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The place of opportunity: Community and individual determinants of poverty among Jews and Arabs in Israel

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Abstract

Israel is characterized by extreme spatial segregation between Arabs and Jews. Arabs tend to live in poorer and more rural areas with fewer employment opportunities than Jewish localities and they tend to be disadvantaged in almost every aspect of socio-economic stratification. This study examines the extent to which local economic opportunities and government allocation of resources account for the difference in poverty and welfare between Jewish and Arab households, above and beyond their demographic and socio-economic characteristics.

Data from Israel's 1995 Census, conducted by Israel's Central Bureau of Statistics, are combined with information from Israel's Central Bureau of Statistics special publication on localities. A multilevel technique (HLM) is used to analyze the extent to which household poverty is affected by community of residence, above and beyond the effect of household socio-economic and demographic characteristics.

The findings show that the Israeli government allocates fewer funds to Arab localities and that Arab localities offer fewer economic opportunities than Jewish localities. The findings also show that government welfare policy is more efficient in reducing household poverty among Jews than among Arabs, revealing another dimension of institutional discrimination.

Keywords: Inequality; Poverty; Segregation; Welfare dependence

1. Introduction

Israel is characterized by extreme spatial segregation between Arabs and Jews. Arabs tend to live in poorer and more rural areas with fewer employment opportunities and lower levels of government funding than Jewish localities (Al-Haj & Rosenfeld, 1990). In parallel, Arabs tend to be disadvantaged in almost every aspect of socio-economic stratification, employment and education and Arab households tend to be poorer than Jewish households (Kraus & Hodge, 1990; Lewin-Epstein & Semyonov, 1992, 1993; Okun & Friedlander, 2005; Semyonov, 1988; Shavit, 1992). In this study we argue that the structure of economic opportunity is an artifact of socio-political processes, and we set out to investigate whether the differences in economic opportunity and resource allocation further enhances the economic disparity between Jews and Arabs in Israel.

The current study is grounded in general theories focusing on the structure of economic opportunity as

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an important determinant of poverty and on studies that investigated the historical process leading to the geographic concentration of poverty (Fong & Shibuya, 2000; Fernandez & Su, 2004; Kasarda, 1989; Massey & Denton, 1993; Massey & Fischer, 2000; Stier & Tienda, 2001; Wilson, 1987). But, the mechanisms underlying the concentration of poverty are politically charged, and historic changes in population composition and economic development are affected by political interests and preferences. For example, governments may enforce laws that attract labor migration, but they may also affect the price and availability of housing laws to direct migrants' settlement patterns. As Massey and Denton (1993) show, housing covenants and mortgage policies during a period of racial migration contributed to racial segregation and then to concentrated poverty in the United States. Thus, both settlement patterns and economic opportunity may result from socio-political processes that reflect government policy. Governments can promote geographic settlement patterns by affecting the availability and price of housing and they can boost economic development by investing in infrastructure and by allocating resources to education and job training.

The Israeli case is a good example illustrating the relationship between government policy, economic development, and poverty. Studies of poverty in Israel have found that Israeli government policy favors Jewish immigrants over Arabs (Lewin & Stier, 2002; Stier & Lewin, 2002), and that the government allocated more resources to Jewish communities (Al-Haj & Rosenfeld, 1990). But the effect of economic development on poverty in Israel has yet to be explored. In this study, we set out to fill this gap and we examine the extent to which local economic opportunities and government allocation of resources account for the difference in poverty and welfare between Jewish and Arab households, above and beyond their demographic and socio-economic characteristics.

2. The poverty of places

The approach that emphasizes the effect of community characteristics on poverty tends to focus on the structure of economic opportunity. The underlying argument is that through its opportunity structure, the place of residence affects the ability of households to raise their economic status and avoid falling into poverty, above and beyond the human resources and work behavior of its residents (Cotter, 2002; Kasarda, 1989; Wilson, 1987). Social segregation and the concentration of the poor have been found to be related to other socio-economic attributes such as crime, teenage parenting, retreat from marriage and infant mortality (Alba, Logan, & Bellair, 1994; Stier & Tienda, 2001; Tienda, 1991; Wilson, 1987). Studies that emphasize community characteristics tend to focus on the role of local labor markets, unemployment levels, racial and ethnic segregation, skill mismatch, and economic restructuring in explaining differences in poverty among communities (Eggers & Massey, 1991; Fong & Shibuya, 2000; Fernandez & Su, 2004) and differences in poverty among individuals (Iceland, 1997).

But focusing exclusively on communities' economic opportunities may obscure the view from the political processes that created these very opportunities. Studies have set out to understand the social mechanisms that led to ethnic segregation and then to the over-representation of ethnic minorities among the poor, the unemployed, and the jobless (Fong & Shibuya, 2000; Massey & Denton, 1993; Massey & Fischer, 2000). We argue that underlying the historic processes that lead to segregation are sometimes political processes, and these may have long-term economic consequences. For example, Massey and Denton (1993) investigated the socio-historic processes that created segregation in the US and found that segregation is, at least in part, a response to political and economic interests.

Therefore, we argue that economic opportunity in a community may in fact reflect its socio-political standing. Weaker groups, with little political clout may receive less funding for economic development than stronger, more established communities that are in a better position to command social resources. Thus, we argue that communities differ not only in their economic structure but also in the political power their members command. The community's socio-political standing is further related to the availability of public services and their quality because access to public services may be related to the funding the community is able to generate.

In the current study, we examine the effects of economic opportunity and government allocation of resources on poverty and welfare dependence among Arabs and Jews in Israel. We expect that the Israeli government's historic neglect of Arab localities in terms of economic development and investment in infrastructure, as well as its limited allocation of funding to education and welfare, will have effects on poverty and welfare dependence of Arabs, compared to Jews.

3. The poverty of individuals

Another approach to understanding the dynamics of poverty focuses on individuals' attributes. According to

this approach, unemployment and economic deprivation are the products of low level of skills and socio-economic resources, partly because of early social and economic disadvantages and partly because of behavioral problems or lack of ability (Alcock, 1997). Individuals are at risk of becoming poor also because of life events such as divorce, out of wedlock childbirth, or disability. Studies show that socio-economic characteristics, such as labor force participation, marital status, and living arrangements, are associated with the odds of being poor (Blank, 1994; Casper, Mclanahan, & Garfinkel, 1994; Stier & Lewin, 2002; Stier & Tienda, 2001).

Proponents of the approach that emphasizes individuals' behaviors as determining poverty and welfare dependence advocate public policy aimed at increasing employment among people of working age. Accordingly, policy should invest in job training, should increase the motivation to work, and should create the necessary conditions for those who are otherwise unable to work. Such policy sets out to transform the behavior of the poor, while little attention is given to the economic and political forces that foster poverty.

In the current study, we include both individual and community characteristics in our analyses and we examine the extent to which they are determinants of poverty and welfare dependence among Jews and Arabs in Israel. On the individual level, we expect that individual characteristics will affect poverty among Arabs and Jews in similar ways. But, we expect to observe differences on the community level because we expect Arab localities to receive less government funding and to offer fewer employment opportunities than Jewish localities.

