Sheltered Labor Markets, Public Sector Employment, and Socioeconomic Returns to Education of Arabs in Israel[1]

Noah Lewin-Epstein and Moshe Semyonov
Tel Aviv University

This study expands the theoretical discussion of ethnic economies by focusing on public sector employment and the role the state plays in affecting the socioeconomic fortunes of ethnic minorities. The authors argue that under certain circumstances public sector employment helps ethnic minorities attain higher socioeconomic rewards. The findings of the study indicate that Arab employees in Israel receive higher returns to education in the ethnic labor market, compared with the dominant market, and in the public sector rather than the private sector. The latter result also holds true when Arab workers are compared to Jews, revealing the benefits derived from the sheltered labor market.

INTRODUCTION

The Arab minority constitutes just over 17% of the population of Israel and is subordinate to the Jewish majority in every facet of stratification. More specifically, Arabs attain fewer years of formal schooling and generally receive lower-quality education (Shavit 1990), they hold less lucrative and less prestigious positions in the occupational structure (Lewin-Epstein and Semyonov 1986; Semyonov and Lewin-Epstein 1989), and their income and standard of living are considerably lower than those of Jews. Furthermore, Arabs are disadvantaged in comparison to Jews in the attainment of socioeconomic rewards. That is, their occupational status and earnings are considerably lower than those of Jewish workers

with the same social and demographic characteristics (Lewin-Epstein and Semyonov 1992a; Semyonov and Cohen 1990).

The purpose of this paper is to identify labor market structures that are relatively advantageous for the Arab population. Specifically, we examine the roles of highly segregated ethnic labor markets and of the public sector in providing job opportunities and higher returns to human capital resources for members of the minority population. By so doing we aim to contribute to an understanding of the impact of labor market structure on ethnically related socioeconomic inequality not only in Israel but in other multiethnic societies as well.

BACKGROUND

The Arab minority is residentially segregated from the Jewish majority. Approximately 85% of the Arab population reside in village communities and small towns. In fact, only seven of the 101 urban localities in Israel are administratively defined as mixed communities, while all other communities are either Jewish or Arab. This extreme residential segregation originated in the "pre-state" period. Jews who migrated to Palestine at the turn of the century chose to establish their own communities and to develop a separate economy. The contradictory interests of the two peoples fueled bitter conflicts that peaked in the war for Israel's independence. While Jewish-Arab relations in Israel have undergone many changes, the patterns of residential segregation have remained largely unaltered throughout the years.

It is safe to say that most Jewish and Arab citizens of Israel endorse residential segregation for national and cultural reasons. In a 1985 population survey, 30% of the Arab public and 50% of the Jewish public expressed the opinion that Arabs and Jews should reside in separate neighborhoods, and an additional 30% of either group were undecided (Smooha 1992). Although segregation is in large part voluntary, the residential patterns also reflect the dominant-subordinate relationship of Jews and Arabs. Arabs are interested in integration more than Jews are willing to permit. In the few known cases where Arab families have tried to move into Jewish communities, they met with strong opposition (Rosenfeld 1988).

The separation of Jews and Arabs is not only ecological but cultural as well. The population we here refer to as Arab is comprised of three major religious subgroups. Muslims constitute the largest group, accounting for three-quarters of the Arab population of Israel. Approximately 13% of the Arabs are Christian, and the Druze make up the remaining 10% (other groups, such as the Cherkesse, are rarely identified separately due to their small numbers). Christians are more urban than either Mus-

lims or Druze. They have lower fertility, attain higher levels of education, and have higher labor force participation rates.

Israeli Arab culture is deeply rooted in the broader Arab culture, and Arabic is considered the primary legitimate language. For Muslims and Christians, in particular, use of Arabic serves as an important expression of their national identity (Ben-Rafael 1994). Arab children are generally educated in Arabic-speaking schools where Hebrew is a compulsory second language. Arabic is the predominant vernacular in all Arab communities, and Hebrew is used when interacting with Jews (with Jewish employers, with Jewish clientele, and when shopping in the predominantly Jewish urban centers). Since most Jews do not speak Arabic, the Arabic language is not only a culture device but also serves as a barrier for Jewish economic activity in Arab communities (e.g., competition for jobs).

