Palestinians in the Israeli Labour Market

A Multidisciplinary Approach

Edited by Nabil Khattab and Sami Miaari
Introduction

Research on welfare states tends to focus on their role in income distribution and the provision of services. However, functions like education, health, and social care also play a massive role as employers, dominating the public sector labor market. In a comparative analysis of developed economies including Israel, Mandel and Semyonov (2005) found that the public social services accounted for a high of 25 percent of total employment in Denmark and Sweden and a low of 7–8 percent in North America and Germany. By this measure, Israel ranked fourth out of 20 countries.

The literature on the social service labor force (SSLF) shows that it is strongly biased toward female and university-educated employees, and tends to offer superior wages and working conditions for groups suffering from blocked opportunities and pay discrimination (Gornick and Jacobs 1998; Kolberg 1991). Consistent with this body of knowledge, earlier research on the SSLF in Israel in the period 1982–2002 showed that the Arab-Palestinian citizens of Israel (hereafter Palestinian) are much more

We are grateful to the Israeli Democracy Institute (IDI) for funding and supporting this project.
dependent than Jews on social service jobs—and have become increasingly so over time (Shalev 2006). Today some 61 percent of female Arab employees and 12 percent of men work in the SSLF. However, the weighty responsibility of the welfare state as a source of jobs for the Arab population was not planned as a form of employment policy, and it is not conceived in these terms by either policymakers or researchers. Indeed, the lack of attention to the role of the welfare state as an employer is a remarkable oversight in the vibrant ongoing discussion of how to expand Arab women’s labor force participation.

The standard policy recommendations currently in vogue for bringing more Arab women into the labor force (their official participation rate is still nearly 50 percentage points below Jewish women) similarly ignore the crucial role of the welfare state as an employer. A recent Bank of Israel publication provides an apt illustration (Yashiv and Kasir 2012). The authors recommend expanding vocational training and guidance, assisting Arab women to solve childcare and transportation problems that hamper their ability to work outside the home, improving their education and encouraging them to modernize their attitudes—in short, everything but the role of the state in directly stimulating demand for female Arab labor by expanding its own services. More critical accounts share the same blind spot. Citing much the same supply-side obstacles as the Bank of Israel study (such as inadequate government assistance in the domains of childcare, transportation, and training), Zu’bi (2009) contends that “state racism and the state’s policies of discrimination against Palestinian citizens create real obstacles to the entry of Palestinian mothers into the labor market.” In support of this claim it is correctly noted that few Arab women find work in the offices of the central government, but no mention is made of their massive absorption into the SSLF.

This chapter presents the results of an extensive analysis of employment and earnings data aimed at revealing the scope, features, and effects on earnings of employment in Israel’s SSLF since the 1980s. Our primary goal is to document the implications for Arab women, but the emphasis throughout will be on multiple and intersecting comparisons—between Arabs and Jews (including specific Jewish ethnic groups), men and women, and different points in time. But before defining our research questions and methodology and reporting on the findings, it is important to reflect briefly on how and why the social services have served as the chief mechanism by which the state in Israel has both promoted and upgraded Arab women’s employment. Where do Arabs fit into the historical trajectory of the SSLF in Israel and the public sector more broadly? And why is it that the state, which undoubtedly does discriminate against Israel’s Palestinian-Arab citizens in myriad ways, supplies extensive social services
to the Arab population in which the majority of Arab working women find jobs?

As in many other areas of social and economic policy that impact heavily on the Arab population in Israel, the routine operations of the political system and the state apparatus—which rest on liberal and bureaucratic as well as ethno-national foundations (Shafir and Peled 2002)—cause policies to be partly or completely generalized to the citizenry as a whole. Universal and discriminatory social policies are capable of coexisting or even morphing into one another (Rosenhek and Shalev 2000). Political forces operating inside the Jewish majority, the institutional logic of a bureaucratic state, the liberal self-image of Israeli democracy, and the existence of institutions (courts, media, civil society organizations) that serve to limit the scope for “state racism,” all explain the extension of education, health, and other lesser (in terms of employment) social services to include the Arab population.

At the same time, the quality and accessibility of social rights and services in Israel is subject to a distinct hierarchy of advantage and disadvantage (Friedman and Shalev 2010). The state often makes special efforts in relation to settlers, soldiers, Jewish immigrants, economically disadvantaged Jews with political clout, and other groups that it has an interest in prioritizing, while making do with substandard services for the Arab sector (as is routinely documented by public interest organizations like Mada el Carmel and Sikkuy). However, these brakes have not prevented the expansion of social service employment in the Arab sector. Three factors account for this expansion. First, demography. A growing school-age population, alongside an increasing number of elderly and infirm Arab citizens, has fuelled the expansion of education and health services geared to Arab communities. A second causal factor has been increased availability of opportunities for higher and vocational education for Arab women, due in part to the proliferation of semi-privatized colleges and training institutions aggressively recruiting students (another example of unintended spillovers to the Arab population). Third, two different mechanisms have unintentionally provided Arabs with a competitive advantage in obtaining social service jobs. The de facto spatial and social segregation of Arabs and Jews in Israel almost completely immunizes Arab job-seekers from Jewish competition for jobs in the services provided to Arab communities (Yonay and Kraus 2001). Much less significant numerically, but of growing importance, is expanding Arab employment in privatized or semi-privatized social services catering mainly to Jews, like hospitals and pharmacies that once operated as internal public sector labor markets. In such cases the forces of competition, weak employment regulation, and the profit motive have combined to stimulate demand for
trained Arab employees ready to accept pay and working conditions that are unattractive to Jews.

Historically the expansion of social services and public bureaucracies was one of the key avenues by which the ruling party generated upward mobility for what Rosenfeld and Carmi (1976) termed the “state-made middle class.” Most of the beneficiaries were veteran Ashkenazim, but as time went on, growing numbers of Mizrahim found superior working-class or lower middle-class jobs not only in public administration and the SSLF but also in infrastructure monopolies and military industries owned by the state or the peak labor organization (Histadrut). Most of this broad public sector, described by Farjoun (1983) as Israel’s “bureaucratic labor market,” excluded Arabs either de jure or de facto. However, over time the relatively universalistic social services component of the public sector expanded to employ growing numbers of Arab citizens, while the role of the particularistic public sector from which Arabs are excluded contracted dramatically.