4. The Israeli setting

In this study, we set out to explore the effects of community characteristics and government allocation of resources on poverty levels and welfare dependence among Jews and Arabs in Israel. Israel provides an interesting case to examine individual and community effects on poverty and welfare dependence because it has high levels of inequality, paralleled with high levels of segregation. Arabs constitute a minority (about 18% of the population) which is subordinate to the Jewish majority in education, occupation and employment (Kraus & Hodge, 1990; Lewin-Epstein & Semyonov, 1992, 1993; Okun & Friedlander, 2005; Semyonov, 1988; Shavit, 1992). Moreover, Israeli Arabs are far more likely to be poor than Israeli Jews (Lewin & Stier, 2002; National Insurance Institute, 1998).

Israeli society is characterized by extreme spatial segregation between Jews and Arabs. This segregation began before the establishment of the State of Israel, with the settlement patterns of Jewish immigrants who tended to build new communities (Lewin-Epstein & Semyonov, 1992). For a while after the establishment of the state in 1948, segregation was institutionally maintained by the military administration, but ever since the military administration was dismantled in the mid 1960s, there have been no legal restrictions on mobility and residence. Today, about 90% of the Arabs are concentrated in villages and small towns, only eight urban localities are ethnically mixed (Lewin-Epstein & Semyonov, 1992, 1993), and these account for 8.6% of Israel's total Arab population. This extreme segregation is maintained by both Jews and Arabs, for political, ideological, and cultural reasons, and residential mobility between the two sectors is rare. In fact, even in the eight mixed localities ethnic segregation is high and persistent over time (Falah, 1996).

The geographic segregation of Jews and Arabs in Israel is paralleled by separate structures of economic opportunity in Jewish and Arab localities. The Israeli government has allocated more resources and has provided more incentives to economic development in Jewish areas than Arab areas. This discriminatory policy has led to a situation whereby Arab communities have less developed infrastructures, are less economically developed and offer fewer job opportunities than Jewish communities (Al-Haj & Rosenfeld, 1990). Therefore, we argue that the economic structure of opportunity reflects the structure of political power in Israeli society.

Arab communities in Israel tend to be located in the periphery, far from large urban centers. The shortage of jobs in the Arab economic sector forces many Israeli Arabs to commute to work (Atrash, 1995; Lewin-Epstein & Semyonov, 1992, 1993, 1994). But, Arabs who commute to work in Jewish localities face discrimination as they compete with Jews for jobs (Lewin-Epstein & Semyonov, 1992, 1994). Jobs in the Arab sector have become increasingly scarce. For example, textile workshops were recently transferred from Arab villages to other countries. The loss of jobs in the textile industry in the Arab sector has reduced employment opportunities for Arab women, who are discouraged from commuting to work (Awad, 1998; Kraus, 2002; Schnell, Sofer, & Drori, 1995).

Jews and Arabs are further stratified by religious (Arabs) and ethnic (Jews) lines (Goldscheider, 2001). The Arab population in Israel is composed primarily of Muslims (80%), with a minority of Christians

and Druze. The three Arab religious groups are highly segregated, with only few mixed Arab localities. The three groups also differ substantially in their socio-demographic attributes. Muslims and Druze have higher fertility rates and lower levels of education than Christians, who tend to be more urban (Goldscheider, 1996). The groups also differ in their socio-political standing. Druze men serve in the Israeli army (as do Jews and some Beduin), and therefore, Druze families (and some Beduin) have been eligible for certain benefits which, until 1997, were limited to army veterans (Rozenhek, 1999).[1]

The Israeli Jewish population is also stratified. Among Israeli Jews, inequality is structured along ethnic lines, with Jews of European and American origin at the top of the political and socio-economic hierarchy and Jews of Asian and North-African origin at the bottom (Haberfeld & Cohen, 1998; Lewin-Epstein & Semyonov, 1993). The Jewish groups differ in their residential distribution, with a higher concentration of Jews from Asian-African origin in peripheral communities. Recent immigrants arriving to Israel throughout the 1990s from the former Soviet Union are over-represented among the poor because they encounter difficulties in securing adequate jobs and they experience high rates of unemployment and under-employment (Raijman & Semyonov, 1997, 1998; Stier & Levanon, 2003).

In the current study, we focus on government funding and economic opportunities available in Jewish and Arab localities and we examine the extent to which these community characteristics explain differences in poverty and welfare dependence among Jewish and Arab households. Separating community effects from household effects will help us better understand the socio-political mechanisms that lead to economic deprivation. We expect that the high concentration of Arabs in peripheral and economically disadvantaged geographical areas limits their access to stable jobs and thereby enhances their economic vulnerability.

[1] The laws regarding children's allowances in Israel are politically charged and constantly evolving. Overall, children's allowances in Israel are not means-tested. But, until 1997, Israeli army veterans received additional child allowances. This benefit discriminated against Arabs because most Arabs do not serve in the Israeli military. The law was changed in 1996 (in effect in 1997), eliminating veteran benefits in child allowances, and eliminating this aspect of discrimination against Israel's Arab population. But, the current study uses census data from 1995, prior to the change in the law, and the results do reflect the unequal distribution of child allowances.

5. Data, variables, and method

In this study, we conduct a multilevel analysis of the determinants of poverty among Jews and Arabs in Israel. A multilevel analysis is necessary because the data are hierarchical, as households are nested in localities. Moreover, with the high level of geographic segregation between Jews and Arabs in Israel, Jewish households are nested in Jewish localities and Arab households are nested in Arab localities. Thus, our study employs two level of analysis: households as the micro level and localities as the aggregate, macro level.

Multilevel models account for the part of the error structure related to the similarity between families within the same locality, and thereby provide more consistent estimated standard errors than those provided by OLS techniques using hierarchical data structures.

Two types of data are required to examine the contextual influences of community characteristics on household poverty: household-level data and data on the level of the community of residence. For household-level variables we use Israel's 1995 Census, conducted by Israel's Central Bureau of Statistics, and for variables on the level of community of residence we use data from Israel's Central Bureau of Statistics special publication on localities with at least 2000 inhabitants. Thus small towns, villages, and most kibbutzim are excluded from the present analysis. The census collects personal and household information regarding income and demographic characteristics, enabling us to estimate the socio-economic characteristics of the household, and whether it lives in poverty. The 1995 census survey is a nationally representative sample of 20% of Israeli households. Because this study focuses on the effects of economic opportunity on poverty, we focus on the working-age population, and we select households headed by working-age men and women (household heads aged 65 or less). After exclusion of households with heads older than age 65 and households with missing information, our sample consists of 193,294 households living in 166 localities in Israel. The majority of households (164,764) are headed by Jews living in 104 Jewish communities (8 of which are mixed), and 27,826 households are headed by Arabs, living in 62 Arab communities (70, including mixed cities).[2]

Table 1 presents the variables and their operational definitions.

[2] The eight mixed communities are included in the sample of both Jewish and Arab households when analyzed separately. Excluding these communities from each of the samples did not affect the results.

