The rate of employment among Haredi men and women with a college degree is higher by about 25 percent than those without.

6 It may be that part of the decline stems from a greater tendency toward acquiring an academic education, but the share of Arab Israelis ages 18 to 22 who are not employed nor studying is particularly high (Miaari & Hadad Haj-Yahja, 2017).

7 Classification as Haredi is by self-reporting.

Figure 3. Change in the employment rate by sector and gender, 2015-2019

In percentage points



Note: No fixed samples. Data are through the third quarter of 2019.
 Source: Hadas Fuchs and Gil Epstein, Taub Center | Data: CBS

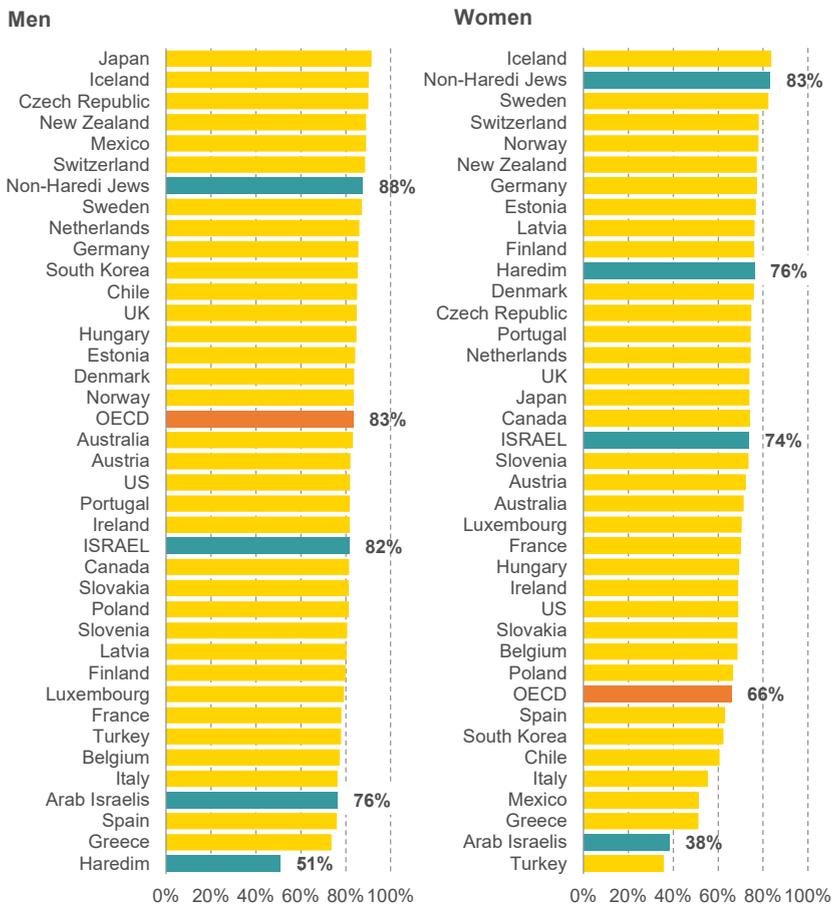
Employment in Israel relative to the OECD countries

A comparison with the OECD countries (Figure 4) emphasizes the gap in employment rates among the various population groups. The average rate of employment among men and women in Israel is close to the median level for the OECD countries (among men it is close to the average while among women it is above the average). Among men, the rate of employment among non-Haredi Jewish men is higher than among men in the OECD countries and, in contrast, the rate of employment among Arab Israeli men is lower. As mentioned, the employment rate among Arab Israeli men has not changed significantly in recent years and essentially it is similar to its 1995 level. The employment rate among Haredi men is significantly lower than rates in the other OECD countries and also lower than the rate among other population subgroups in the OECD.

Among women, the high rate of employment among non-Haredi Jewish women (82.2 percent in 2018) is particularly notable and it exceeds that in all the OECD countries except for Iceland. This is despite the fact that the fertility rate among non-Haredi Jewish women in Israel is higher than that of women in the OECD and stands at 2.6 children (Hleihel, 2017). It is also

worth mentioning the relatively high rate of employment among Haredi women (74 percent) despite their very high fertility rates (about 7 children; *ibid.*). The rate of employment among Arab Israeli women is similar to that among women in Turkey. Employment rates among Israeli women in the 30 to 39-year-old age group are also similar to those of their peers in the OECD countries. Thus, the rate of employment among Israeli women during their fertile years, and primarily non-Haredi Jewish women, is relatively high.

Figure 4. Employment rates among 25-64-year-olds, 2018



Source: Hadas Fuchs and Gil Epstein, Taub Center | Data: CBS; OECD

In an international comparison, Israeli men work longer hours than their peers in other OECD countries (Figure 5) while the number of work hours among women is similar to the OECD median. Broken down by sector, non-Haredi Jewish men and Arab Israeli men rank fifth and sixth, respectively, (meaning they work more than the average number of hours per week) and Arab Israeli women – followed by Haredi women – are located near the bottom of the list (i.e., they work the fewest number of hours). The combination of the two variables (that is, rate of employment multiplied by work hours), which indicates the average number of work hours of all individuals in the 25 to 64-year-old age group (including the non-employed), shows that here, too, non-Haredi women are ranked second in terms of employment and non-Haredi Jewish men are ranked in fourth place.