Nevertheless, the casualization of large swathes of public employment since the 1980s, due to the decline of collective bargaining and the growth of outsourcing, has undermined the economic position of large numbers of Jews (predominantly women—see Benjamin 2002). Presumably these trends have adversely affected Arabs as well, but the consequences for the wage differential between the SSLF and the rest of the labor market is an empirical question that the present study is the first to investigate systematically. For Arab women the alternative of employment outside the social services predominantly means jobs available in their own or neighboring communities in private services or local government. If these jobs offer worse conditions than those available to Jewish women, Arab women in the SSLF may continue to enjoy a wage premium even if Jewish women do not.

Data and Definitions

Unless otherwise stated, the empirical analyses in this chapter are based on datasets from two CBS surveys and span a period of more than two decades. The surveys are the LFS (Labor Force Surveys) and the IS (Income Surveys). The LFS, similar to the Current Population Survey in the USA, is a large-scale household survey carried out quarterly with a rotating sample. Its coverage has increased over the years, to the point that in the course of a year it now samples more than 100,000 individuals, more than a quarter of whom (26,623) were included in the analysis that generated table 7.1. Today, the IS sample is a subset of approximately one-third of the total LFS sample.
The analyses to be reported here begin as early as 1982 (LFS) or 2002 (IS), ending in 2010. Over this period there have been numerous methodological changes, large and small, in the two surveys. At various points in time the questions asked, classifications of branches and occupations, and other lesser details were modified. The LFS sample gradually grew over the years, with the most important changes affecting the coverage of Arab citizens, which increased particularly in the 1990s. However, the IS sample is only about 40 percent as large as the LFS, and this limitation weighs especially heavily on the Arab sector of the population. The IS samples on which our analysis of earnings is based include about 800 Arab households.

All analyses include only prime-age workers (25–54) or in some specifically noted cases a narrower age group (30–44) and exclude members of cooperatives or kibbutzim and unpaid family workers, as well as residents of East Jerusalem and the institutionalized population. The self-employed have also been excluded, since the social services are made up almost entirely of salaried employees and in any case in its early years the IS did not sample the self-employed. The numerator of the social service share of the labor force is calculated by summing the employees in the health, education, and welfare branches of the economy, except for specific branches that are known to be predominantly in the private sector. Unfortunately the datasets offer no way of knowing whether or not individuals in the social service branches are actually employed by the state—and if so, whether directly or by outsourcing. We will, however, provide an indication of the possible effects of privatization trends, by analyzing changes over time in the earnings of social service employees relative to the workforce as a whole.

Table 7.1 Arab and Jewish women’s employment characteristics, 2009–2010

<table>
<thead>
<tr>
<th></th>
<th>Labor force characteristics</th>
<th>Percent employed in SSLF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>Arabs (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highly educated</td>
<td>40</td>
<td>48</td>
</tr>
<tr>
<td>Part-time</td>
<td>57</td>
<td>39</td>
</tr>
<tr>
<td>Highly educated and part-time</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>83</td>
</tr>
</tbody>
</table>
The Changing Scope of Social Service Employment

Uniquely among all population groups, the SSLF is the dominant employer of Arab women and it has been the major conduit for their growing entry into the labor market. To some extent this pattern is typical of women workers generally. Research in OECD countries has shown that social service jobs have played a crucial role in driving rising female labor force participation (Daly 2000; Esping-Andersen 1990), and Israel is no exception. More than a decade ago the Adva Center observed that the public social services have become “the primary stronghold of women in the Israeli labor force” (Adva Center 2001: 53). Similarly, Yaish and Kraus (2003) argued that “the major force behind women’s integration in the labor force is their opportunity to find employment in the highly regulated, and the most egalitarian, segment of the economy, namely the public sector.” However, while previous research shed a great deal of light on the scope and conditions of SSLF employment for Arab women, the focus of these studies was different—on either women or Arabs (e.g., Lewin-Epstein and Semyonov 1994; Yonay and Kraus 2001).

Our first empirical analysis documents the changing extent of SSLF employment for Arab and Jewish men and women, in comparison with other broad sectors of the economy from the late 1980s to 2010. The branches of the service economy are divided between the SSLF and “other services,” and all other branches are classified as “production.”

The key finding is strikingly clear. Arab women are unique in that the social services have been responsible for the majority of their employment growth since the late 1980s. How, more specifically, do they compare with other population groups in this period? Although Arab men are more dependent on the SSLF than Jewish men, in both cases the proportion is low (about one-eighth and one-twelfth, respectively) compared to the female rate, and has changed very little over the years. For women, both the extent and the trend of SSLF employment differ significantly between Arabs and Jews. In the past few years the proportion of female Arab employees working in the social services has reached more than 60 percent, double the rate among Jewish women. Moreover, the two groups of women exhibit opposite trends—over time the SSLF share has been growing among Arabs and declining among Jews. For Jewish women the service sector outside of health, education, and welfare has always been a more important source of jobs, and over time its role has expanded. Arab women, on the other hand, remain dependent on the SSLF to provide the bulk of their service employment. Moreover, while they were initially more likely than Jewish women to work in manufacturing and other
branches of production, this is no longer the case. The average sectoral distribution of employment in 2007 and 2010 for Arab women (for Jews women in parentheses) was as follows: SSLF 61 percent (30 percent), other services 29 percent (52 percent), and production 10 percent (17 percent) (figure 7.1).

Both Arab and Jewish populations are characterized by well-known internal cleavages. From a long-term perspective, employment in the social services was initially dominated by Jewish women of Ashkenazi (mainly European) background. Mizrachi, then Arab, and more recently women from the FSU (former Soviet Union) followed. A view of these trends over the past two decades underlines the uniqueness of the role played by the SSLF for Arab women—but also its differentiation along ethno-religious lines, as we might expect from previous research showing the impact of these divisions on their labor market position (Khattab 2002). All three categories of women—Muslim (66 percent of the female Arab labor force), Christian (24 percent), and Druze (10 percent)—are more dependent on employment in the social services than any non-Arab group, and over time this gap has widened. But as shown in figure 7.2, the rise in the SSLF share of the female Arab labor force since the beginning of the 2000s has been confined almost entirely to the Muslim majority. In this period the proportion of Christian Arabs in the social services has remained a little over

Figure 7.1 Number of employees by broad economic branch and percentage in SSLF

Note: the percentages shown on the charts are SSLF as a proportion of total employment, two-year averages for the beginning and end of the series.
one-half, while among Muslim women it reached two-thirds. The Druze closely tracked the Christians, but their numbers in the sample are too small for reliable analysis.