Table 1
Definition of variables included in the analysis

Variable name	Variable definition
Dependent variables	
No provider in the household	Binary variable indicating that no household member participates in paid employment
Poverty	Binary variable indicating that household income is below the official poverty line (the official poverty line is 50% the median income after tax and transfers)
Welfare dependence	Binary variable indicating that the household receives Income Maintenance payments. Income Maintenance is Israel's means-tested welfare transfer, available only to households with very low income (or no income) and no possessions (excluding the home in which they live)
Independent variables	
Community-level variables	
Percent of employees in agriculture	The percentage of employees in the locality employed in agriculture
Percent of employees in industry	The percentage of employees in the locality employed in industry
Percent of employees in public sector	The percentage of employees in the locality employed in the public sector
Percent of employees earning minimum wage or less	The percentage of low-wage employees in the locality, i.e., earning minimum wage or less
Unemployment rate	The percentage of the total labor force in the locality actively looking for work
Female labor force participation rate	The percentage of women in the labor force in the locality
Government allocation for education per student (in 1992)	In New Israel Shekels (NIS)
Government allocation for welfare per person (in 1992)	In New Israel Shekels (NIS)
Household-level variables	
Number of children	Number of children under age 18 in household
Age of head of household	Measured in years
Education of head of household	Measured in years
No provider	Binary variable indicating that there are no wage earners in the household
Type of household	Categorical variable distinguishing: single (person living alone); single parent (with children in household); extended household; and two-parent household (reference category in regressions)
Ethnicity of head of household	Categorical variable distinguishing: Jews (by continent of birth, and for Israeli-born, by father's continent of birth): Asia; Africa; Israel; Recent Immigrant (Jewish immigrant arrived to Israel between 1989 and 1995); Europe/America (reference category in regressions). Arabs (by religion): Muslim; Christian (reference category in regressions); Druze

Note: All variables are drawn from Israel's 1995 Census, with the exception of the budget variables indicating government investment is education and welfare in the locality, which are from Special Publications, Israel Census Bureau 1992.

5.1. Dependent variables

We use three dependent variables measuring poverty: (1) whether the household has no member participating in paid employment. This is a direct measure of the risk of experiencing poverty, because having no providers in the household is an immediate determinant of economic hardship.[3] (2) Whether any member of the household receives income maintenance (Israeli welfare payments). This is a direct measure of poverty that applies to people with no access to income or whose level of earnings is very low (National Insurance Institute, 1998). (3) Whether the household's income is below the official poverty line. The Israeli official poverty line is defined, as in other Western countries, as 50% of the household's median disposable income. Disposable income is defined as the sum of the household's income from all sources: earnings, property, capital, and transfers, net of taxes. The poverty line is adjusted by household size, with diminishing returns for each additional household member (National Insurance Institute, 1998). The correlation

[3] Our dependent variables are drawn from Census data which uses self-reported income and employment information. Respondents do not have a direct incentive to under report earnings or employment because census data are not shared with welfare authorities or with income tax authorities. Nonetheless, it is possible that respondents under report earnings and gains from informal economy due to a general mistrust of government agencies. There is no evidence, however, that certain groups (e.g., Arabs) under-report employment or earnings more than others, or that one group under utilized welfare services more than the other (Doron & Gal, 2000).

between the poverty measure and the measure of welfare dependence is very low ($r = 0.1$ among Jews and 0.06 among Arabs), indicting that while Israeli welfare payments are successful in lifting some households out of poverty, other households experiencing economic hardship are not eligible for welfare support. Therefore, these two indicators measure different aspects of economic deprivation. There is a moderate correlation between welfare dependence and having no provider in the household partly because some of the working poor are eligible for welfare support. The correlation between having no provider in the household and poverty status is relatively strong (0.5 among Jews and 0.4 among Arabs), because participating in the labor force is the major determinant of household income, and thus, of poverty.

5.2. Independent variables

The following hierarchical analysis combines household-level and community-level independent variables.

Household level: Two variables indicate the household's economic standing: the educational level of the head of household[4] and whether the household has no provider (for the models predicting poverty and welfare dependence). The number of children in the household is included in the analysis because larger families are at greater risk of poverty and need higher incomes in order to live above the poverty line. Larger families also have a lower probability of women participating in the labor force. We also control for the age of the head of household and for household type. We distinguish four household types: persons living alone, households headed by a single parent, households headed by a couple (reference category in regressions), and extended households.

Ethnicity is the main independent variable in the study, as we set out to compare the determinants of poverty among Jews and Arabs in Israel. Within each of these main ethnic groups we further distinguish ethnic groups. For Jews, ethnicity is defined by continent of birth, and for Israeli-born Jews by father's continent of birth; for Arabs, we define three ethnic groups by religion (see Goldscheider, 2001 for a discussion of the historical, political, and ideological roots of these distinctions). The ethnic categories are mutually exclusive and defined as follows: for Jews, Asia, Africa, Europe/America (reference category in regressions), and Israel (head of household and father were both born in Israel). We include a separate category for recent immigrants from the former Soviet Union because as immigrants they face more severe economic hardship than other European Jews. For Arabs, we distinguish Muslims, Christians, and Druze. The reference category in the regressions for Jews and for total population are Jews of European/American origin; Christians are the reference category in the separate regressions for Arabs. Household ethnicity is defined by the ethnicity of the head of household.[5]

Our community-level variables are various indicators of economic opportunity and government investment in the locality. Among economic indicators we include the economic structure of the locality, measured by three variables: percent of the locality's residents employed in agriculture; percent of the locality's residents employed in industry; and percent of the locality's residents employed in the public sector. The quality of employment in the area is measured by the percent of the locality's residents employed and earning below the minimum wage. We include two indicators of the availability of jobs, the unemployment rate in the locality and the rate of female labor force participation. Among Arabs, women's employment rate may reflect the availability of jobs within the locality, as women are strongly discouraged from commuting to work, and it may also reflect norms regarding the division of labor within households and child-rearing responsibilities due to high level of fertility.

We include two measures of government allocation of resources to the locality: education budget per student and welfare budget per person. These measures reflect current government priorities in investment in development. High correlations among the variables prevent us from including additional indicators of economic opportunity and government involvement in our analyses.

Our research questions call for a multilevel analysis, examining the effects of both household-level and community-level characteristics. We employ hierarchical modeling and we use HLM software (Bryk & Raudenbush, 1992). HLM enables us to model the two components of poverty simultaneously, and to differentiate between the effects of household- and community-level characteristics on poverty. Since the poor tend to be located in areas characterized by high poverty rates,

[4] Head of household is defined as the person with the highest labor supply or, in case of equal labor supply, the oldest member.

[5] The number of ethnically mixed households is negligible among Arabs (Lewin, 2004), yet it is more substantial (about 25%) among Jewish households (Stier & Shavit, 1994). Applying the head of household's ethnicity as the ethnicity for the entire household introduces a certain amount of error into this measurement, for households composed of members of different ethnic groups. We maintain that this error is minimal for the current investigation because the head of household's ethnicity is the most important in regard to employment and poverty.

Table 2a
Means (standard deviations) and percentage distribution of selected household characteristics, by nationality (Israel 1995)

	Total population	Jews	Arabs
Dependent variables			
No provider in household (%)	10.4	10.0	13.0
Poor (%)	14.3	11.1	33.9
Welfare dependent (%)	5.3	5.2	5.7
Household level characteristics			
Number of children	1.43 (1.52)	1.25 (1.34)	2.50 (2.00)
Education of head of household	11.74 (3.74)	12.13 (3.57)	9.49 (3.90)
Age of head of household	40.04 (11.49)	40.84 (11.47)	35.31 (10.45)
Household composition			
Single parent (%)	7.0	8.0	4.0
Extended (%)	6.0	6.0	4.0
Single (%)	11.0	12.0	3.0
Couple	76.0	74.0	89.0
Ethnicity			
Jew-Asia (%)	19.0	23.0	
Jew-Africa (%)	18.0	21.0	
Jew-Europe–America (%)	27.0	29.0	
Jew-Israel (%)	8.0	9.0	
Immigrant (%)	14.0	16.0	
Arab-Muslim (%)	11.0		78.0
Arab-Christian (%)	2.0		13.0
Druze (%)	1.0		9.0
No. of households	192591	164764	27826

the effect of household characteristics on the likelihood of being poor may be distorted by the homogeneity of communities (Bryk & Raudenbush, 1992). HLM (HGLM for binary dependent variables) adjusts for this distortion and provides correct estimates and standard errors, allowing us to test whether important correlates of poverty such as employment status, education, and number of children have similar effects on the likelihood of being poor across communities characterized by different opportunity structures and different levels of government funding.