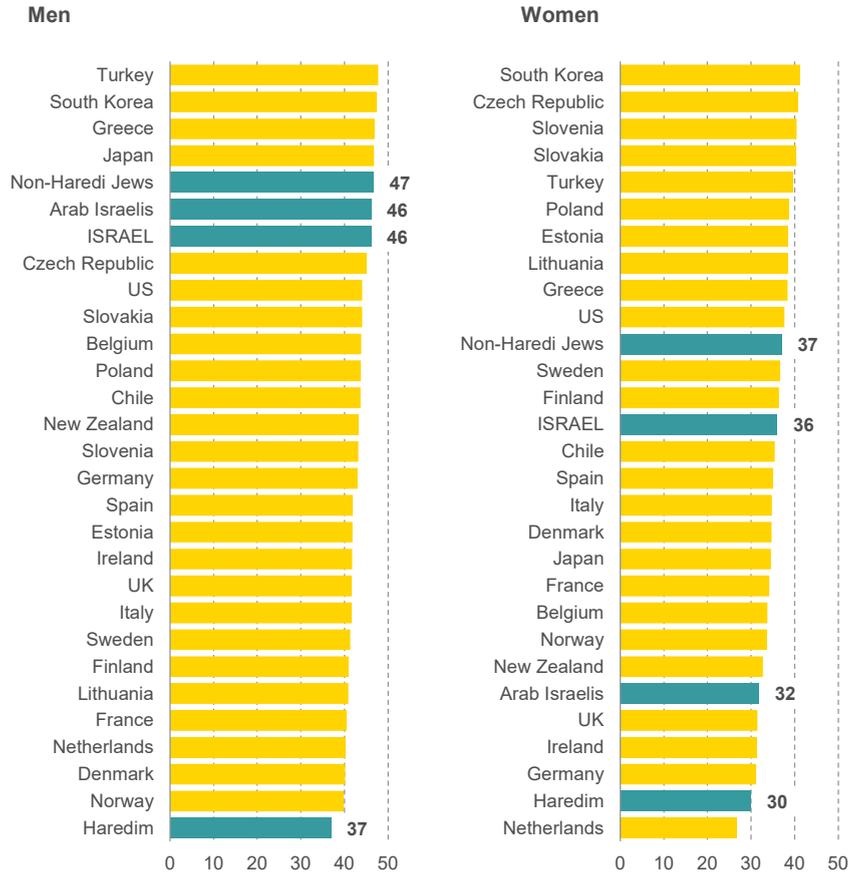
As noted, employment rates in Israel are similar to the OECD median even though fertility in Israel is the highest in the OECD countries (there is a difference of almost one child between the fertility rate in Israel and that in the next country on the list). In an examination by sector, the high rates of employment and number of work hours among non-Haredi Jews, combined with their high fertility rates, would seem to make it difficult for these Jewish parents to combine work, family, and leisure.⁸ Indeed, the OECD ranks Israel as fourth from last with respect to work-life balance.⁹ The next section will focus on this issue.

8 In a comparison by sector, it is important to remember that, even in other OECD countries, there are population groups whose rates of employment are relatively low; their removal from the calculation increases the employment rate in the OECD. However, in the other OECD countries, the populations characterized by low employment rates are not as large as the minority groups in Israel and, what is more, the gap in the employment rate between them and the rest of the population is not as large as it is in Israel.

9 See <http://www.oecdbetterlifeindex.org/topics/work-life-balance/>

Figure 5. Average weekly work hours in Israel and other developed countries, 2014-2015

Workers ages 25-64

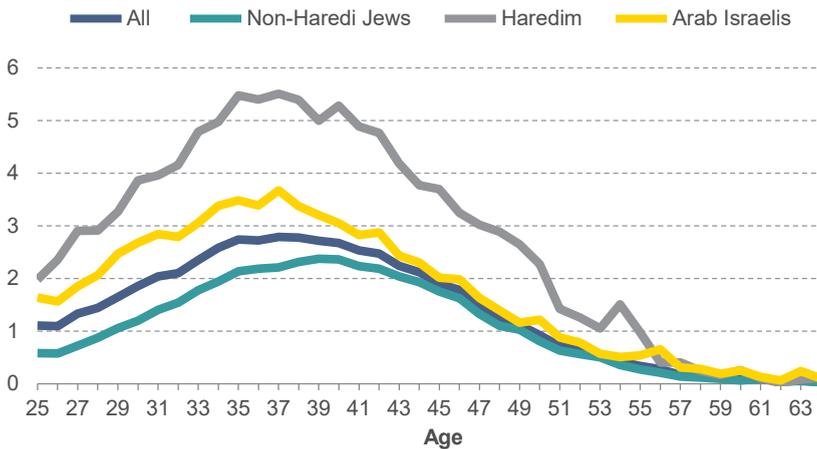


Source: Hadas Fuchs and Gil Epstein, Taub Center | Data: OECD, PIAAC

Family and work in Israel

Fertility in Israel is an outlier in many respects (Weinreb, Chernichovsky, & Brill, 2018). Despite the significant improvement in the education levels of Israeli women and their large-scale entry into the labor market, and despite a rise of close to three years in the average age at first birth (between 2000 and 2014), fertility rates in Israel are similar to their level during the 1980s (ibid.). The number of children up to the age of 17 in a household, according to the age of the head of the household, rises from 1 in a household headed by women aged 25 to 2.8 children in a household headed by women aged 38 (Figure 6). The numbers vary between the various population groups but, in all of them, the maximum number of children is reached in households headed by women ages 36 to 39.