At the other pole to Arab women are immigrants from the FSU, of whom little more than one in five have been absorbed into the SSLF at any time. The two main groups within the veteran Jewish population are positioned midway between Arabs and Russians, but each of them exhibits a different pattern. The proportion of Ashkenazi women in the social services has always been higher than among Mizrachi women, but until recently the gap was declining as members of the first group diversified their employment while concurrently a steady one-third of the second group remained in the SSLF. Note that foreign and native-born women are combined in these calculations. The only case in which the distinction would have made a difference is the recent drop in SSLF participation by Mizrachi women, which is entirely due to former immigrants.
Why Are Arab Women Overrepresented in the SSLF?

The social services tend to attract particular types of workers. First, jobs in the welfare state (especially teaching) disproportionately employ women—among other reasons because they are relatively friendly to mothers of young children in terms of working hours, vacation schedules, and the feasibility of interrupting careers to have children (for Israel, see Stier and Yaish 2006). Second, social service jobs are predominantly professional or semi-professional and therefore have a high educational profile. To what extent can the exceptionally high rate of Arab women’s participation in the SSLF be explained simply by the fact that the supply characteristics of female Arab labor favor precisely toward the kinds of jobs made available by the welfare state as an employer?

Using the most recent available data, Table 7.1 addresses the question of whether the high rate of social service employment among Arab women is linked to two characteristics—higher education and part-time jobs—which are especially common in the SSLF. The left panel documents the prevalence of these characteristics in the labor force as a whole, comparing Arab and Jewish women. The right panel shows the proportion of those having each characteristic who are employed in the social services. For the first indicator—higher education—there is an evident disconnect between the two results. Even though a lower proportion of Arab than Jewish working women have higher education, those who do are more than twice as likely to belong to the SSLF (compare the two ratios of Arabs to Jews). In each row of the table, the ratio of Arab to Jewish percentages is also supplied for men. The results show that although male Arab employees are even less likely than females to have higher education, those who do are much more dependent on social service jobs (again, relative to Jews). This clearly indicates that the employment opportunities open to educated Arabs outside of the SSLF are far more limited than among Jews, regardless of their gender.

Turning to part-time employment, we see that once again the dependence of Arabs on the SSLF (right panel) is not directly determined by their general inclination to gravitate toward certain kinds of jobs (left panel). More Arab women than Jewish women work in part-time jobs, but fewer Arab men do. However, in both cases Arab part-timers—especially men—are more likely to be found in the SSLF than Jewish part-timers. The implication, once again, is that relative to Jews, alternative job openings are limited for Arabs of both genders.

The bottom row of the left panel (“Total”) refers to the total number in the labor force as a proportion of the relevant population. This reminds us of the issue that motivates this chapter—Arab women’s very low rate...
of labor force participation (31 percent), compared to both Jewish women (83 percent) and Arab men (78 percent). The right panel shows concretely how much the specific characteristics in focus here raise their likelihood of working in the social services. The SSLF employs 64 percent of female Arab employees, but 91 percent of those who are both highly educated and work part-time (for Jewish women these proportions are 32 percent and 62 percent; for Arab men they are 12 percent and 86 percent).

The importance of the welfare state as a source of relatively highly skilled and part-time jobs for Arab women is underlined when they are compared with the Jewish origin groups distinguished previously in figure 7.2. Over the past two decades the share of part-timers working in the social services has averaged 71 percent among Arab women. In comparison, the highest level among Jews is 55 percent for foreign-born Ashkenazi women, the lowest is 30 percent for women from the FSU, and Mizrachi women are in between. However, uniquely among Arab women, in the course of the 2000s while the SSLF share of part-time employees was stable, among full-timers it rose sharply from 30 to 47 percent. This indicates that the growing dependence of Arab women on the social services over the past decade has occurred entirely in full-time jobs, rendering the SSLF an increasingly important track to regular employment. This is not true of any non-Arab group.4 Bringing these figures together, we conclude that not only is the SSLF an avenue for employment of Arab women working part-time where not many other paths are available, but it is also becoming an increasingly important way of entering full-time jobs, implying more blocked opportunities here as well.

A long-term perspective is also needed in order to grasp the role of higher education in bringing Arab women into the labor force via the social services. Here, again, it is essential to relate to intra-Arab diversity. Figure 7.3 documents trends over nearly three decades in the proportion of Muslim and Christian Arab women with higher education in comparison to Jewish women, and also compares their rates of labor force participation. The share of women aged 30–44 with academic training, shown at the bottom of the figure, has risen remarkably over the years in groups of all origins. However, there is a clear distinction among Arabs between Christians, who have come furthest toward closing the gap with the Jews, and Muslims (as well as Druze, not shown), who remain far behind despite sharp increases in the past five years. At the same time, higher education is accompanied in all groups of women by a very high probability of belonging to the labor force.5 Today Muslim women lag behind Christians and Jews by 10 percentage points, but their 80 percent participation rate is still impressive given their higher probability of having dependent children at home.
Figure 7.3  Trends in higher education (HE) and labor force participation (LFPR) of the educated

Note: Women aged 30–44, two-period moving averages.

Academically qualified Arab women are much more specialized in a narrow range of occupations like teachers, nurses, and social workers, whose pay is lower than that of lawyers, doctors, and graduates in business administration, professions that have become increasingly common among Jewish women. Since the specializations most common among Arab women are intimately tied to the social services, it is reasonable to assume that in the absence of demand for social service occupations that require a degree, Arab women would not have sought out higher education to anything like the same extent. The dynamic linking the demand for higher education to the supply of social service jobs is particularly clear in the cases of teaching and nursing. Both professions raised the bar over the years to require an academic qualification, which in itself contributed substantially to stimulating higher education among women, especially Arabs.

Our discussion so far of the high rate of Arab women’s employment in the SSLF has shown that it can only partially be explained by the factors—beginning with gender itself—that typically attract certain types of workers into social service employment. Even if Arab women were more like Jewish women in their education and other characteristics, we expect
that they would still be overrepresented in the SSLF because of the limited availability of alternative jobs. Logistic regression offers a more precise way of establishing whether gaps between Arabs and other origin groups in their likelihood of working in the social services would have disappeared if there had been no differences between them in background characteristics. Moreover, by running repeated regressions over time it can be established whether the unexplained distinctiveness of Arab social service employment has altered over the years. The full analysis (available on request) provided separate results for ten different years between 1983 and 2010. In addition to gender and parental status, the model also used age, education, part-time employment, and origin (Arabs vs. six other categories) to predict whether employees belong to the SSLF or work in other branches.

The findings reveal that over a period of nearly 30 years, the only group to come anywhere near the net odds of SSLF membership among Arabs was Mizrachim, but even in this instance the Arab odds were generally at least twice as high. By 2010 the Arab/Jewish odds ratios stood at 3:1 for all origin groups, except immigrants from the FSU where they were even higher (5:1). This implies a clear answer to the “what if” question: if Arabs in the labor force were more like their Jewish counterparts in respect to age, gender, education, working hours, and the presence of small children, they would still be far more likely than all other sectors of Israeli society to join the SSLF—and the gap has been growing.