6. Findings

Table 2a presents descriptive statistics of household-level characteristics for the total population and for Jews and Arabs separately. Overall, about 14% of all working-age households in Israel are poor, but there is a substantial difference in poverty level between Jewish and Arab households. Among Jewish households only 11% live below the poverty line, compared with a third of all Arab households. Nonetheless, while Arabs are considerably poorer than Jews, the two groups have similar levels of welfare dependence (5.2% of Jewish and 5.7% of Arab households receive income maintenance). These findings demonstrate that not all poor people in Israel are eligible for welfare support from the state. Eligibility for income maintenance is restricted to households with little or no earned income (apparently, substantially below the poverty line). In addition, ownership of assets or property (e.g., land or a car) precludes eligibility for income maintenance (with the exception of applicants owning the home in which they reside). Since many Arabs live in formerly rural areas and own land, many are ineligible for state support. In addition, Arab households are large but have relatively fewer providers (and lower income), so they may fall below the poverty line yet still not qualify for welfare transfers.

The percentage of households in which no one participated in the labor market (households with no provider) is higher in Arab (13%) than in Jewish households (10%). These figures reflect the lower level of labor force participation of Arab men and women in Israel (Kraus, 2002; Sa'di & Lewin-Epstein, 2001). On average, Arab heads of households are also substantially less educated than Jewish heads (9.5 and 12 years of studies, respectively), and their families tend to be substantially larger. The great majority of all working-age households in Israel are headed by a couple, and this percentage is higher for Arabs (89%) than for Jews (74%).

The findings presented in Table 2b depict the differences between Arab and Jewish communities. Overall,

Table 2b
Means (standard deviations) of community characteristics by Nationality

	All communities	Jewish communities	Arab communities
Community level characteristics			
% Employed in agriculture	3.13 (4.01)	1.80 (1.66)	4.90 (5.39)
% Employed in industry	22.53 (8.98)	22.48 (8.52)	22.89 (9.86)
% Employed in public sector	29.78 (9.52)	33.80 (8.50)	24.68 (9.38)
% Low-wage workers	39.73 (6.76)	37.31 (6.76)	43.25 (4.61)
% Unemployed	7.68 (3.05)	8.31 (3.02)	6.84 (2.80)
Education budget per person (NIS)	828.19 (277.83)	903.12 (267.51)	713.00 (251.94)
Welfare budget per person (NIS)	296.14 (154.79)	366.15 (151.56)	205.37 (100.62)
Distance from metropolis	36.14 (27.66)	31.54 (29.47)	40.99 (17.50)
Population size	35,470 (7081)	52,385 (8746)	33,645 (9336)
% Women in the labor force	38.10 (13.11)	47.67 (2.40)	24.68 (9.38)
Mean education	10.91 (1.62)	11.94 (1.10)	9.49 (1.07)
Mean salary	3915.5 (1139.7)	4430.9 (1200.3)	3248.9 (447.2)
No. of communities	166	103	70

the figures presented in Table 2b reveal the relative disadvantage of Arab households compared to Jewish households, in economic opportunities and government support available in their communities of residence. Arab communities in Israel are smaller than Jewish communities, and tend to be located in the periphery, far from a major urban center. The economic structure of localities reveals a higher level of employment in agriculture among Arab localities, although the overall rate of employment in this sector is very low (4.9% of residents in Arab localities and fewer than 2% in Jewish localities). Employment in industry is similar in Jewish and Arab localities (22–23%), and the level of employment in the public sector is higher in Jewish localities. The unemployment rate is, unexpectedly, higher in Jewish localities (8.3% are unemployed compared with only 6.8% in Arab communities) but there are more households with no providers in the Arab localities than in the Jewish communities. These figures suggest that there are more discouraged workers who have withdrawn from the labor force and are no longer searching for employment in Arab localities than in Jewish localities, possibly due to their limited employment opportunities (see Sa'di & Lewin-Epstein, 2001).

The mean household income is lower in Arab localities than in Jewish localities, and 43% of economically active residents in Arab localities have low incomes (up to the minimum wage), compared to only a third of the residents in Jewish localities.

Our measures of government investment in the locality indicate that Arab communities receive fewer government funds for education per student and welfare per person than Jewish communities (NIS 713 and NIS 903 for education in Arab and Jewish communities, respectively, and NIS 205 and NIS 366 for welfare). These finding show that Arab localities receive less government support and offer fewer economic opportunities than Jewish localities. Multivariate analyses are necessary to estimate the effect of these community characteristics on household poverty, among Jews and Arabs in Israel.

To test whether community characteristics affect the different measures of extreme economic disadvantage above and beyond the effect of household characteristics, we turn to the next stage of our analysis. We conduct our multivariate analyses for the entire population (column 1), and then separately for Jewish (column 2) and Arab households (column 3). Our analysis is composed of three parts: first, we begin by examining the determinants of having no provider in the household (Table 3), then we examine the determinants of poverty (Table 4) and welfare dependence (Table 5).

Table 3 shows multilevel models predicting the (log) odds of there being no provider in a household. Column 1 is the model for the entire population and columns 2 and 3 are models predicting no provider in the household separately for Jews and Arabs. Comparison between columns 2 and 3 reveals differences in the determinants of poverty among the two groups.

Both household-level and community-level characteristics have an effect on the odds of having no provider in the household, and these effects are similar for Jews and Arabs. On the household level, education reduces the odds of having no provider, while the age of the household head increases these odds. These two variables serve as direct measures of the ability of household heads to find employment. The number of children increases the odds of having no provider in the household, probably through its effect on mothers' labor force participation. Household type is also related to its members' economic activity: extended families have lower odds of having no

Table 3
Multilevel models predicting there being no provider in the household, by ethnicity