Figure 6. The average number of children under the age of 18 per woman by age and sector, 2017



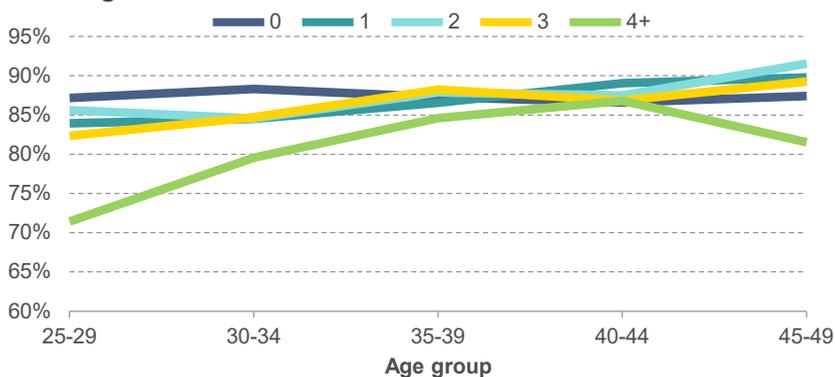
Source: Hadas Fuchs and Gil Epstein, Taub Center | Data: CBS, Labor Force Survey

Employment rates among women have risen significantly in recent decades and in particular among mothers of young children (Bowers & Fuchs, 2016). In 2018, the rate of employment among mothers of children ages birth to 4-years-old was similar to that among mothers of older children or women without children, implying that rates of employment are also much higher today among mothers with young children.

Figure 7 shows the probability of employment among non-Haredi Jewish women ages 25 to 49 by number of children.¹⁰ Employment according to age is similar among women without children and mothers with 1 to 3 children. The lower rate of employment among mothers ages 25 to 29 with 4 or more children may be an indication of employment rates among non-Haredi women who are nonetheless religiously observant.¹¹ In other words, non-Haredi Jewish women with up to 3 children remain in the labor market after the births of their children.¹² A possible explanation is the simple fact that as the mothers age so do their children, making it easier for mothers to leave the home to work. In large families, there is a greater likelihood that the older children can help care for the younger ones, thus enabling mothers to work. However, the number of work hours declines as the number of children increases (Figure 8) and primarily from the first birth. It is important to note that panel data would be needed in order to examine the exact changes in employment rates, number of work hours, and wages following births.

Figure 7. Probability of employment among non-Haredi Jewish women by number of children, 2017

Controlling for observable variables



Note: Probability is calculated by a logistic regression analysis, including controls for country of origin, education level, and family status.

Source: Hadas Fuchs and Gil Epstein, Taub Center | Data: CBS, *Labor Force Survey*

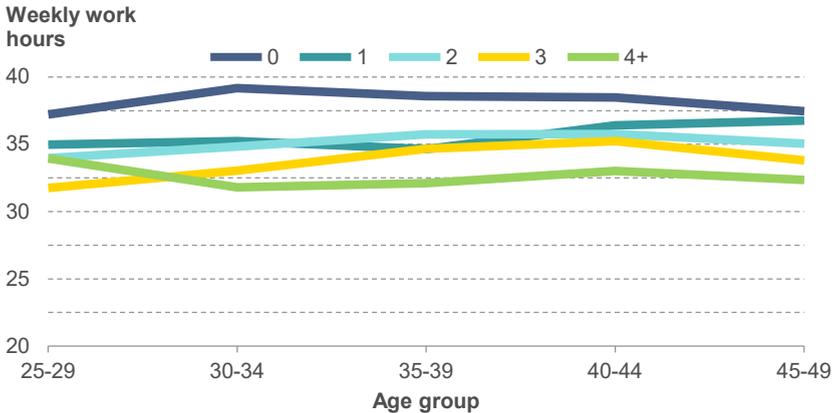
10 Calculations for Arab Israeli and Haredi women are not presented due to the small number of observations.

11 About 45 percent of mothers of 4 children and 79 percent of mothers with 5 or more children among non-Haredi Jewish women are religiously observant, as opposed to 11 to 17 percent of mothers of 0 to 3 children.

12 Among Haredi and Arab Israeli women, the data are noisy due to the small number of observations.

Figure 8. Average weekly work hours among non-Haredi Jewish women by number of children, 2017

Controlling for observable variables



Note: Weekly work hours were calculated using logistic regression analysis, including controls for country of origin, education level, and family status.

Source: Hadas Fuchs and Gil Epstein, Taub Center | Data: CBS, *Labor Force Survey*

Employment in coupled households with children

The family structure of individuals between the ages of 25 and 64 is usually a couple. About one-half of the working-age population live in a household with children under the age of 18 and 71 percent live as a couple in a household. The share of single-parent households is only 8 percent of the population (10 percent among women and 6 percent among men). This section focuses on heterosexual couples in a household (where a man and woman are heads of the household) with at least one child under the age of 18.