An intuitive way of conveying this result is to use the logistic regression coefficients to compute the expected probabilities of social service employment for different origin groups, while assigning fixed values to all other predictors. Figure 7.4 presents predictions for mothers aged 35–44 with higher education, at least one child under five and working in part-time jobs—all features that tend to attract workers to the SSLF (consequently, the analysis yields conservative estimates of intergroup differences). The Arab probabilities are clearly the highest, albeit a little lower in the current decade than previously. The comparison with the two major Jewish ethnic groups is revealing. (Note that since the distinction between foreign- and native-born Jews does not substantively alter the results, the figure presents averages for the two.) In percentage terms, our model predicts that until the late 1990s about 90 percent of employees with the selected features would have worked in the SSLF if they were Arabs, compared with 80 percent of Mizrachim and 75 percent of Ashkenazim. By 2010 the estimates for all groups had fallen, but least of all among Arab women. In both Jewish groups well under 70 percent are now employed in the SSLF, roughly 20 points below their Arab counterparts. The estimates for FSU immigrants are much lower throughout.
As large-scale public sector employers providing services like schools and medical clinics that are inherently local, the social services are unusually open to hiring the members of “marked” groups (women and minorities) that otherwise suffer from constrained opportunities and low pay. By the same token, the social services should also be less inclined than other employers to practice internal pay discrimination against subordinate groups. In relation to the Arab minority in Israel, we have argued that as a result of spatial and cultural segregation between the Jewish and Arab populations, the expansion of social services inadvertently provided many Arab job-seekers with a refuge from the otherwise intense competition presented by the Jewish population for jobs that are not low in status and pay. Within this sheltered labor market, we claim, the Arab population benefits from high demand for local service providers, as well as the legal or bureaucratic binding of government jobs to nationally standardized job descriptions and conditions of employment, including pay scales. These advantages, in turn, highlight the disadvantages that Arabs face in other segments of the labor market: not only discrimination and unfair competition with Jews in private and public sector workplaces outside of Arab communities, but also competition with one another for scarce local jobs in municipal government or the private sector.
This reasoning suggests that Arabs in the SSLF ought to earn the same as Jews who also work in the social services, and substantially more than the rest of the Arab labor force. However, this is best understood as an ideal-typical scenario. In the real world the advantage we anticipate for Arabs working in the social services might be undermined by negative spillover from the harsher labor market outside. Newly available estimates of unemployment among Arab women put it at a staggering 18 percent—three times the rate for Jewish women. Social service employers may be tempted to deviate from the principle of uniformity, adjusting their wage offers to fit the labor market conditions facing different groups beyond the SSLF (which among Jews tend to be more rather than less advantageous). To the extent that privatization and casualization of many sectors of social service employment have replaced the bureaucratic state as a direct employer by subcontractors, freelancers, and temporary employment agencies, the scope for this kind of wage flexibility has almost certainly increased over time (Mandelkern and Sherman 2010). But even if Arabs earn less than Jews within the SSLF, it could still be the case that they earn more than Arabs working in other branches. This makes it all the more important to pay attention to both potential wage gaps: between Arabs in the social services and Arabs in other branches, and between Arabs and Jews inside the SSLF.

In order to compare earnings across origin groups and between economic branches, it is essential to compare like with like. However, as demonstrated in earlier sections of the chapter, the SSLF has a distinctive makeup in terms of gender, education, and working hours. To avoid the possibly confounding effect of working hours, we analyze hourly rather than monthly wages. And to take account of compositional differences between the Arab and Jewish workforces, on the one hand, and between jobs in the social services and other branches, on the other, we use OLS regressions to control for the effects of these compositional differences on wages. In addition, given the sectoral heterogeneity of jobs, our model also controls for a distinguishing feature of the SSLF, which has not yet entered the analysis—overrepresentation of professional and other comparatively high-status occupations. Finally, gender also needs to be integrated into the model, and not only for the obvious reason that the SSLF is dominated by women and that women generally earn less than men. As we have claimed in relation to Arabs, the gender wage gap may be smaller in the SSLF if the social services are a more equitable employer. Thus, gender may condition (interact with) the SSLF effect.

The regression model is introduced by breaking it down into stages that progressively incorporate these determinants of earnings, in order to statistically control for the effects of differences between the composition of
the SSLF and the remainder of the labor force. To provide a temporal perspective, the analysis has been carried out for 2002 and 2010. The year 2002 represents a time when outsourcing and other wage-cutting practices were less developed than they are today, and working in the SSLF may have been more profitable.

The results are presented in Table 7.2. The top five rows show the changing effect of the main independent variable of interest—a dummy variable for employment in the SSLF—as other controls are added to the model. To save space, detailed results for all the coefficients are shown only for the full equation (Model 5). Note that since the dependent variable, hourly wages, has been transformed to natural logs, the coefficients (which have been multiplied by 100) represent percentage effects on earnings. In the few instances where coefficients were insignificant ($t < \pm 2$), they have been grayed out.

Starting out with the gross wage differential between the two sectors, and then moving in steps toward a fully adjusted net differential, reveals that the size and even the direction of the sectoral wage gap depend on what compositional differences (if any) are taken into account. Looking first at the results for 2010, it can be seen that when entered alone into the regression, a dummy variable for SSLF employment has a positive effect on hourly wages, increasing them by 5.2 percent (Model 1). This is the unadjusted differential between the sectors, which seems to imply that social service workers enjoy a bonus relative to the rest of the economy. Model 2 shows us, however, that when age (a rough indication of workers' job experience) and the superior educational and occupational profile of the SSLF are taken into account, working in the social services actually imposes a wage penalty of about 14 percent. Thus, although on average observed wages in the social services are higher, this is only because they tend to employ more educated and experienced workers in higher-status occupations.