Household-level variables	Total population	Jews	Arabs
Education (of head)	−0.135* (0.003)	−0.134* (0.004)	−0.137* (0.010)
Number of children	0.188* (0.023)	0.231* (0.038)	0.102* (0.012)
Age (of head)	0.043* (0.002)	0.043* (0.002)	0.049* (0.004)
Household composition			
One-person household	1.827* (0.070)	1.916* (0.065)	1.275* (0.131)
Single-headed household	1.832* (0.050)	1.819* (0.059)	2.018* (0.090)
Extended household	−0.722* (0.065)	−0.766* (0.079)	−0.439* (0.127)
Ethnicity			
Asia	0.046 (0.046)	0.048 (0.051)	
Africa	0.198* (0.044)	0.192* (0.049)	
Israel	0.317* (0.053)	0.307* (0.050)	
New immigrant	1.027* (0.081)	1.043* (0.078)	
Muslim	0.456* (0.150)		0.612* (0.103)
Christian	−0.026 (0.115)		
Druze	0.279* (0.143)		0.479* (0.118)
Intercept	−3.117* (0.071)	−3.207* (0.051)	−2.913* (0.105)
Community-level variables			
% Employed in agriculture	−0.033* (0.009)	−0.069* (0.026)	−0.021* (0.008)
% Employed in industry	−0.003 (0.004)	−0.001 (0.004)	0.001 (0.007)
% Employed in public sector	0.022* (0.006)	0.019* (0.005)	0.016 (0.010)
% Low-wage workers	0.039* (0.013)	0.0586* (0.016)	0.018 (0.011)
% Unemployment	0.053* (0.014)	0.038* (0.017)	0.059* (0.024)
% Employed women	−0.005 (0.006)	0.027 (0.019)	−0.017 (0.014)
Education budget per person	−0.0002* (0.000)	−0.0003* (0.000)	−0.0001 (0.0001)
Welfare budget per person	−0.0004 (0.0003)	−0.0006* (0.000)	0.001* (0.000)
Variance component			
Null model	0.254	0.288	0.151
Individual-level variables	0.162	0.191	0.114
Full model (individual + community)	0.063	0.047	0.089

* $p < 0.05$.

provider, whereas single-parent families and households composed of a person living alone have higher odds of having no provider than households headed by a couple. This finding suggests that living in an extended family may serve as a strategy to improve the economic standing of those otherwise unable to have access to market income.

Members of different ethnic groups have different odds of having no provider in the household. Overall, ethnic differences indicate that while Arabs have lower access to market income than Jews do, there is substantial ethnic variation within each group. Recent Jewish immigrants and Muslims have the highest odds of having no provider, followed by Jews of Israeli origin, Druze, and Jews of African origin.

On the community level, economic opportunity has an effect on the odds of having no provider in the household. The higher the percent employed in agriculture, the lower the odds of having no provider. The percent employed in the public sector increases the odds of having no provider, but this effect is statistically significant only in Jewish localities. Unsurprisingly, the higher the unemployment rate in the locality, the higher the odds of having no provider in the household. Similarly, the percent of workers earning up to the minimum wage has a positive effect on the odds of having no provider, but this effect is significant only among Jewish localities. The effect of the percent of women employed on the odds of having a provider is not statistically significant.

The effect of our indicators of government allocation of resources to the community differs in Jewish and Arab localities. Welfare budget per person in the locality is related to lower odds of having no provider in the household in Jewish localities, while the relationship is positive in Arab localities. This effect may reflect the differences in the population targeted by welfare transfers in the two sectors. Among Jews, a high percent of welfare transfers serve as complementary payment to low-income workers. In Arab localities these payments support families with no access to market income. We suspect that

Table 4
Multilevel models predicting household poverty, by ethnicity (Israel, 1995)

Household-level variables	Total population	Jews	Arabs
No provider in household	3.346* (0.055)	3.380* (0.070)	3.138* (0.187)
Education (of head)	−0.065* (0.004)	−0.064* (0.003)	−0.060* (0.019)
Number of children	0.281* (0.009)	0.279* (0.012)	0.244* (0.031)
Age (of head)	−0.030* (0.001)	−0.032* (0.002)	−0.019* (0.006)
Household composition			
One-person household	−0.274* (0.085)	−0.166* (0.066)	−1.531* (0.194)
Single-headed household	0.357* (0.065)	0.392* (0.069)	0.143 (0.107)
Extended household	0.229* (0.037)	0.224* (0.049)	0.146* (0.068)
Ethnicity			
Asia	0.234* (0.049)	0.241* (0.053)	
Africa	0.240* (0.054)	0.230* (0.061)	
Israel	0.343* (0.056)	0.351* (0.059)	
New immigrant	0.587* (0.062)	0.561* (0.062)	
Muslim	1.855* (0.360)		0.364* (0.079)
Christian	1.232* (0.313)		
Druze	1.199* (0.274)		−0.038 (0.140)
Intercept	−3.419* (0.120)	−3.284* (0.051)	−1.718* (0.093)
Community-level variables			
% Employed in agriculture	−0.003 (0.008)	−0.049* (0.017)	0.008 (0.008)
% Employed in industry	−0.008* (0.003)	−0.010* (0.003)	−0.005 (0.006)
% Employed in public sector	0.004 (0.005)	0.005 (0.004)	0.010 (0.013)
% Low-wage workers	0.029* (0.007)	0.044* (0.009)	0.020* (0.008)
% Unemployment	−0.008 (0.012)	−0.012 (0.013)	−0.013 (0.015)
% Employed women	0.029* (0.011)	0.011 (0.012)	0.007 (0.009)
Education budget per person	−0.0001 (0.0001)	−0.0001 (0.0001)	−0.0001 (0.0002)
Welfare budget per person	0.0002 (0.0003)	−0.0001 (0.0002)	0.0002 (0.0007)
Variance component			
Null model	0.526	0.284	0.144
Individual-level variables	0.157	0.043	0.103
Full model (individual + community)	0.042	0.021	0.097

* $p < 0.05$

welfare investments in Jewish localities are related to the presence of recent immigrants, many of whom participate in paid employment, but at the same time are dependent on income maintenance (National Insurance Institute, 1998). The budget allocated to education per student reduces the odds of having no provider in the household, but this effect is statistically significant only in Jewish communities. A decomposition of the reduction in the component variance (the variance component in the null model—the variance component in the full model) reveals that in the Jewish population model, the individual-level variables account for 40% of the total explained variance $((0.288 - 0.191)/(0.288 - 0.047))$ while the community-level variables account for the remaining 60% $((0.191 - 0.047)/(0.288 - 0.047))$.[6] The pattern is reversed for the Arab population model, where individual-level variables account for 60% of the total explained variance and community-level variables account for 40%. This decomposition exemplifies the importance of community-level variables in explaining the odds of having a provider in the household, but it also emphasizes the differences between Jews and Arabs in the relative importance of the individual versus structural determinants.

The absence of a provider in the household is a major determinant of household poverty, and is therefore included in the following analyses as an independent variable predicting poverty and welfare dependence. Table 4 shows the multilevel models predicting income below the poverty line. Again, column 1 is the model for the entire population, and columns 2 and 3 are mod-

[6] We refer to the difference between the variance component in the null model and the variance component in the full model as the total explanation power of the model. We then decompose this 100% reduction in the variance into individual-level and community-level components.