Alongside increased rates of employment among women, the gender division between work and home is changing and the wage gender gap is narrowing (Fuchs, 2016). From the employment perspective, households are becoming more egalitarian. Thus, the share of households with children in which both parents are employed full-time rose from 30 percent in 2002 (the historic low during the dot-com crisis and the second *intifada*) to 40 percent in 2017; the share of households in which only the father is employed fell

from 28 percent to 20 percent (Figure 9).¹³ In 13 percent of households, the mother works in a more full-time position than the father.¹⁴

With respect to sector, there are large differences between population groups with respect to household employment structure (Figure 10). About 51 percent of non-Haredi Jewish households have two parents working full-time, as compared to 25 percent of Arab Israeli households and only 13 percent of Haredi households. In contrast, in 45 percent of Haredi households, the mother works more of a full-time position than the father. Similarly, in 43 percent of Haredi households, neither parent works full-time, in contrast to only 11 percent of non-Haredi Jewish households and 15 percent of Arab Israeli households. In line with the low employment rate among Arab Israeli women, in more than one-half of Arab Israeli households, the father is the only wage earner and the share of households in which the mother works more of a full-time position than the father is particularly low (only 5 percent in 2017).

13 The CBS defines a full-time position (FTE) as 35 or more weekly work hours.

14 Mothers employed full-time when the father is employed part-time or not employed and mothers employed part-time when the father is not employed.

Figure 9. Household structure for families with at least one child under the age of 18

Percent

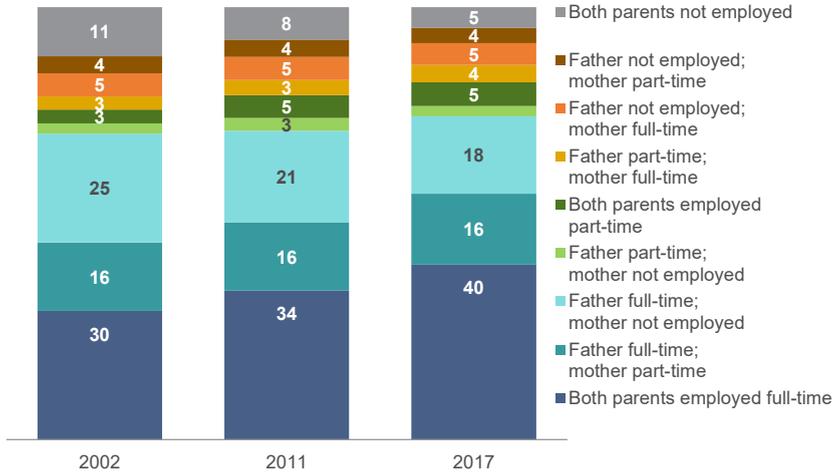
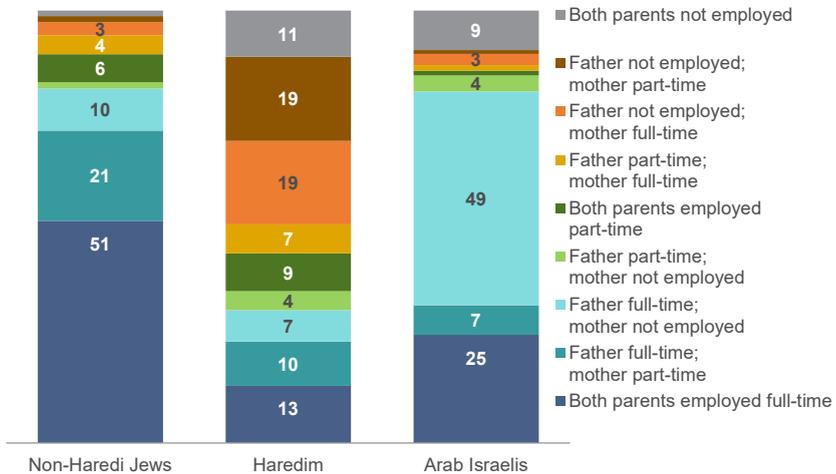


Figure 10. Household structure for families with at least one child under the age of 18 by sector, 2017

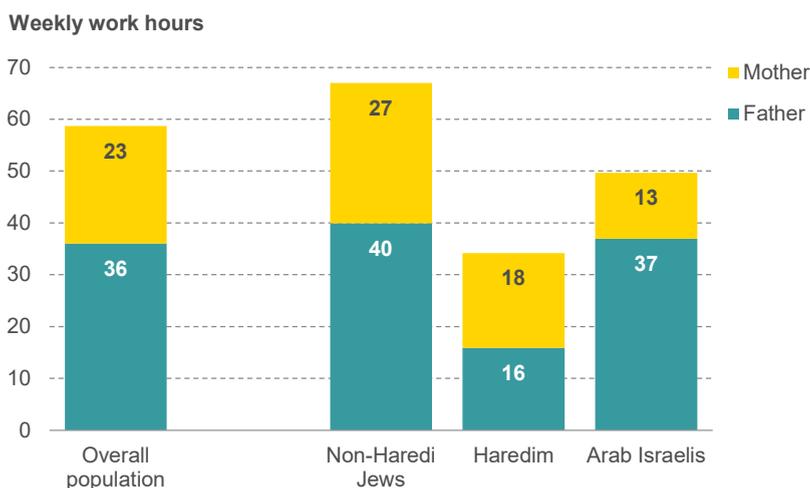
Percent



For Figures 9 and 10: Source: Hadas Fuchs and Gil Epstein, Taub Center | Data: CBS, Labor Force Survey