Arab communities are generally distant from major urban centers. Approximately half the Arab population resides in the northern region of Israel, and some 10% are located in the south. Most Arab urban communities are in fact oversized villages, and they lack the infrastructure needed to promote development. Consequently, the Arab economy is characterized by limited economic opportunities and an underdeveloped industrial base. Until recently the Arab economy was mostly a village economy catering to its own needs. Over the years, however, the agriculture sector shrank while manufacturing and commerce grew only marginally. Currently, the private sector in the Arab labor market is minute, and many of the private enterprises are small family-run sewing shops or construction material producers (Haidar 1990; Meyer-Brodnitz and Czamanski 1986). The scanty opportunities in Arab communities compel many workers to seek employment outside the Arab economy. Over 50% of the Arab workforce commute to work and find employment in Jewish communities (Lewin-Epstein and Semyonov 1992a; Semyonov 1988).

In recent years public services have become the leading economic branch in the Arab economy, accounting for almost 40% of all jobs in the Arab labor market. Indeed, local government and state agencies are currently the largest employers in the Arab sector. State agencies (in Arab communities) such as education, health, and welfare employ mostly Arabs and hence exert considerable control over job opportunities for the Arab population. Expansion of these opportunities is often politically motivated and is frequently responsive to the requests of the Arab electorate from its party representatives. Hence, when educated Arabs are faced with labor market hardship, expansion of the public sector in the Arab community also serves as a strategy of co-optation and control (Lustick 1980). Local government has expanded with the growth of the Arab population and the rise in the demand for services. Moreover, jobs in

local government have sprouted in part as a result of pressure from below (family members of the politically connected, university graduates, etc.) for employment opportunities.

Surprisingly, despite the limited opportunity structure of the Arab economy, research has revealed that Arab workers employed in Arab communities are occupationally advantaged relative to other workers (Semyonov 1988; Semyonov and Lewin-Epstein 1994). That is, Arabs employed in the segregated ethnic market are able to attain jobs of higher status and prestige than those employed in the dominant economy (i.e., the mainstream economy of Israel controlled by the Jewish majority), and they receive higher returns to their human capital resources (see also Shavit 1992). Evidently, the spatial and cultural segregation of Arabs, coupled with the particular structure of the ethnic economy, yields certain advantages, the nature of which we pursue in this article.

Ethnic economies are embedded in the social, political, and economic context of each society. Hence, the case of the Arab minority in Israel provides us with a rare opportunity to contribute to the literature on ethnic economies from a comparative perspective and to extend the application of this abstraction to additional phenomena. In the analysis that follows we evaluate the pertinence of the different market mechanisms that operate in the ethnic economy to provide subordinate minorities with socioeconomic advantages. The specific study reported here will enable us to highlight the impact of the public sector in the sheltered economy on the distribution of socioeconomic outcomes and rewards. Before turning to the empirical examination, however, it is necessary to describe in detail the theoretical underpinnings of the perspectives brought to bear on the present case.

PERSPECTIVES ON ETHNIC LABOR MARKETS

Students of ethnic inequality have long viewed spatial segregation as a structural device through which minorities are denied access to economic opportunities and rewards. Subordinate ethnic populations are likely to reside in places with limited industrial base, scarcity of jobs, and peripheral industries. Consequently, employment in the ethnic economy is generally associated with lower earnings than employment outside the ethnic labor market. Indeed, a series of studies have repeatedly demonstrated a negative association between minority concentration and economic outcomes (e.g., Lewin-Epstein 1986; Lewin-Epstein and Semyonov 1992a; Nachmias 1979; Tienda and Lii 1987; Tienda and Wilson 1992).

At the same time, however, spatial and social segregation can facilitate the development of a sheltered economy. One way in which segregation may provide benefits to a subordinate minority is through limiting compe-

tition from members of the superordinate group. For example, Aldrich et al. (1985) pointed out (with regard to ethnic retail trade in urban Great Britain) that residential concentration and cultural affinity of the ethnic minority are powerful determinants of protected ethnic markets. Since members of the dominant ethnic group are not likely to seek jobs in the minority ethnic market, competition is minimized. In the absence of competition, members of the minority population can enjoy job opportunities otherwise denied them (Semyonov 1988; Waldinger 1987).