Table 5
Multilevel models predicting welfare dependence, by ethnicity (Israel, 1995)

Household-level variables	Total population	Jews	Arabs
No provider in household	1.566* (0.046)	1.580* (0.051)	1.592* (0.077)
Education (of head)	−0.092* (0.005)	−0.101* (0.006)	−0.067* (0.006)
Number of children	0.055* (0.017)	0.078* (0.023)	0.011 (0.015)
Age (of head)	−0.012* (0.001)	−0.011* (0.001)	−0.015* (0.003)
Household composition			
One-person household	0.549* (0.080)	0.660* (0.082)	0.220 (0.142)
Single-headed household	1.973* (0.057)	2.208* (0.051)	0.550* (0.101)
Extended household	1.248* (0.058)	1.341* (0.067)	1.031* (0.066)
Ethnicity			
Asia	0.512* (0.077)	0.493* (0.076)	
Africa	0.768* (0.065)	0.753* (0.064)	
Israel	0.029 (0.070)	0.016 (0.070)	
New immigrant	1.995* (0.086)	2.020* (0.084)	
Muslim	0.658* (0.189)		0.297* (0.133)
Christian	0.536* (0.115)		
Druze	0.176 (0.177)		−0.312* (0.123)
Intercept	−4.747* (0.098)	−5.052* (0.074)	−3.560* (0.120)
Community-level variables			
% Employed in agriculture	−0.017 (0.013)	−0.051* (0.019)	−0.009 (0.014)
% Employed in industry	−0.001 (0.004)	0.007 (0.005)	0.0004 (0.006)
% Employed in public sector	−0.002 (0.005)	0.002 (0.005)	−0.005 (0.011)
% Low-wage workers	0.023* (0.009)	0.042* (0.008)	0.008 (0.016)
% Unemployment	0.066* (0.014)	0.047* (0.015)	0.079* (0.023)
% Employed women	−0.020* (0.008)	−0.002 (0.017)	−0.022 (0.012)
Education budget per person	−0.0004* (0.000)	−0.004* (0.000)	−0.002 (0.0008)
Welfare budget per person	0.001* (0.000)	0.001* (0.000)	0.002* (0.0008)
Variance component			
Null model	0.555	0.705	0.310
Individual-level variables	0.19	0.172	0.176
Full model (individual + community)	0.076	0.044	0.137

* $p < 0.05$

els predicting poverty separately for Jews and Arabs. As expected, most household characteristics have similar effects on the odds of Jews and Arabs living below the poverty line. Most important is access to market income: in both groups, having no provider in the household substantially increases the odds of being poor. The higher the household head's level of education, the lower the odds of being poor. The odds of a household living in poverty increase with the number of children, and decline as the age of the household head increases. As expected, the odds of poverty differ by household type. Compared to households headed by a couple (the reference category), extended households and households headed by a single parent have higher odds of poverty, while single households have lower odds. This may be the result of a process of selection to extended and single households, whereby those who can afford to live on their own, do so, and those who cannot, live in extended households. All the effects are statistically significant, with the exception of single-parent households among Arabs, which may be due to the small number of single-parent families among Arabs or the selection into this type of living arrangement. Research shows that the level of labor force participation of Arab lone-mothers is considerably higher than that of married Arab women (Swirsky, Kraus, Conor-Atias, & Herbest, 2002), and this may afford some single mothers independent living, outside the extended household.

In the total population, all ethnic groups have higher odds of household poverty than Jews of European or American origin (the reference category), and these differences are statistically significant (column 1). Still, Arabs have higher odds of living below the poverty line compared with all Jewish groups. Interestingly, while Jewish recent immigrants had the highest odds of living in households with no provider, they have lower odds of being poor than all Arabs groups. This can be attributed to the discriminatory effect of the Israeli social security system, which grants special welfare payments rights

to recent immigrants but not to Arabs (Lewin & Stier, 2002). Among Arabs, Muslim households have higher odds of poverty than Christian households, whereas the difference between Druze and Christian households is statistically insignificant. Though Druze have significantly higher odds than Christians to live in households with no provider, they have greater access to government transfers than other Arabs. For example, until 1997, when extended child allowances were eliminated, Druze were eligible to these veteran benefits because they serve in the Israeli army (Rozenhek, 1999). Such benefits may help raise them above the poverty line.

The multilevel analysis allows us to examine the effects of community-level characteristics on household poverty. As in Table 3, more measures of economic opportunity have a statistically significant effect on household poverty in Jewish communities than in Arab communities. The percentages of workers employed in agriculture and in industry reduce the odds of poverty among Jews, but they exert insignificant effects among Arabs. The statistically insignificant effect of these variables in Arab communities may be because most Arab workers, whatever the industry, are employed in low-paid jobs (an average of 43% have income up to the minimum wage, as indicated in Table 2b).

The percent of low-wage workers (minimum wage or less) is an interesting measure of economic opportunity because it reflects the type and quality of jobs available to employees in the locality. The percent of low-wage workers in the locality increases the odds of household poverty in Jewish and in Arab communities, although the effect is stronger in the Jewish sector (probably due to the higher variation in types of jobs).

Surprisingly, the effect of the unemployment rate on household poverty is statistically insignificant. Female employment increases the odds of household poverty in the total population, but has no effect in the separate equations, by nationality. The effects of both indicators of government investment in the locality are statistically insignificant. The decomposition of the total variance explained reveals a modest effect of community level indicators on the likelihood of being poor, only 8% of the variation among the Jews $((0.043 - 0.021)/(0.284 - 0.021))$ and 13% among the Arabs $((0.103 - 0.097)/(0.144 - 0.097))$ could be attributed to the structural variables.

Table 5 presents the models predicting the (log) odds of households being dependent on welfare (measured as receiving income maintenance). Income maintenance is an indicator of very low income and of eligibility for welfare. Here too, column 1 is the model for the entire population, and columns 2 and 3 are models predicting income maintenance separately for Jews and Arabs.

Access to market income, as indicated by there being a provider in the household and by the education of the household head, reduces the odds of welfare dependence for both Jews and Arabs. Again, the age of the household head reduces the odds of being on welfare. The number of children in the household increases the odds of welfare dependence in Jewish households, but the effect is statistically insignificant among Arab households. This finding may indicate the uniqueness of large Jewish families, which constitute a minority among the Jewish population, as opposed to the high level of fertility among most Arab groups. Living in a household that is not headed by a couple increases the odds of welfare dependence, with the exception of single Arab households, which do not have significantly higher odds of welfare dependence than couple-headed Arab households (column 3).

While the results in Table 4 show that all Arab groups have higher odds of household poverty than Jews, the situation is more complex regarding the odds of receiving welfare. First, recent immigrants, who have the lowest odds of having a provider in the household, have the highest odds of being dependent on welfare. As Table 4 suggests, these welfare payments reduce their odds of living below the poverty line. Other Jewish groups (those of African origin and to some extent Asian origin) have relatively high levels of welfare dependence, similar to Muslims and Christian Arabs, though the latter groups have higher odds of being poor. The odds of second-generation Israeli-born Jews and Druze are not different from the odds of Jews of European/American origin of being dependent on welfare. These findings point once again to the discriminatory practices of the Israeli welfare system, which favors certain groups over others, and is therefore more efficient in lifting Jewish than Arab households out of poverty (Lewin & Stier, 2002).

Economic opportunity in the locality has an effect on the odds of households being dependent on welfare. The percent employed in agriculture reduces the odds of receiving welfare, but this effect is statistically significant only among Jews. The percent employed in industry and in the public sector does not have a significant effect on the odds of welfare dependence. A high percentage of low-wage employment in the locality increases the odds of households relying on welfare payments in the Jewish but not in the Arab population. Again, this finding suggests that when the economic conditions in Jewish localities afford workers low incomes and menial jobs, the welfare system compensates for the lack of economic opportunities. Unemployment has

a positive effect on welfare dependence, in both Jewish and Arab localities; that is, as unemployment rises, so do the odds of households in the locality receiving welfare payments.

Government investment in education reduces the odds of welfare dependence, but this effect is only significant in Jewish localities. Unsurprisingly, and almost by definition, government investment in welfare per person is positively related to the odds of welfare dependence in both Jewish and Arab localities. All in all, community-level variables account for about a fifth of the total explained variance (19% in the Jewish model and 23% in the Arab model).