As of 2017, the average number of weekly work hours of two parents with children is 59 (Figure 11), where the father works 61 percent of the hours and the mother 39 percent. Here, again, there are major differences among population groups. In the middle are Arab Israelis with an average of 50 work hours per couple in a household with children, in contrast to non-Haredi Jewish couples who work an average of 67 hours and Haredi Jewish couples who work an average of only 34 hours. Thus, the average number of work hours of two parents in a non-Haredi Jewish household is almost double that of a comparable Haredi household, whose total work hours are less than one full-time equivalent (FTE). Even though the rate of employment is higher for Haredi women than for Haredi men in a coupled-household, the gap between the mother and the father in Haredi households is relatively small when work hours are taken into account.

Figure 11. Average cumulative weekly work hours of parents with children, 2017

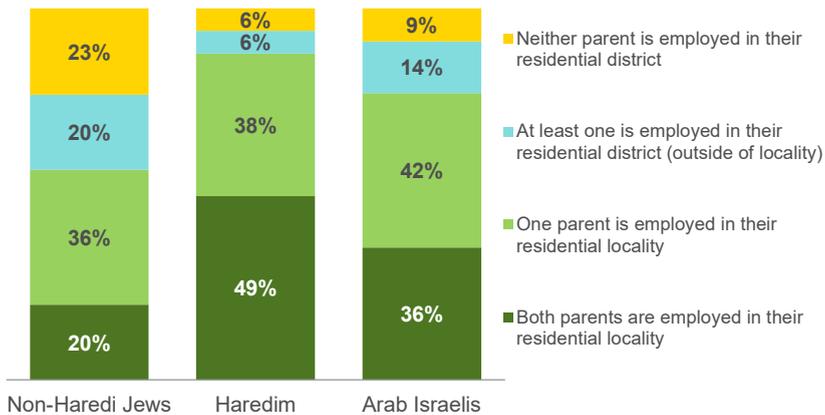


Source: Hadas Fuchs and Gil Epstein, Taub Center | Data: CBS, *Labor Force Survey*

Commuting time is a consideration in addition to high employment rates and the high number of work hours. The share of employees who work outside their residential area is rising (Bleikh, 2018) and commuting time for these employees has lengthened considerably since 2009 (Bank of Israel, 2018). The share of employees who commute is increasing also among

couples with children. Thus, the share of men who commute has risen from 57 percent in 2003 to 64 percent in 2017 with smaller increases for women (from 44 to 48 percent). Also from this perspective, there were differences among the various groups. Thus, non-Haredi Jewish couples spend more time on the road. According to data from the CBS *Social Survey*, non-Haredi Jewish women report longer commuting time than Arab Israeli and Haredi women. Among men, non-Haredi Jewish men and Arab Israeli men report similar commuting time while Haredi men report significantly shorter times. With regard to employment locale and residential locality, among working couples with children, in 2016 and 2017, 48 percent of non-Haredi Jewish women are employed in their residential locality, as compared to 76 percent of Haredi women and 69 percent of Arab Israeli women. Only 22 percent of non-Haredi Jewish couples both work in their residential area, as compared to about 50 percent of Haredi households and 36 percent of Arab Israeli households. The share of non-Haredi Jewish couples in which neither works in their residential locality is significantly higher than among Haredi and Arab Israeli households (Figure 12).

Figure 12. Residential locality and place of employment, coupled households with children, both parents are employed, 2016-2017



Source: Hadas Fuchs and Gil Epstein, Taub Center | Data: CBS, *Labor Force Survey*

In summary, households in the non-Haredi Jewish sector have fewer children than in the Arab Israeli sector and certainly fewer than in the Haredi sector, and the rate of employment in these households is higher, the couple works more cumulative hours and they have, in general, longer commuting times to their place of employment. According to the CBS *Social Survey*, due to the higher number of work hours and the relatively high rate of employment, only 56 percent of working women and 59 percent of working men in Israel are satisfied with their work-life balance. As shown in Table 1, non-Haredi Jews report the lowest level of satisfaction.¹⁵ Individuals without children under 18 report that they are more satisfied with their work-life balance than the parents of children under 18. However, among Arab Israelis, there is less of a gap between parents of young children and the rest of the population.

Table 1. The share of individuals reporting being satisfied with their work-life balance, employed individuals ages 25-64, 2017

	Men		Women	
	No children under the age 18	Children under the age of 18	No children under the age 18	Children under the age of 18
Non-Haredi Jews	60.4%	51.6%	56.4%	52.0%
Haredim	76.4%	64.4%	72.2%	64.9%
Arab Israelis	70.4%	68.9%	75.9%	74.8%

Note: Haredim without children were omitted from the table due to the small number of observations.
Source: Hadas Fuchs and Gil Epstein, Taub Center | Data: CBS, *Social Survey*

¹⁵ Haredim report high levels of satisfaction with certain aspects of life and, therefore, comparisons between them and other population groups should be interpreted with caution.