Not only is the ethnic minority in residentially concentrated areas sheltered from competition with the superordinate group, but concomitantly the daily needs in the ethnic community generate job opportunities across the entire range of the occupational hierarchy. In Lieberson's words (1980, pp. 297–98), "As the group gets larger it is likely to develop certain internal strengths that will support some occupational activities even if outsiders are totally against their holding the position. Hence, if the black population base is large enough, there will be support for black doctors, black clergy and so on, even if they remain totally unacceptable to others. Likewise, there will develop certain entrepreneurial possibilities and other employment shifts will occur." In the ethnic labor market, members of the subordinate group fill not only low status, manual jobs but also managerial administrative and professional positions. According to this view, places with high minority concentration can provide workers with a measure of protection from discrimination and can serve as sheltered labor markets.

Research on ethnic segregation has traditionally utilized the general notion of competition with the dominant group (or absence thereof) to explicate the social position of minority members (Blalock 1967; Frazier 1957; Lieberson 1980). Recent work on ethnic minorities in North America, however, has drawn attention to entrepreneurship and economic organization of the ethnic communities as a particular mechanism by which ethnic groups can mitigate socioeconomic disadvantage (e.g., Light and Bonacich 1988; Model 1992; Portes and Bach 1985; Wilson and Martin 1982). In this body of literature the achievements of ethnic minorities are examined within the context of "ethnic economies." These ethnic economies are often referred to as "ethnic enclaves," and they occupy a unique and somewhat autonomous position within the larger economy. Ethnic enclaves have variously been defined in terms of place of residence (Sanders and Nee 1987), place of employment (Portes and Jensen 1987), or in terms of industrial concentration (Zhou and Logan 1989). However, the key conceptual factor in the literature on ethnic enclaves appears to be ethnic entrepreneurship (Light and Bonacich 1988): that is, ethnic minorities' ability to create their own economic subsystem based primarily on small businesses owned by ethnic entrepre-

neurs who employ coethnic workers. Under these circumstances, ethnic sentiments and solidarity ensure that the antiminority discrimination experienced by ethnic workers elsewhere in the economy will be absent from this setting.

The emphasis on the private sector and the importance given to entrepreneurial activity in the sociological literature on North America are not surprising in view of the predominance of the free-market economy in the United States. In the case of the Arab minority in Israel, however, the public sector seems to play an important role in mediating the relationship between ethnic group membership and socioeconomic outcomes. Hence, the case of the Arab minority in Israel provides us with an opportunity to evaluate the ways in which the public sector, embedded in the ethnic economy, affects socioeconomic rewards of the minority population. This issue is especially interesting in light of the importance a separate body of literature attributes to the public sector, and government employment in particular, as a mobility channel for minority populations (Eisinger 1986; Jones 1993; Maume 1985; Moss 1988; Wilson 1978).

THE PUBLIC SECTOR AND ETHNIC MINORITY EMPLOYMENT

Two features of the public sector are central to understanding its role as a preferred locus of employment for ethnic minorities in liberal democratic societies. The first quality derives from the bureaucratic nature of governmental organization (see Viteretti 1979; Eisinger 1986) and its greater commitment to universalistic criteria of recruitment and promotion (see Blank 1985; Maume 1985; Zwerling and Silver 1992). Wilson (1978) has pointed out that the expansion of the government sector in the United States has meant that a greater percentage of high-paying jobs became available to the black middle class (see also Boyd 1991). Indeed, the public sector was found to be more open and to generally operate according to principles of equality. Blank (1985), for example, has pointed out that the state appears to be more effective in enforcing universalistic guidelines concerning the employment of disadvantaged groups (e.g., ethnic minorities and women) and in adopting affirmative action policies in the public rather than the private sector. Hence, minority employees are more likely to be attracted to the public sector and are more likely to be found in federal, state, and local government.[2]

[2] We propose here that whether or not discrimination against ethnic minorities exists in the public sector has to do primarily with political and social agendas (e.g., affirmative action in the United States). Precisely because government agencies do not seek to maximize profits, they can pursue a policy of equal pay to ethnic minorities and can offer them compensation in excess of the minimum necessary to attract them in terms of the competitive market wage (e.g., Abowd and Killingsworth 1985; Asher and Popkin 1984).