To summarize, the analyses show that both individual characteristics (measured at the household level) and characteristics of the community determine the household's economic position. In particular, the findings underscore the importance of employment opportunities in the area, although their effect is not straightforward. We find that Arabs live in communities with disadvantaged employment opportunities, but the effect of community characteristics on Arabs' economic position is weaker than the effect of community characteristics on Jews' economic position. To demonstrate this complex relationships, Fig. 1 presents the calculated actual and expected probabilities of having no provider in the household (Panel A), living in poverty (Panel B) and being on welfare (Panel C) by percent low-wage workers in Arab and Jewish communities. The first panel shows that the percent of Arabs with no provider in the household would decline slightly (from 9.3% to 8.4%) if they lived in communities with same level of low-paying jobs as in Jewish communities. Fig. 1, Panel A also shows that if Jews lived in communities with the same percent of low-paying jobs as in Arab communities, they would have the same difficulties in providing for their families as do Arabs. More specifically, the probability of Jews having no provider in the household would increase from 6% to more than 9% if they lived in communities with the same level of low-paying jobs as Arabs. Panel B shows that changing the level of low-paying jobs in Arab communities to that of Jews would result in a decline in Arab poverty rate from 27% to 25%. In parallel, the poverty rate among Jews would increase slightly, from 6% to 7% if employment conditions in their communities were similar to those in Arab communities. Finally, Panel C shows the results for the probability of being on welfare. The percentage of Arab families on welfare would decline slightly (from 4.5% to 4.3%) if Arabs lived in communities with the same level of low paying jobs as Jews. Interestingly, the percentage of Jewish families on welfare would not change if Jews lived in communities with the same level of low-paying jobs as Arabs. This finding is counter-intuitive, but it suggests that Israeli welfare policy is more efficient in compensating Jews residing in economically underdeveloped areas than Arabs.

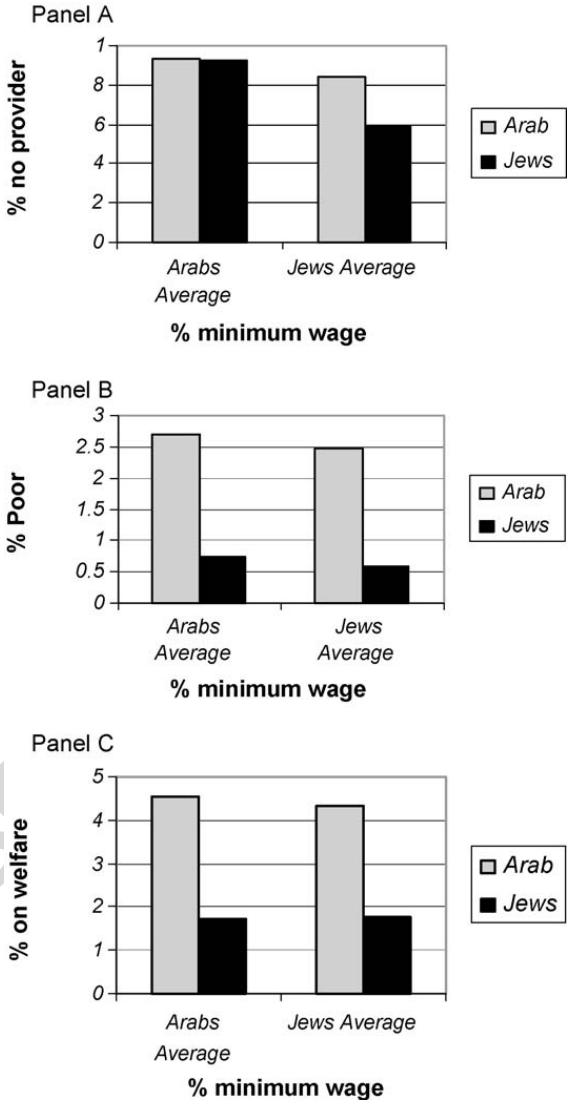

Fig. 1. Simulations illustrating the effect of the percent of minimum wage workers in the community on economic disadvantage of Arab and Jewish households in Israel, 1995.

7. Conclusions

This study set out to disentangle contextual from household effects on poverty and welfare dependence among Jews and Arabs in Israel. One unique characteristic of Israeli society is the high level of geographic segregation of its Jewish and Arab populations. Consequently, being a Jew or an Arab in Israel represents not just a distinction between individuals but also differences in the social and economic characteristics of place of

residence. It is therefore especially important, and especially difficult, to disentangle individual from contextual effects in the Israeli case. We employed a multilevel technique to analyze the extent to which household economic hardship is affected by community of residence, above and beyond the effect of household socio-economic and demographic characteristics. Our findings suggest that ethnic segregation has an effect on non-employment and poverty in Israel, and that this effect works mainly via employment opportunities at the community level, measured as the percentage of low-paying jobs. Thus, we argue that the inferior economic standing of Arab communities, which is a result of their weak political power in the Israeli State, is an important determinant of their ability to find employment, and thus, their poverty and welfare dependence.

On the individual level we found, as expected, that having no provider in the household is a central cause of poverty among both Jews and Arabs. These findings suggest that unemployment should be treated simultaneously at the household and the community levels. So, while it is important to increase the employability of household members by improving education and providing job training, it is also important to provide incentives for businesses to create good jobs in the geographic periphery. Upgrading the skills of residents and creating appropriate employment opportunities will result in higher labor force participation rates, and eventually in a reduction of poverty and welfare dependence.

On the community level, our study shows that the Israeli government allocates fewer funds to Arab localities than Jewish localities, and that Arab localities offer fewer economic opportunities than Jewish localities, especially in terms of well-paying jobs. The shortage of well-paying jobs may reflect discrimination on the individual level, as well as government's neglect to invest in economic development, on the community level. Our findings show that the percentage of low-paying jobs has both a direct and an indirect effect on poverty. But, even this measure does not affect welfare dependence in Arab localities, whereas it does affect welfare dependence in Jewish localities. This finding suggests that Israeli welfare policy compensates Jews residing in economically underdeveloped areas more than it compensates Arabs living in similarly disadvantages areas.

But, policy tends to evolve constantly, and important policy changes have taken place since the 1995 census, when the data for the current analyses were collected. Most significant for the current discussion are the 1996–1997 policy changes that have made the distribution of resources to Arab citizens and their communities more equal. An example of such a change is the cancellation of veterans' benefits in child allowances. Following this amendment, all Israeli families, Jews and Arabs alike, receive child allowances by number of children, regardless of whether a family member ever served in the military. Some improvements have also been made in hiring practices, whereby some positions that previously required "security clearance," and thus excluded Arabs, are now open to Arab applicants.

We have argued that the structure of economic opportunity reflects government policy, and that to understand government policy, it is necessary to take into account historical and socio-political processes. Having said this, it is still difficult to predict how recent events will affect future government practices. It is safe to say that the increase in levels of violence since the year 2000, combined with political instability, have had a destructive effect on Israel's economy. Foreign investment in businesses declined and unemployment increased. The ensuing economic recession resulted in a further deterioration of employment opportunities, especially for low-skilled workers, and poverty rates increased. In parallel, an economically conservative government cut welfare transfers aimed at large families and the unemployed. The economic recession and the welfare cuts had devastating effects on Israel's poor population, and it may have affected Arabs more than Jews, because Arabs tend to have larger families than Jews, and they tend to have poorer employment opportunities. Our findings suggest that unless the Israeli government defines economic development and investments in the Arab sector as national priorities, Arabs are likely to remain economically vulnerable.