Spotlight

Employment by age

Employment rates among men and women rise from the age of 25 until about age 40 and subsequently begin a downward trend.¹⁶ A breakdown by sector (Figure 13), after controlling for marital status, shows that employment rates among non-Haredi Jewish men increase somewhat until ages 35 to 39 and then gradually decline. The rate of decline accelerates between the ages of 55 and 59 and increases even more between the ages of 65 and 69, when men hit the official retirement age. The rate of employment among Arab Israelis consistently declines with age and Arab Israeli men, many of whom work in physically demanding jobs, leave the labor market at a relatively early age. Employment rates among Haredim are on an upward trend until age 50.

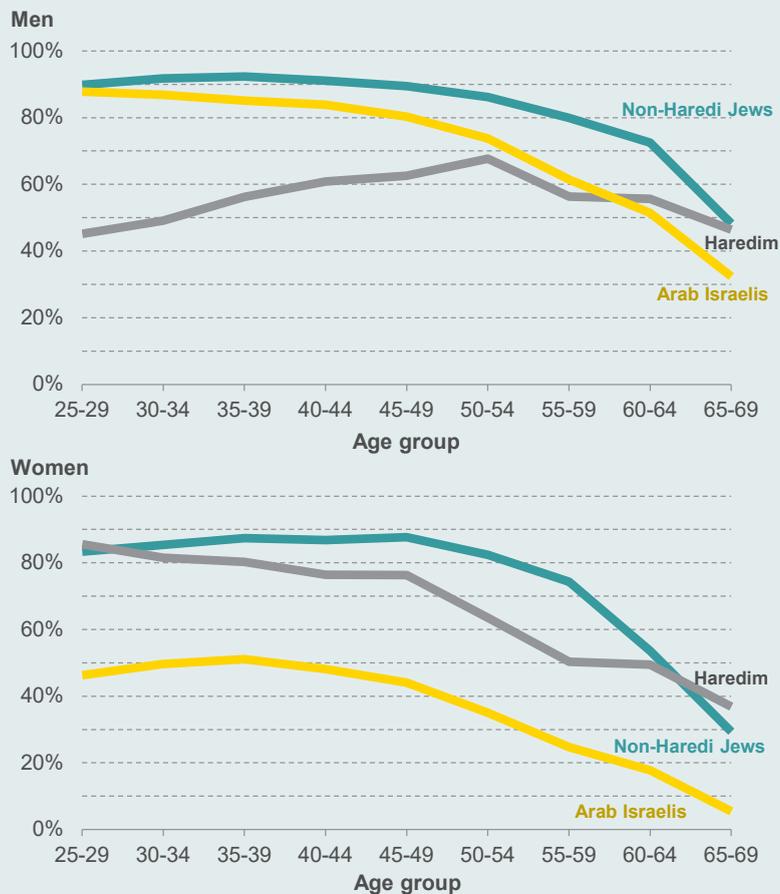
Among women, the rate of employment among non-Haredi women is relatively stable until ages 50 to 54. Among Haredi and Arab Israeli women, following a consistent decline, there is a sharp drop in employment rates from age 50 onward, although there is a large cohort effect in these groups.

A breakdown by education level (Appendix Figure 1) shows that employment rates among college graduates are higher in all the groups. The rate of employment among Haredi college graduates is higher than among Haredim who did not graduate, although it is lower than among non-Haredi college graduates. In contrast to the employment rates among Arab Israeli non-graduates that decline rapidly in the older age groups, there is a much more gradual decline among Arab Israeli college graduates, although it is steeper than the decline among Jewish non-graduates.

¹⁶ It is important to note that throughout the *Spotlight* the probabilities of being employed were calculated for 2017 and it is possible that some of the variation between age groups is the result of cohort effect, particularly among women. Thus, the rate of employment among women has risen significantly over time and it may be that part of the decline that we see later in life is a result of the fact that these cohorts were characterized by lower employment rates when they were younger.

Between the ages of 35 and 44, Arab Israeli women who are college graduates are employed at similar rates to Jewish women graduates, whether they are Haredi or not. The employment of Haredi women without higher education declines continuously with age, in particular, between the ages of 50 and 54. Among Haredi women who are college graduates, the decline begins between ages 55 and 59.

Figure 13. Probability of employment by population group, 2017



Note: Probabilities are calculated using logistic regression analysis, controlling for country of origin and family status.

Source: Hadas Fuchs and Gil Epstein, Taub Center | Data: CBS, Labor Force Survey

Conclusion

The labor market has been in a relatively healthy situation for a number of years. Rates of labor force participation and employment are high and the unemployment rate is at record lows. In 2019, these rates remained similar to those in 2018. Employment rates among non-Haredi Jews have remained virtually unchanged in recent years and they are high even relative to other OECD countries. It appears that, in this population, the factors that led to the growth in employment have been exhausted. Among Arab Israelis, employment rates remain low and there is potential for growth, among both men and women; the same is true for Haredi men. In view of the natural rate of growth in Haredi society, it is necessary to increase employment among Haredi men in order to maintain overall rates of labor force participation at their present level. However, employment rates among Haredi men have remained stable since 2015. The low rate of labor force participation among Haredi men is expected to be a major challenge for Israel in the future and the government should continue to examine ways to offer incentives to this population group to join the labor force.