In recent years closer attention has been given to the role of government in labor market performance and specifically to the centrality of state policies in accounting for international differences in service-sector employment (Esping-Andersen 1990; Rein and Rainwater 1987). The public sector offers labor contracts and pays wages like any other employer, but lack of a profit motive "and the sheer inoperability of the conventional productivity-logic mean that orthodox economic models of the labor market hardly apply" (Esping-Andersen 1990, p. 157). Consequently, the state may foster public sector expansion in order to achieve political goals. Hence, the second feature of interest here concerns the political leverage that often characterizes the public sector (Dye and Renick 1981; Bobo and Gilliam 1990). To the extent that the public sector is controlled by political actors, constituents may affect allocation decisions by applying pressure on elected officials.

Political allocation may help explain why the federal government can make better job offers and have higher minority employment relative to other employers. Indeed, this may be a deliberate policy to accommodate the minority community in regions where the minority political clout is greater (e.g., Abowd and Killingsworth 1985, p. 81). In the context of segregated communities, the ethnic minority has considerable control over local government and the jobs it provides. In the context of the United States, for example, Eisinger (1986, p. 170) has pointed out that "it is possible that the local civil service, with its more abundant jobs, swifter rate of job growth, and greater sensitivity to local political conditions than the federal system, has functioned as a true mobility channel."

Eisinger's (1986) findings indicated that blacks employed in the public sector achieved, on average, higher occupational status than their siblings employed in the private sector. Similarly, Asher and Popkin (1984) found that the U.S. Postal Service (unlike the private sector) paid nonwhites and women wages similar to those paid to white men with comparable qualifications. They attributed the Postal Service wage "premium" to its nondiscriminatory wage policy. Maume (1985) has further suggested that when local government makes up a substantial portion of the local economy, employment of minorities is likely to increase due to affirmative action policies.

In Israel the government has long practiced what Kretzmer (1990) termed "institutional discrimination" against Arabs, manifest in budgetary decisions and resource allocation, at the group level. With respect to employment, the government has not established an affirmative action policy. Yet, it is illegal in Israel to discriminate against workers on account of age, sex, religion, or ethnicity. Due to the sensitivity of government to domestic politics, and the greater scrutiny of its actions, the

public sector is more likely than the private sector to adhere to formal equality in treating Arab employees. More importantly, the considerable segregation of Jews and Arabs and the localization of many public services, such as education and welfare, have provided the Arab population substantial leverage in demanding public sector jobs.

The above conceptualization of the public sector in the context of an ethnic economy draws out some similarities to the theoretical construct of "ethnic hegemony" proposed by Jiobu (1988), although his concept was developed with a view to ethnic entrepreneurship. The idea of hegemony places substantial emphasis on ethnic control. It refers to economic activity controlled by an ethnic minority, where the market has a disproportionately large number of ethnic employers (particularly small entrepreneurs) and employees and where internal labor markets emerge. Jiobu places strong emphasis on the ability of the group to interface with the majority and to concentrate on producing goods or services that are in high demand in the majority population. Under these conditions the minority can succeed economically even in the face of adverse attitudes. In the ethnic hegemonic market, it is argued, ethnic employees receive higher returns than in the dominant economy.

We propose that under certain circumstances the above notion may be applied to the public sector as well. When ethnic minorities are segregated and the public sector reaches a large enough size, the ethnic community may gain hegemony over portions of the public sector, and this in turn provides individuals access to opportunities otherwise unavailable to them. Indeed, the presence of a large public sector in communities where ethnic minorities make up a large proportion of the population generally provides minority members with better access to opportunities (Maume 1985).

HYPOTHESES

The analytical models utilized in this study derive from the status attainment and the human capital framework (Blau and Duncan 1967; Becker 1975; Mincer 1974). In view of the emphasis this paradigm places on education (a central indicator of human capital) and the significance of differential labor market regimes for the outcomes of ethnic minorities, we focus in the present study primarily on status and earning returns to education. Following the logic embodied in the perspectives outlined in the previous section, it is possible to derive explicit, although not necessarily contradictory, hypotheses regarding the socioeconomic returns to education in different market situations.