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References

Al-Haj, M., & Rosenfeld, H. (1990). *Arab local government in Israel*. Boulder: Westview Press.

Alba, R. D., Logan, J. R., & Bellair, P. E. (1994). Living with crime: Evidence of racial/ethnic differences in suburban location. *Social Forces*, *73*(2), 395–434.

Alcock, P. (1997). *Understanding poverty* (2nd ed.). London: Macmillan.

Atrash, A. S. (1995). *Days go by: Unemployment among Arabs in Israel*. Beit Berl: The Institute for Israeli Arab Studies [Hebrew].

Awad, Y. (1998). Poverty and inequality among Jewish and non-Jewish families 1979–1994. In Haled Ab (Ed.), *Arab children and teens in Israel: From today to the future* (pp. 291–318). Jerusalem: Brookdale Institute [Hebrew].

Blank, R. (1994). The employment strategy: Public policies to increase work and earnings. In S. Danziger, G. Sandefur, & D. Weinberg (Eds.), *Confronting poverty: Prescriptions for change* (pp. 168–204). New York: Russell Sage Foundation and Harvard University Press.

Bryk, A., & Raudenbush, S. (1992). *Hierarchical linear models*. Newbury Park: Sage Publications.

Casper, L. M., Mclanahan, S. S., & Garfinkel, I. (1994). The gender-poverty gap: What we can learn from other countries. *American Sociological Review*, *59*(4), 594–605.

Cotter, D. A. (2002). Poor people in poor places: Local opportunity structure and household poverty. *Rural Sociology*, *67*(4), 534–555.

Doron, A., & Gal, J. (2000). The Israeli income support program in a comparative perspective. *Social Security*, *58*(1), 5–27.

Eggers, M. L., & Massey, D. S. (1991). The structural determinants of urban poverty: A comparison of whites, blacks, and hispanics. *Social Science Research*, *20*, 217–255.

Falah, G. (1996). Living together apart: Residential segregation in mixed Arab-Jewish cities. *Urban Studies*, *33*, 823–857.

Fernandez, R. M., & Su, C. (2004). Space in the study of labor markets. *Annual Review of Sociology*, *30*, 545–569.

Fong, E., & Shibuya, K. (2000). The spatial separation of the poor in Canadian cities. *Demography*, *37*(4), 449–459.

Goldscheider, C. (1996). *Israel's changing society: Population, ethnicity, and development*. Boulder: Westview Press.

Goldscheider, C. (2001). Ethnic categorization in censuses: Comparative observations from Israel, Canada and the United States'. In D. I. Kertzer, & D. Arel (Eds.), *Census and identity: The politics of race, ethnicity, and language in National Censuses* (pp. 71–91). Cambridge: Cambridge University Press.

Haberfeld, Y., & Cohen, Y. (1998). Earnings of native-born and Arab men in Israel, 1987–1993. *Research in Social Stratification and Mobility*, *16*, 69–88.

Iceland, J. (1997). Urban labor markets and individual transitions out of poverty. *Demography*, *34*(3), 429–441.

Kasarda, J. D. (1989). Urban change and minorities opportunities. In P. Peterson (Ed.), *The new urban reality* (pp. 33–67). Washington, DC: Brookings Institution.

Kraus, V. (2002). *Secondary breadwinners: Women in the Israeli labor force*. Westport, CT: Praeger Publishers.

Kraus, V., & Hodge, R. W. (1990). *Promises in the promised land*. NY: Greenwood.

Lewin, A. C. (2004). Marriage patterns among Palestinians in Israel. Paper presented at the annual meeting of the American Sociological Association, San Francisco.

Lewin, A. C., & Stier, H. (2002). Who benefits the most? The unequal allocation of transfers in the Israeli Welfare State'. *Social Science Quarterly*, *83*(2), 488–503.

Lewin-Epstein, N., & Semyonov, M. (1992). Local labor markets, ethnic segregation and income inequality. *Social Forces*, *70*, 1101–1119.

Lewin-Epstein, N., & Semyonov, M. (1993). *Arabs in the Israeli economy*. Boulder: Westview Press.

Lewin-Epstein, N., & Semyonov, M. (1994). Sheltered labor markets, public sector employment, and socioeconomic returns to education of Arabs in Israel. *American Journal of Sociology*, *100*(3), 622–651.

Massey, D. S., & Denton, N. A. (1993). *American apartheid: Segregation and the making of the underclass*. Cambridge, MA: Harvard University Press.

Massey, D. S., & Fischer, M. J. (2000). How segregation concentrates poverty. *Ethnic and Racial Studies*, *23*(4), 670–691.

National Insurance Institute (1998). *Annual Survey 1996/7*. Jerusalem.

Okun, B. S., & Friedlander, D. (2005). Educational stratification among Arabs and Jews in Israel: Historical disadvantage, discrimination, and opportunity. *Population Studies*, *59*(2), 163–180.

Raijman, R., & Semyonov, M. (1997). Gender, ethnicity and immigration: Double disadvantage and triple-disadvantage among recent immigrant women in the israeli labor market. *Gender and Society*, *11*, 108–125.

Raijman, R., & Semyonov, M. (1998). Best of times, worst of times and occupational mobility: The case of Russian immigration in Israel. *International Migration Review*, *36*(3), 291–312.

Rozenhek, Z. (1999). The exclusionary logic of the Welfare State. *International Sociology*, *14*(2), 195–216.

Sa'di Ahmad, H., & Lewin-Epstein, N. (2001). Minority labour force participation in the post-fordist era: The case of the Arabs in Israel. *Work Employment and Society*, *15*(4), 781–802.

Schnell, I., Sofer, M., & Drori, I. (1995). *Arab industrialization in Israel: Ethnic entrepreneurship in the periphery*. Westport: Praeger.

Semyonov, M. (1988). Bi-ethnic labor markets, mono-ethnic labor markets, and socioeconomic inequality. *American Sociological Review*, *53*, 256–266.

Shavit, Y. (1992). Arabs in the Israeli economy: A study of the enclave hypothesis. *Israel Social Science Research*, *7*(1–2), 45–66.

Stier, H., & Levanon, V. (2003). Finding an adequate job: Employment and income of recent immigrants to Israel. *International Migration*, *4*(2), 81–107.

Stier, H., & Lewin, A. C. (2002). Does women's employment reduce poverty? Evidence from Israel. *Work Employment and Society*, *16*(2), 211–230.

Stier, H., & Shavit, Y. (1994). Age at marriage, sex-ratios, and ethnic heterogamy. *European Sociological Review*, *10*, 79–87.

Stier, H., & Tienda, M. (2001). *The color of opportunity: Pathways to family, welfare and work*. Chicago: University of Chicago Press.

Swirsky, S., Kraus, V., Conor-Atias, E., & Herbest, A. (2002). *Single mothers in Israel*. Tel Aviv: Adva Research Center [Hebrew].

Tienda, M. (1991). Poor people poor places: Deciphering neighborhood effects on poverty outcomes. In J. Huber (Ed.), *Macro-micro linkages in sociology* (pp. 231–243). Newbury Park, CA: Sage Publications.

Wilson, W. J. (1987). *The truly disadvantaged: The inner city, the underclass, and public policy*. Chicago: University of Chicago Press.