Labor force participation rates are also low among Arab Israelis and particularly among Arab Israeli women. Following a rapid increase between 2016 and 2018, there has been no further increase in labor force participation of Arab Israeli women in 2019. In view of the continuing rise in their education levels – from the primary education level up to higher education – it can be assumed that their employment rates will continue to rise in the coming years. There has been less of an improvement in the education levels of Arab Israeli men, and their rate of employment in 2019 was lower than in 2017. It is possible the government should consider additional assistance to Arab Israeli men to encourage them to acquire a high-quality education and thus to enter the labor market with higher level skills and into higher paying employment positions.

During the last two decades, employment rates among women have increased considerably across developed countries and in Israel in particular. This is an indication that Israeli households have become more egalitarian. However, this has an effect on the work-life balance of individuals and households. In view of the high fertility rates among all of population groups in Israel, this effect primarily affects individuals with children. Non-Haredi Jews, both men and women, are characterized by high employment rates and non-Haredi Jewish men are characterized by a high number of work hours. With regard to commuting time, 38 percent of couples with children are employed outside their residential locality.

Among the Haredi population, fertility is particularly high (and average of about 7 children per woman), but employment rates are relatively low. About one-half of Haredi couples with children under 18 have only one partner who works and on average, the couple jointly work only 34 hours a week. Among Arab Israelis, a high share of households have only one working parent, and the average work hours of a couple with children is higher than in Haredi households.

Of the three groups, non-Haredi Jews report the least satisfaction with their work-life balance. It would seem that it will be hard for Haredi men and Arab Israeli women to increase employment rates without it impacting their work-life balance.

References

English

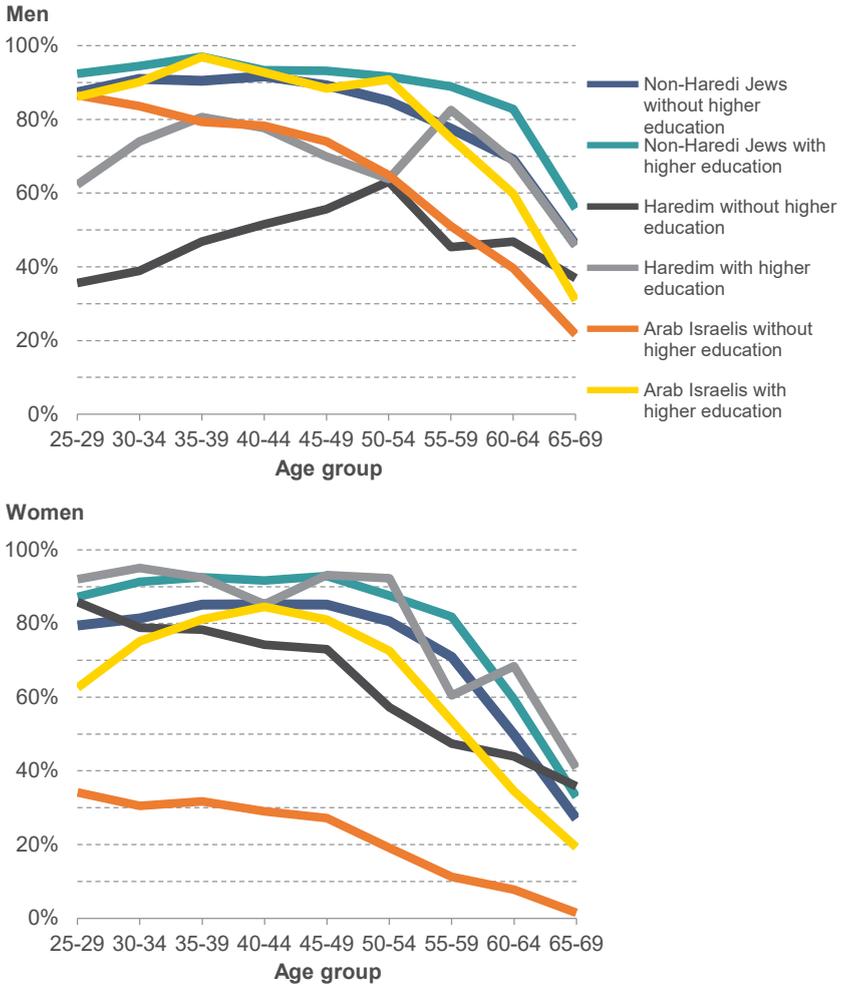
- Bank of Israel (2018). *Annual report 2017*. Jerusalem: Bank of Israel.
- Bleikh, H. (2018). *Back and forth: Commuting for work in Israel*. Policy Paper 05.2018. Jerusalem: Taub Center for Social Policy Studies in Israel.
- Bowers, L., & Fuchs, H. (2016). *Women and parents in the labor market – Israel and the OECD*. Policy Brief. Jerusalem: Taub Center for Social Policy Studies in Israel.
- Fuchs, H. (2016). Gender gaps in the labor market: Wage and occupational segregation. In A. Weiss (Ed.) *State of the nation report: Society, economy and policy 2016* (pp. 61-100). Jerusalem: Taub Center for Social Policy Studies in Israel.
- Fuchs, H. (2017). Education and employment among young Arab Israelis. In A. Weiss (Ed.) *State of the nation report: Society, economy and policy 2017* (pp. 259-310). Jerusalem: Taub Center for Social Policy Studies in Israel.
- Fuchs, H., & Weiss, A. (2018). Israel's labor market: An overview. In A. Weiss (Ed.) *State of the nation report: Society, economy and policy 2018* (pp. 85-104). Jerusalem: Taub Center for Social Policy Studies in Israel.
- Weinreb, A., Chernichovsky, D., & Brill, A. (2018). Israel's exceptional fertility. In A. Weiss (Ed.) *State of the nation report: Society, economy and policy 2018* (pp. 271-307). Jerusalem: Taub Center for Social Policy Studies in Israel.
- Yanay, G., Fuchs, H., & Blass, N. (2019). *Staying in school longer, dropping out less: Trends in the high school dropout phenomenon*. Policy Paper 05.2019. Jerusalem: Taub Center for Social Policy Studies in Israel.