Controlling for origin, represented by a series of dummy variables for all of the main groups except Arabs (the omitted category), has the opposite effect. When these variables are entered in Model 3, along with the controls previously introduced for human capital, the negative effect of being in the SSLF is slightly attenuated. The reason is that the social services employ significant numbers of low-earning groups (notably Arabs). In similar fashion, Model 4 shows that the prevalence of women in the SSLF combined with their tendency to earn less than men means that controlling for gender substantially curtails the adjusted pay gap between the SSLF and other branches. Combining these results, if the ethnic and gender composition of the workforce was the same both inside and outside the social services, the penalty for working in the SSLF would be
Table 7.2  OLS regressions on the natural log of hourly wages, 2002 and 2010

<table>
<thead>
<tr>
<th>Model</th>
<th>Independent variables</th>
<th>2002</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B*100</td>
<td>T</td>
</tr>
<tr>
<td>1</td>
<td>SSLF alone</td>
<td>10.0</td>
<td>7.2</td>
</tr>
<tr>
<td>2</td>
<td>SSLF + Human capital and occupation</td>
<td>−5.7</td>
<td>−4.4</td>
</tr>
<tr>
<td>3</td>
<td>SSLF + origin</td>
<td>−5.9</td>
<td>−4.6</td>
</tr>
<tr>
<td>4</td>
<td>SSLF + gender</td>
<td>0.7</td>
<td>0.5</td>
</tr>
<tr>
<td>5</td>
<td>SSLF + interaction effects</td>
<td>13.3</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Human capital and occupation

- Young (25–34)  
  - 2002: −19, T = −16.3, Adj. R² = 0.356
  - 2010: −22, T = −21.3

- Old (45–54)  
  - 2002: 8, T = 6.1
  - 2010: 6, T = 5.7

Medium education (13–15 years)

- 2002: 13, T = 10.0
  - 2010: 13, T = 11.1

High education (16 + years)

- 2002: 26, T = 17.9
  - 2010: 28, T = 21.4

- Top manager
  - 2002: 42, T = 18.3
  - 2010: 37, T = 17.3

- Professional
  - 2002: 36, T = 18.5
  - 2010: 34, T = 20.7

- Associate professional
  - 2002: 22, T = 13.4
  - 2010: 21, T = 14.5

- Blue collar
  - 2002: −20, T = −12.6
  - 2010: −19, T = −12.9

- Menial service
  - 2002: −35, T = −22.0
  - 2010: −30, T = −20.7

Origin

- Mizrachi
  - 2002: 9, T = 3.5
  - 2010: 13, T = 5.0

- Israeli Mizrachi
  - 2002: 19, T = 8.5
  - 2010: 28, T = 15.3

- Ashkenazi
  - 2002: 14, T = 5.1
  - 2010: 26, T = 10.1

- Israeli Ashkenazi
  - 2002: 24, T = 9.7
  - 2010: 35, T = 16.4

- Russian
  - 2002: −9, T = −3.8
  - 2010: 9, T = 4.4

- Second-generation Israeli
  - 2002: 19, T = 7.6
  - 2010: 28, T = 14.4

Gender (women)

- 2002: −19, T = −15.9
  - 2010: −17, T = −16.2

Interaction terms

- SSLF*Mizrachi
  - 2002: −10, T = −2.0
  - 2010: −16, T = −3.1

- SSLF*Israeli Mizrachi
  - 2002: −23, T = −5.2
  - 2010: −21, T = −5.9

- SSLF*Ashkenazi
  - 2002: −17, T = −3.3
  - 2010: −25, T = −5.4

- SSLF*Israeli Ashkenazi
  - 2002: −24, T = −5.1
  - 2010: −33, T = −8.3

- SSLF*Russian
  - 2002: −12, T = −2.6
  - 2010: −7, T = −2.0

- SSLF*second-generation Israeli
  - 2002: −26, T = −5.3
  - 2010: −26, T = −7.3

- SSLF*women
  - 2002: 7, T = 2.6
  - 2010: 10, T = 4.0
almost halved (from 12.6 to 7.2 percent, after adjusting for other sectoral differences).

Before proceeding to the final stage of the analysis, we compare the findings noted so far for 2010 with parallel results for 2002, revealing some interesting changes. First, in the course of the decade, the average social service premium in the real world fell from 10 to 5 percent. Second, controlling for age, education, and occupation has broadly similar effects in both years. However, because the educational requirements for joining the SSLF have risen since 2002, at that time leveling these variables would not have imposed as heavy a penalty as it does today. In the next step, controlling for origin in 2002 has the effect of slightly amplifying rather than diminishing the SSLF effect. During the 2000s the composition of the SSLF became more biased in favor of low-paid groups (see figure 7.2). Finally, the inclusion of gender in Model 4 completes the accumulated main effects of all the hypothesized determinants of wages. Results for the fully adjusted sectoral gap show that in the past both sectors would have paid the same average wage if their workforces had been similarly composed, but by 2010 the social service sector imposed a wage penalty of more than 7 percent.

What this preliminary analysis tells us is that while at first sight it seems more profitable to work in the social services than in the rest of the economy, this apparent premium is actually the consequence of two contradictory forces. On the one hand, jobs in the SSLF are unusually biased toward higher education and high-status occupations, and given this bias, they actually pay less than jobs in other branches. On the other hand, compared with employees in these other branches, workers in the SSLF are more likely to be members of disadvantaged groups, especially women and Arabs. From this perspective, social service workers are paid surprisingly well.

These two distinctive features of the SSLF as an employer, which have opposite effects on our estimates of SSLF wages relative to other branches, are the key to its importance for Arab women. The social services combine medium- and high-status jobs, which are in relatively short supply in the labor markets of Arab localities, with wages that may be lower than those theoretically available in other branches, but are more equitable across different social groups. Bearing this in mind makes it easier to understand what changed in the course of the 2000s. The negative effect of the first bias overpowered the positive effect of the second one, with the result just noted—that a distinct penalty has now been imposed on social service workers.

Note, however, that the models estimated so far make a questionable simplifying assumption: that the size of the SSLF bonus is identical for men and women, and is the same for disadvantaged origin groups as advantaged
ones. This assumption is inconsistent with our claim that social service employment is likely to be especially worthwhile for disadvantaged groups like Arabs and women, because they have more limited opportunities and are at greater risk of encountering discrimination outside of the public sector. Accordingly, the final stage of the regression model includes two sets of interaction terms that capture whether the effect of social service employment on earnings differs by gender and origin.

The coefficients estimated for this more comprehensive model make it possible to ascertain whether or not working in the SSLF furnishes Arabs with the two earning advantages distinguished earlier: relative to Arabs employed in other branches and relative to other social service workers (Jews). Starting with the intra-Arab differential, the coefficients obtained for Model 5 imply that in 2010, for Arab men social service employment yielded only a small net gain (4 percent) in hourly wages, which is not statistically significant. In contrast, Arab women in the SSLF enjoyed a much larger bonus (14 percent) compared to their earnings in other branches. Contrasting these results with the ones for 2002, we see that the premium enjoyed by Arab women used to be even higher (20 percent). (The bonus for Arab men in 2002 was also higher, 13 percent.)