According to the sheltered labor market perspective, we expect that socioeconomic returns for Arab workers would be higher in the ethnic

economy than in the dominant economy. This result should hold for both the public and the private sectors.[3] In the absence of competition, workers employed in the ethnic economy will command higher returns to human capital resources (e.g., education). According to the perspective that regards the public sector as a mobility channel for members of the subordinate minority, we would expect returns to human capital resources to be higher in the public sector, both in the ethnic and the dominant economy.

The two hypotheses outlined above seem to emphasize different market mechanisms that determine socioeconomic rewards of the minority population. The two hypotheses, however, should not be viewed as mutually exclusive. Following the theoretical reasoning discussed earlier, it is reasonable to expect that sector of employment will interact with type of labor market to produce divergent patterns of socioeconomic attainment. In fact, proponents of the ethnic enclave approach argue that advantages for workers in the ethnic economy derive primarily from both cultural affinity binding entrepreneurs and their coethnic workers and from the economic linkages between firms in the ethnic labor market. According to this logic, we expect Arabs employed in the private sector in the ethnic economy to receive relatively higher returns than other workers.

On the basis of the arguments concerning the public sector, we hypothesize that employment in the public sector in the ethnic labor market will be most advantageous to minority workers. The high level of concentration of the ethnic minority in certain communities provides them some measure of control over the political and bureaucratic apparatus. This control, in turn, leads to better access to employment opportunities in the public sector, in general, and to positions of high status, in particular. Following this logic, in the absence of strong affirmative action policies, on the one hand, and the political allocation of public resources, on the other hand, the public sector in Arab communities may serve as a primary mechanism for rewarding members of the subordinate group. Consequently, we expect that returns to human capital resources will be

[3] We propose that the advantage holds for the private sector as well as the public sector, even though, as one reviewer noted, ethnic economies are typically made up of economic undertakings in peripheral industries (Waldinger, Aldrich, and Ward 1990). It is possible, hypothetically, that the minority workforce employed in the dominant economy would concentrate in core industries, in which case the industrial composition of minority workers in and out of the ethnic economy would result in socioeconomic advantages for those employed outside the ethnic economy. We believe, however, that ethnic minorities are generally overrepresented in peripheral industries not only in ethnic economies but in the dominant economy as well. In the case of Arabs in Israel we found that approximately equal proportions (65%) of those who worked in the private sector in and out of the ethnic economy were employed in peripheral industries.

higher in the public sector within the ethnic economy than in other set-tings.

DATA AND VARIABLES

Data for this study were obtained from the public use sample of the 1983 Israeli population census (Central Bureau of Statistics 1983).[4] Analyses are limited to the Arab population between 25 and 64 years old who resided in communities with more than 5,000 residents.[5] Individuals se-lected for the extensive interview provided detailed information on edu-cation, employment status, place of employment, occupation, and earn-ings. This information forms the basis for the variables included in our study.

Two dependent variables are examined in the analyses carried out in the paper—occupational status and earnings. *Occupational status* is measured by the socioeconomic index for occupations in Israel (Tyree 1981), and scores are given at the three-digit classification level. The scale ranges from 0 (low status) to 100 (high status). *Earnings* are measured as the natural logarithm of the gross monthly earnings from employment (measured in Israeli shekels).

The predictive variables included in the analyses are those traditionally utilized in status attainment and earning equations. They include educa-tion, age, potential labor market experience, hours of work, knowledge of Hebrew, and religious affiliation. *Education* is the number of years of formal schooling. *Age* is measured in years at the last birthday. For lack of more specific information, we defined *potential experience* as [age − (education + 6)]; it replaces age in the earnings equations. We added the square of potential experience to the equations to tap the nonlinear relationship between experience and earnings. *Hours of work* is the usual number of hours worked per week. *Knowledge of Hebrew* is a dichoto-mous variable with the value of "1" for speaking knowledge and "0" otherwise. As noted earlier, Arabic is the spoken language in Arab com-munities, while Hebrew is generally required when interacting in the dominant (mainstream) economy. Hence, knowledge of Hebrew probably exerts a differential effect on the compensation Arab employees receive in the two market segments (for a discussion of language skills and labor

---

[4] The public use sample is based on a 20% random sample of all households enumer-ated in the census. All persons over 15 years old in the selected households were required to supply detailed social and demographic information in addition to the standard census form.