Hebrew

- Central Bureau of Statistics (2019). Media Release (27 Oct 2019): *Job openings July-September 2019*. Jerusalem: Central Bureau of Statistics.
- Hleihel, A. (2017). *Fertility among Jewish women in Israel, by level of religiosity, 1979-2017*. Working paper no. 101. Jerusalem: Central Bureau of Statistics, Senior Department of Demography and Census.
- Miaari, S., & Hada Haj-Yahya, N. (2017). *Arab youth in Israel with nothing to do*. Research Paper. Jerusalem: The Israel Democracy Institute.

Appendix

Appendix Figure 1. Probability of employment by age, sector, and education level, 2017



Note: Probabilities are calculated using logistic regression analysis, controlling for country of origin and family status.

Source: Hadas Fuchs and Gil Epstein, Taub Center | Data: CBS, Labor Force Survey

Appendix Table 1. Results of linear regression
Explanatory variable — employment, 2017

	(1) Arab Israeli men	(2) Arab Israeli women	(3) Haredi men	(4) Haredi women
Age	0.0261*** (8.57)	0.0410*** (12.59)	0.0441*** (9.73)	0.0216*** (3.75)
Age ^ 2	-0.000423*** (-12.46)	-0.000540*** (-14.42)	-0.000459*** (-8.72)	-0.000367*** (-5.55)
New immigrant			-0.0837*** (-3.79)	-0.161*** (-7.86)
FSU immigrant			-0.0204 (-0.45)	0.0715 (1.85)
Post-high school degree	0.108*** (8.00)	0.285*** (20.80)	0.246*** (13.09)	0.175*** (13.99)
Academic degree	0.132*** (14.25)	0.466*** (50.45)	0.245*** (12.48)	0.262*** (18.49)
Enrolled in an academic institution or post-high school studies	-0.164*** (-7.73)	-0.0368 (-1.86)	0.121*** (4.20)	0.0661** (3.05)
Learned in a religious yeshiva			-0.121 (-0.99)	
Learned in a Haredi yeshiva			-0.00246 (-0.20)	
Learned in a <i>kollel</i>			-0.309*** (-22.49)	
Christian Arab	0.0895*** (7.59)	0.198*** (16.12)		
Druze	0.0524*** (4.45)	0.0881*** (7.20)		
Negev Bedouin	-0.0887*** (-6.35)	0.00833 (0.61)		

Appendix Table 1 (continued). Results of linear regression
Explanatory variable — employment, 2017

	(1)	(2)	(3)	(4)
	Arab Israeli men	Arab Israeli women	Haredi men	Haredi women
Single	-0.163*** (-13.68)	0.0765*** (5.93)	-0.148*** (-5.05)	-0.0701* (-2.00)
Divorced/Widowed	-0.222*** (-8.26)	0.0449*** (3.40)	-0.245*** (-5.46)	-0.0516 (-1.60)
Parent with children ages 0-4	0.0671 (0.97)	-0.0375*** (-5.81)	0.430** (2.71)	-0.0376*** (-5.37)
Parent with children ages 5-9	-0.150** (-3.18)	-0.0151** (-2.86)	-0.0966 (-0.99)	-0.0319*** (-5.41)
Parent with children ages 10-17	0.0367 (1.44)	-0.0143*** (-3.78)	0.146*** (3.57)	-0.0156** (-3.11)
Intercept	0.470*** (7.12)	-0.490*** (-7.24)	-0.285** (-3.07)	0.456*** (3.90)
Number of observation	12,807	13,707	6,198	6,152
R ²	0.1082	0.2482	0.1793	0.1154
Adjusted R ²	0.1073	0.2474	0.1773	0.1137

Note: Standard deviation in parentheses; *p< 0.05; **p<0.01; ***p<0.001.

Source: Hadas Fuchs and Gil Epstein, Taub Center | Data: CBS, Labor Force Survey