Are these benefits of working in the social services unique to Arabs or similar to those enjoyed by the members of other groups? Looking at the results of the interaction of the effects of origin and SSLF in Model 5, we note that in both years the coefficients for all six origin groups are negative and significant, meaning that all of these groups gain less than Arabs from working in the social services. Moreover, Arabs have suffered less than other groups from the decline over time in earnings in the social services relative to other branches. Whereas in 2002 several non-Arab subpopulations still benefited from a wage premium for working in the social services, today these interaction terms are so highly negative they turn the SSLF effect into a penalty for all non-Arab groups except Russian women.

While Arab men and women are therefore almost alone in still enjoying an SSLF wage premium relative to members of their origin group who work in other branches, it is nevertheless possible that inside the social services the net earnings of Arab employees are lower than those received by Jews. If Arab earnings in other branches lag far enough behind those of Jews, then even a big social service wage premium among Arabs would not necessarily imply that those in the SSLF enjoy parity with Jews. We also need to remember that our main focus is on Arab women, who may be more disadvantaged as women than the members of other groups. To anticipate this possibility, we modify our model to enable gender gaps to vary between origin groups, thereby obtaining more precise estimates of the expected earnings of varying combinations of origin, gender, and
sector. Formally, this means adding the two-way interaction between origin and gender to the model specified in table 7.2.

In order to provide an easily digested overview of the key results, we use Analysis of Variance to compute the expected average wages for women of different origins working in each of the two sectors. This procedure adjusts expected earnings as if each subgroup shared the mean attributes of the population on all other variables (age, education, and occupation). The results in figure 7.5 confirm that, controlling for compositional differences, ethnic inequalities are much lower inside than outside the SSLF. Among women working in the social services, gaps in adjusted hourly pay between Arabs, Russians, and the two groups of Israeli-born Jews are no more than a few shekels in either direction. In contrast, in other branches of the economy, while Russian women with similar characteristics are not far ahead of Arabs, the two veteran Jewish groups earn far more (12–15 shekels per hour).

In order to take a closer look at the implications of this augmented analysis, we need to compare women to men, and to investigate changes over time. To do this we return to the regression framework, which generates percentage effects that are easily compared. Note that the interactions between origin and gender indicate that the net gender wage gap is indeed higher among Arabs than all other origin groups—generally by at least 8 percent, in both 2002 and 2010. With this taken into account, we obtain a clear picture of the impact of origin, gender, and period on

Figure 7.5 Women’s adjusted hourly wages by sector and origin, 2008–2010
Figure 7.6 Net wage gap (in percentage) between SSLF and other branches, by gender and year

wage differentials between and within sectors. Beginning with the differential between the social services and other branches, figure 7.6 shows that with compositional differences controlled, during the past decade the earnings of the SSLF declined for all groups relative to opportunities elsewhere. But this trend was least pronounced among Arab women, who with a net SSLF bonus of 14 percent remained well ahead of other groups of women, especially the most advantaged—Israeli-born Ashkenazi women, who went from paying a slight SSLF penalty to a very sizable one (18 percent). A similar pattern is evident among men, for whom the SSLF was already unprofitable in 2002—with the exception of Arab men, whose bonus declined to only 4 percent in 2010, while in parallel the penalty paid by Israeli-born Jewish men rose dramatically.

As has already been observed, inside the social services, wage differentials between origin groups are far smaller than differences in the rest of the economy. However, figure 7.7 shows that in 2002 the earnings of Arab women were closer to equality with Israeli-born Jewish women than they are now. Yet in comparison with the parallel earnings disadvantage that Arab women face outside of the social services, the SSLF continues to be far more egalitarian. Interestingly, the findings for men (not shown) also reveal growing Arab-Jewish inequality outside the SSLF, but inside the social services their net wages are very similar to other groups (and in the past they were actually higher). This finding seems to imply that the welfare state is even less likely to discriminate against Arab men than Arab women. It may, however, be due to unmeasured differences in the human capital of the different gender and origin groups and the jobs they perform.

The overall picture is clear. The social services are definitely characterized by more uniformity in pay between similarly qualified workers, regardless of their gender and ethnic background. However, among Jews both sexes increasingly face more lucrative employment opportunities
outside the social services than inside, even more among men than among women. In the Arab labor force neither men nor women are able to earn as much outside the SSLF as inside, but in both sectors men manage to get closer than women. Consequently, the evidence supports our claim that the SSLF is particularly beneficial as an employer to Arab women, in comparison with other groups.

What Makes Social Service Jobs Profitable for Disadvantaged Groups?

The final substantive analysis of this chapter takes a different perspective on wage determination inside and outside the social services. We now ask not about *earning outcomes* for varying employment sectors and social groups, but how the *determinants of earnings* differ between them. Until now education, experience, and occupation were interpreted as indicators of potential productivity, and therefore employers’ willingness to pay, and our analysis asked what would have happened to earnings in a counterfactual world in which all gender and origin groups were equally valuable to employers in these respects. But in the analysis now to be reported, human capital and occupation are treated as investments by workers, and the question is what returns they receive on these investments. This will help us uncover what makes the SSLF beneficial for disadvantaged groups.

As a group, Arab women stand at the intersection of both gender and ethnic disadvantage in the labor market. Given this dual handicap, we ask whether Arab women gain as much as Arab men and Mizrachi women, each of which possesses only one of these disadvantages. For instance, by comparing the premium for higher education inside and outside the SSLF, we expect to confirm that in all three cases the educated profit from working in the social services, while questioning whether Arab women benefit as much as members of the comparison groups.
The analysis is not limited to differences in returns on productivity-related individual characteristics. We also explicitly model two “family-friendly” features that attract many women—Arabs in particular—into jobs in the social services, with the aim of estimating the value of these advantages in practice. Most Arab women are mothers (75 percent of those aged 25–45 have at least one child under 15 at home), and as such they face two pitfalls that have been well documented in the vast international literature on women and work (Blau et al. 2006): the “motherhood penalty,” meaning the tendency for mothers to be paid less than other comparably qualified women, and the “part-time penalty” that mothers risk when they respond to work–family conflict by taking part-time positions.

Because the social services are geared to hiring mothers and offering them part-time jobs, and because the public sector is a relatively equitable employer, we expect the risk of both the motherhood penalty and the part-time penalty to be lower for members of the SSLF. If so, the benefits would be especially significant for Arab women, since they appear to confront relatively severe work–family tensions and have access to relatively limited job opportunities. This does not necessarily mean that Arab women benefit more as parents or part-time employees in the SSLF than either Jewish women or Arab men. What mainly interests us are differences between the two sectors of employment in these and other determinants of earnings.