[5] At the time of data collection slightly over 70% of the Arab population of Israel resided in these communities (Central Bureau of Statistics 1984, table II/10).

market outcomes see Evans [1987]). *Religion* is a dichotomous variable for which Christian Arabs receive the value "1," and all others (mostly Muslims) receive the value "0." The purpose of including this variable is to control for unobserved cultural and social differences that may co-vary with some of the other predictive variables.

We defined the *ethnic labor market* on the basis of location; it includes the 34 urban Arab communities (those with a population of 5,000 or more). We classified Arabs employed in the 60 urban all-Jewish communities and in the seven mixed-population communities (which include some of the largest cities in Israel, such as Jerusalem and Tel Aviv) as part of the dominant labor market.[6] Arab workers who reside in Arab communities and whose place of employment was not specified we considered to be part of the ethnic labor market.[7] We defined the *public sector* as public services and operationalized it on the basis of the industrial classification. It includes all public and community services, such as local government, education, welfare, and health services. Persons employed in all other industries were included in the private sector.

FINDINGS

Descriptive Overview

Before we examine the particular hypotheses advanced in the previous section, a brief review of the major attributes of Arabs employed in the various labor markets is in order. The figures in table 1 reveal that just under half of the Arab workers in our sample (48% of the men and 49% of the women) are employed outside Arab communities in what we refer to as the dominant labor market. The locus of the labor market (whether in ethnic communities or the dominant economy) clearly interacts with sector type so that for men and women alike the public sector provides a larger proportion of jobs within the ethnic labor market than outside it. In the ethnic labor market, 28% of men and 74% of women are employed in public sector jobs. Outside the ethnic labor market public sector jobs account for 24% of employed Arab men and 51% of employed Arab women.

[6] It is important to note the ethnic overlap between communities and business ownership. According to Meyer-Brodnitz and Czamanski (1986), approximately 84% of manufacturing workshops and factories in Arab communities were locally owned, as were practically all retail and service businesses. Arab-owned establishments made up a negligible fraction of the dominant economy.

[7] The overwhelming majority of Arab workers who reside in Arab communities and whose place of employment was not known were in the transportation and construction industries, where, indeed, it is difficult to specify a single place of employment. Hence, we assume their base location to be their community of residence and consider these workers as part of the ethnic labor market.

TABLE 1

MEANS OF VARIABLES

VARIABLES	ARAB MEN				ARAB WOMEN			
	Ethnic Labor Market		Dominant Labor Market		Ethnic Labor Market		Dominant Labor Market	
	Public	Private	Public	Private	Public	Private	Public	Private
Earnings (ln)	10.07*	9.73	9.88	9.74	9.77*	9.19	9.65	9.33
	(.60)	(.59)	(.59)	(.59)	(.63)	(.82)	(.73)	(.60)
Occupational SES	55.57*	30.56†	43.53	32.00	58.38*	31.03	51.65	29.94
	(23.29)	(12.00)	(25.03)	(12.02)	(19.50)	(12.80)	(22.81)	(12.94)
Education (years)	11.83*	7.34†	10.50	7.67	12.20*	7.95	11.82	8.61
	(5.13)	(3.58)	(5.63)	(3.96)	(3.67)	(4.81)	(4.78)	(4.34)
Age	37.06	37.17	38.75*	37.53	34.03‡	34.02†	37.38	37.16
	(9.72)	(9.22)	(10.20)	(9.91)	(8.58)	(8.66)	(9.62)	(10.18)
Hours of work (per week)	38.00*	44.52†	43.21	45.83	31.00*	40.24	34.20	40.89
	(12.97)	(11.72)	(11.17)	(10.72)	(11.43)	(13.25)	(12.81)	(12.64)
Christian (%)	.18‡	.17†	.22	.21	.44‡	.48†	.56	.63
	(.39)	(.38)	(.41)	(.41)	(.49)	(.50)	(.50)	(.48)
Use of Hebrew (%)	.57	.57	.51*	.57	.41‡	.43†	.51	.56
	(.49)	(.49)	(.50)	(.49)	(.49)	(.49)	(.50)	(.49)
N	1,837	6,101	1,297	4,619	801	349	516	510

NOTE.—Nos. in parentheses are SDs.

* Differences between this segment and all others are significant at $P < .05$.

† The private sector in and out of the ethnic labor market differ significantly at $P < .05$.