To compare the extent to which different groups enjoy advantages like higher returns to education or less of a motherhood penalty when working in the SSLF, we ran a series of regressions estimating the effects of these variables on logged hourly earnings for different combinations of gender, origin, and sector. As noted, Arab women are compared to Arab men (same origin but different gender), and Mizrachi women (same gender but different origin). Why the latter? Mizrachim are the most appropriate comparison group to Arabs because they are not recent immigrants and represent something of an “in-between” group in the Jewish stratification hierarchy.

Table 7.3 offers a compact overview of the most important results. The table is arranged in two vertical panels. The left-hand panel shows effects for the social services, while the right-hand panel shows absolute differences between the effects found in the two sectors. To give an example, the second figure in the second row indicates that Arab women working in the social services earn 22 percent more if they have a high level of education than at the medium level. Moving to the right-hand panel in the same row, we learn that this bonus is higher by 12 percentage points than the one received by Arab women employed in other branches. Note that statistically insignificant effects are shown in gray type.
Table 7.3 Determinants of hourly wages in different groups and sectors 2008–2010; effects in percent

<table>
<thead>
<tr>
<th>Social services</th>
<th>Social services minus other branches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arab men</td>
</tr>
<tr>
<td>Medium vs. low education</td>
<td>47</td>
</tr>
<tr>
<td>High vs. medium education</td>
<td>17</td>
</tr>
<tr>
<td>Middle vs. younger age</td>
<td>17</td>
</tr>
<tr>
<td>Older vs. middle age</td>
<td>30</td>
</tr>
<tr>
<td>Menial services vs. routine WC</td>
<td>4</td>
</tr>
<tr>
<td>Associate professional vs. routine WC</td>
<td>2</td>
</tr>
<tr>
<td>Professional vs. associate professional</td>
<td>8</td>
</tr>
<tr>
<td>Part-time vs. full-time</td>
<td>24</td>
</tr>
<tr>
<td>Child under 15 vs. other</td>
<td>15</td>
</tr>
</tbody>
</table>

So far as human capital is concerned, the results show that the social services provide all three groups with enhanced returns to higher education (16 or more years), relative to the medium level of 13–15 years. Although not attaining statistical significance, our best estimates indicate that Arab men and women gain twice or three times as much, respectively, if they work in the social services (more than the returns to Mizrachi women). All groups in the SSLF enjoy a substantially larger “experience bonus.”

Returns to occupational attainment are more complex. The table reports results for the most important categories of the six-part occupational breakdown used in our regressions.13 As shown by the comparison between menial service jobs (e.g., cleaners and child minders) and routine white-collar occupations (which are mainly secretarial and clerical), the social services ease the pay disadvantage attached to lower-status occupations. This is especially important for women, because in both origin groups at least a quarter of them work in menial service jobs. Equally if not more prevalent is the category of “associate professionals,” dominated in the SSLF by three occupations—nurses, elementary school teachers, and kindergarten teachers. For both Arab and Mizrachi women, this group of occupations pays more than the category immediately below (routine white-collar work) in both sectors. But in the case of Arab women—and only in their case—this bonus is higher in the SSLF. This finding is particularly noteworthy since not much below half of all Arab working
women (44 percent) are associate professionals employed in the social services.

The comparison with Mizrachi women underlines the unique attractions of the SSLF for Arab women. The former actually gain less of an advantage as associate professionals in the SSLF than they do elsewhere, and are much less dependent on these jobs (15 percent of total employment). Mizrachi women working in professional occupations enjoy an even more pronounced advantage if they work outside the social services. In principle this is also true for Arab women, but for them the benefits are largely theoretical since very few of them are employed in these high-status jobs, either inside or outside the SSLF.

What, finally, do our results imply regarding the “family-friendliness” of the welfare state as an employer? Among Arabs—both men and women—hourly earnings in the social services are around 25 percent higher for part-time workers. This is approximately three times the bonus received by Arab and Mizrachi women not employed in the SSLF. We find no evidence that parenthood imposes a wage penalty in Israel (see also Budig et al. 2010). Being a mother actually has a modest positive effect on women’s earnings (although it is lower than the fatherhood bonus). In this respect also the welfare state is a relatively benevolent employer of Arab women, since it provides a slightly higher motherhood bonus than other branches. In contrast, among Mizrachi women the bonus is less than half what they receive outside the SSLF.

Conclusions

In Israel, as in other countries, the welfare state has been extensively studied and debated primarily because of its role in the distribution and redistribution of income and services. But its massive scope as an employer has been noticed, if at all, only in a small and specialized literature. At the same time, Arab women’s low rate of labor force participation is increasingly perceived by scholars, policymakers, and policy advocates in Israel as a severe social and economic problem (although opinions are divided concerning the roots of the problem). It is remarkable that to date almost no research has juxtaposed these two issues and examined the role of the welfare state as an employer of Arab women.

The present chapter took up this challenge in a series of interrelated steps aimed at revealing the scope, causes, and effects of employment in the social services sector. We began with the simple task of documenting trends in the growth of social service employment over the course of almost three decades, noting that Arab women have become ever more
dependent on the state for jobs in the social services and that these jobs bear the primary responsibility for the growth in their labor force participation rates. Disaggregating the Arab and Jewish female populations revealed that over the past decade, Muslim women are the only group that has experienced a (very substantial) rise in the SSLF share of total employment. The parallel rates for Christian and Druze women are higher than among Jews, but have stagnated. Meanwhile, all major subgroups of Jewish women have experienced a decline.

Attempting to explain these findings, we first examined whether Arab women's characteristics coincide with the well-known bias of the social services sector toward hiring highly educated workers in part-time positions. It turns out that a lower proportion of Arab than Jewish working women exhibit these traits, although those who do have them are much more likely to belong to the SSLF (which is also true for Arab men). This implies that for highly educated and/or part-time Arab employees, opportunities to work outside of the social services are slim. Reinforcing this impression, from a long-term perspective all groups of women exhibit rising proportions with higher education, but only among Arab women does this trend coincide with rising proportions employed in the social services. Given the rising educational requirements of the occupations frequently filled by Arab women (like teachers and nurses), it seems likely that without the availability of social service employment fewer of them would have gone on to higher education, and more of those who did would have found themselves unemployed. Moreover, acute dependency on the SSLF has now spread to other sections of the Arab working population—full-time employees and those with lower education—again implying diminishing opportunities elsewhere. Using regression models, we find that even if the Arab and Jewish labor forces shared identical characteristics in relation to age, gender, education, working hours, and the presence of small children, Arabs would still be substantially more likely than other sectors of Israeli society to work in the social services—and the gap is now larger than ever before.