‡ The public sector in and out of the ethnic market differ significantly at $P < .05$.

A comparison of the attributes of employees in the various market segments reveals considerable variations among the subpopulations. The most noticeable difference is between those employed in the public sector in the ethnic market and all other workers. Members of the former group—whether men or women—attained the highest levels of schooling, enjoy the highest levels of earnings, and hold the highest status jobs. Concomitantly, workers in the public sector work fewer hours per week than workers in other segments of the economy. By contrast, workers in the private sector, especially in the Arab market, have low levels of education and receive modest socioeconomic rewards. The low levels of earnings in the private sector are even more apparent when the number of hours worked per week is taken into consideration.

Although the comparison between economic sectors reveals similar patterns for men and women, the figures in table 1 also present some interesting gender differences. Not surprisingly, women work fewer hours per week than men in every segment of the labor market, and the gender difference is most pronounced in the public sector. Women in the labor force are also more educated than men (as a result of the selective nature of female labor force participation), and their occupational status is generally higher, especially in the public sector. Nonetheless, the earnings of women are substantially lower than the earnings of men in every segment of the economy.

Figures in table 1 disclose a higher proportion of Christian workers in the dominant labor market. This reflects the fact that Christian Arabs are more likely than Muslims to reside in some of the largest communities of Israel (such as Tel Aviv–Jaffa and Haifa), which are mixed communities and are classified as part of the dominant labor market. The proportion of Christians is especially high among women, since labor market participation of Christian women is substantially higher than that of Muslim women (Lewin-Epstein and Semyonov 1992*b*).

Returns to Education

Occupational status.—In order to examine the hypotheses concerning the effect of the sheltered market and the public sector on occupational attainment, we estimate three multivariate covariance models. Coefficient estimates for the models are presented in table 2 and are listed separately for Arab men and Arab women. In model 1 we test the hypothesis that the ethnic labor market shelters the minority and ensures higher returns to education. Thus, the model includes the type of labor market and three interaction terms, along with personal attributes (i.e., education, age, and religion). Two of the interaction terms capture the use of Hebrew inside and outside the ethnic labor market (the comparison group

is no use of Hebrew). The third term, the interaction of education and labor market, estimates the extent to which returns to education differ in the ethnic labor market and outside it. Model 2 tests the hypothesis that the public sector provides the ethnic minority with socioeconomic advantages and with higher returns to education. In this model, sector of employment (whether public or private) and the interaction between education and sector are added to the individual attributes. Finally, in model 3 we compute a covariance model in which the public sector and ethnic labor market are replaced by a set of dummy variables that classify the four combinations of market and sector type. The comparison group is the public sector in the ethnic labor market, and the dummy variable representing this segment is excluded from the model. Interactions of the dummy variables with education are also added to the model. Model 3 tests the hypothesis that status returns are higher in particular labor market segments (e.g., the private sector in the ethnic labor market).

The results from models 1 and 2 lend support to the hypotheses that returns to education are higher in the ethnic labor market and in the public sector. The figures indicate that both the ethnic labor market and the public sector have significant effects on occupational status, although they differ somewhat for men and women. Occupational status returns to education are substantially higher in the ethnic labor market than outside it (only for men) and in the public sector than in the private sector (for both men and women). However, the impact of sector (public vs. private) on returns to education is substantially higher than that of type of labor market (ethnic labor market vs. dominant labor market). This difference is evident from the coefficients for the respective interaction terms ($b = 2.37$ vs. $b = 0.55$ for men and $b = 2.17$ vs. $b = 0.30$ for women). These differences are also manifest in the coefficient of determination (R^2) for the two models.

Although the data from models 1 and 2 are quite revealing, they do not inform us whether specific combinations of type of labor market and sector of employment produce different returns to education. Thus, in model 3 we test whether returns to education are higher in the private sector within the ethnic labor market than in other sectors and whether employment in the public sector is more advantageous within the ethnic market than outside it. In line with the research question raised in this paper our primary focus in model 3 is on returns to education in the various segments of the labor market. Since the excluded labor market segment is the public sector in the ethnic labor market, the coefficient for education in model 3 indicates the occupational status returns to every year of schooling for persons in this segment (i.e., when the dummy variables = 0). Arab men in the public sector of the ethnic labor market receive 3.75 status points for each year of schooling, and Arab women