Our next step was aimed at examining the consequences for earnings of this high dependency on the social services. Once again we used multivariate models to avoid confounding compositional differences between sectors and social groups with gains or losses from working in the social services. We anticipated that due to lack of competition from Jews for social service jobs in Arab communities, and the tendency for public sector wages to be more uniform and equitable than in the private sector, disadvantaged groups who join the SSLF—Arab women in particular—experience two kinds of gains: a sectoral premium vis-à-vis comparably qualified workers employed in other branches, and equality of earnings
with the members of more socially advantaged groups within the social services. Both of these expectations were fully upheld in our results for 2002, but somewhat less so in 2010. The main change was in the size of the sectoral bonus or penalty enjoyed by different groups. Among both men and women, it is still advantageous for Arabs to work inside the social services and for veteran Jews (especially Ashkenazim) to work outside, but the first advantage has diminished while the second grew.

Different ethnic and gender groups confront different opportunity structures outside of the SSLF. If the social service sector had been free to adjust its wage offers to the labor market conditions facing different groups, by 2010 a sizable gap would have opened up between the earnings of Arabs and Jews working for the welfare state. In practice the almost identical adjusted earnings of Arab women and Israeli-born Jews in the social services in 2002 were replaced at the end of the decade by modest though perceptible gaps. As a result, from the perspective of the Arab women who are our primary concern in this chapter, working in the SSLF may be seen today as a mixed blessing, since it offers them superior wages to Arabs with similar qualifications employed in other branches, but no longer pays them as much as Jews who work in the same jobs.

The final phase of our empirical analysis addressed the question of profit and loss by unpacking the determinants of wages for three different combinations of gender and nationality. Relative to groups disadvantaged on only one of these dimensions, how much do Arab women benefit from working in the SSLF? The results showed that returns on human capital (education and experience) are much higher within the SSLF, especially for Arabs. Moreover, other things being equal, the type of occupations typically held by women employed in the social services are better paid in the SSLF, with especially beneficial consequences for Arab women. When we turned our attention to indicators of the costs of work–family conflict for women, it turned out that in Israel both motherhood and part-time employment generate net gains. These unexpected bonuses tend to be even higher in the SSLF, with Arab women gaining as much as Arab men and sometimes more than Mizrahi women.

Our interpretation of how the social services operate as a labor market for Palestinian women points to three key dimensions. The first of these is human capital requirements. Jobs in the SSLF have a distinctive high-skill profile. For disadvantaged groups generally—and Arab women in particular—the relative abundance in the social services of jobs requiring higher education accelerates their educational level by holding out the prospect of employment. This leads directly to the second dimension: the degree of competition for jobs both inside and outside the SSLF. Although the social services offer relatively “good jobs,” for the most part Arabs do
not compete for these jobs with the dominant Jewish majority. Conversely, alternative “good jobs” for Arabs are scarce, spurring intra-Arab competition that could result in SSLF jobs becoming less “good” for Arab women. The balance between these two forces depends on the third dimension, which is the wage policy of the social services. Large-scale public employers tend to pay workers in high demand less than the private sector, but are more likely to operate uniform and equitable pay scales and less likely to respond to labor market conditions that invite discrimination against women and minorities. The evidence suggests that these conditions have worked decidedly to the benefit of Arab women. But the corresponding advantages—higher pay than other branches and equal pay inside the SSLF—have eroded somewhat over the past decade, presumably as a result of growing privatization of the delivery of social services.

The policy implications of our study are clear, beginning with the unacknowledged but undeniable fact that for Arab women the social services are their predominant port of entry into the labor market. But in addition, the welfare state as an employer has operated in ways specifically beneficial to Arab women: by encouraging them to invest in higher education, by offering them jobs compatible with the gender roles prevalent in their community, and by refraining from exploiting their limited alternative job options. Moreover, given both the quantity and quality of the services supplied to Arab citizens lag significantly behind those provided to Jews, expansion of social services would be an effective way to simultaneously advance civic equality and bring more Arab women into gainful employment, without simply moving them from poverty without employment into working poverty. Having said that, it is important to acknowledge that research of the type carried out here rests on making theoretically informed inferences from correlational evidence. We have not directly investigated either the behavior of the social services as an employer or the job offers available outside the social services. Some other missing variables could potentially be included in more sophisticated statistical models, like variations in the selectivity (talent and motivation) of workers and the quality of their human capital. Given the high stakes involved, we hope that future research will take up these and other challenges.

Notes

1. For brevity, hereafter the Palestinian-Arab citizens of Israel will be referred to as Arabs.
2. The three 2-digit branches comprising the SSLF are education, health, and “welfare and social work,” which following Israel’s 1993 SIC are coded 80, 85, and 86, respectively. For the LFS only, a few three-digit categories were
excluded (808—“schools and educational institutions n.e.c.”, and 85A—
“Veterinary services, para-medical and medical services n.e.c.”).

3. Arabs here and throughout have been defined using a combination of nationality and religion variables. The Jewish population, when not divided into origin groups, comprises all “non-Arabs,” meaning this category includes those who are not Arab by nationality but are also not Jews by religion. The grouping of branches in figure 7.1 is based on the two-digit classification of the CBS.

4. Detailed results available on request.

5. Due to small sample sizes, results for Arab women are not presented before the mid-1990s.


7. Due to the less complete data on education collected in the IS, education categories are defined less precisely than in previous analyses based on the LFS. Sixteen or more years of schooling corresponds to high education, between 13 and 15 is defined as medium, and less than 13 years of schooling is considered low education.

8. The ANOVA model is identical to the regression model in Table 7.2, augmented by the two-way interaction between gender and origin, but for comprehensiveness also includes a three-way interaction between gender, origin, and sector (which, although significant, had no notable substantive effect on the results). To ensure adequate statistical power, the analysis pools three consecutive years (2008–2010).

9. The results, available on request, are based on the model in Table 7.2 with the addition of interaction terms between gender and the six non-Arab origin groups. While a number of the coefficients (mainly in 2002) do not reach conventional levels of significance, the pattern is clear.

10. The full results of these regressions are available on request.

11. Note that Mizrahim are defined as both immigrants from North Africa and the Middle East and Israeli-born Jews whose father was born in these regions, with the two groups proportionally weighted.

12. Statistical significance was defined as $p < .05$. For the differences in effects shown in the right panel of the table, significance was determined by adding interaction terms between each independent variable and an SSLF dummy variable to the models.

13. The unreported categories are blue-collar jobs and managers, which are both relatively uncommon in the social services.

References