TABLE 2

Unstandardized OLS Coefficients for Covariance Models Predicting Occupational Status

Variables	Arab Men			Arab Women		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Education (years)	2.39**	1.36**	3.75**	3.26**	1.48**	3.82**
	(.04)	(.03)	(.06)	(.11)	(.11)	(.13)
Age	.24**	.14**	.14**	.19**	.07	.09
	(.01)	(.01)	(.01)	(.04)	(.04)	(.04)
Christian	−.27	1.41**	1.52**	−5.57**	−2.94**	−2.37**
	(.30)	(.27)	(.27)	(.73)	(.65)	(.64)
Public sector		−13.02**			−6.46**	
		(.57)			(1.54)	
Education × sector		2.37**			2.17**	
		(.05)			(.14)	
Ethnic labor market (EthLM)	−2.47**			2.93		
	(.53)			(1.73)		
Education × EthLM	.55**			.30**		
	(.05)			(.14)		
Hebrew in EthLM	−.70*		.21	−2.14*		−.39
	(.31)		(.27)	(.95)		(.83)
Hebrew out of EthLM	−.04		.17	−3.10**		−2.56**
	(.36)		(.32)	(.98)		(.85)

Private sector in the EthLM (PrEthLM)			10.36**			8.97**
			(.80)			(2.18)
Private sector in the dominant labor market (PrDomLM)			10.53**			5.07*
			(.83)			(2.19)
Public sector in the dominant labor market (PuDomLM)			−4.58**			−.32
			(1.02)			(2.34)
Education × PrEthLM			−2.44**			−2.50**
			(.07)			(.20)
Education × PrDomLM			−2.35**			−2.14**
			(.07)			(.19)
Education × PuDomLM			−.24**			.31
			(.08)			(.18)
Intercept	5.48	15.35	4.82	5.13	17.8	9.66
Adjusted R^2	.43	.54	.56	.51	.61	.63
N	13,849					2,175

NOTE.—Nos. in parentheses are SEs. The comparison group for the labor market contrasts is the public sector in the ethnic labor market, and the comparison group for the interactions with education is "no knowledge of Hebrew."

* $P < .05$.
** $P < .01$.

in the same market segment receive 3.82 points for every additional year of schooling. These status returns are higher than in any other segment of the market, as is evident from the negative sign of all interactions between education and market segments.

The figures in model 3 also indicate that status returns to education are lowest in the private sector of the ethnic labor market (the largest negative coefficients), followed by the private sector in the dominant labor market. An interaction effect, then, is apparent, whereby occupational status returns to education are higher in the public sector than in the private sector, and sector of the economy interacts with the type of labor market (ethnic vs. dominant) to produce divergent levels of returns to education. For men, status returns to education are highest in the public sector in the ethnic labor market.[8] For women the important distinction is between the public and private sectors, and there appears to be no significant difference in status returns to education derived from employment in the ethnic or the dominant labor markets (when controlling for public sector).

The findings reported thus far lend support to our theoretical expectations. Nevertheless, it is not clear to what extent higher returns to education in the public sector are due to its more egalitarian policies or are due, alternatively, to its particular occupational composition. According to the latter explanation, the observed findings may have been produced by the bimodal occupational distribution of Arabs in the public sector. The public sector is composed of health professionals, teachers, and administrators at the top, nonmanual unskilled workers at the bottom, and relatively few occupations in the middle. Consequently, the public sector can accommodate either highly educated workers or those with little schooling. Hence, according to this argument, education serves as a strong statistical discriminator between the two groups. By way of contrast, the occupational distribution of Arabs employed in the private sector is concentrated at the middle and bottom of the status scale. Thus, Arabs who are employed in the private sector, whether educated or not, face a limited opportunity structure, and their education can make little difference for their occupational status.[9]

In order to test this possibility we reestimated the covariance models predicting occupational status for a subsample of the population who had occupational status scores below 70. This procedure in effect eliminated the high status occupations and provided a test of differential status

[8] The coefficient estimates for returns to education derived in the various labor market segments are significantly different from one another except for returns in the private sector within and outside the ethnic labor market. In these two segments returns to education appear to be similar.

[9] We thank an anonymous reviewer for pointing out this possibility.

returns to education in the public and private sectors for the intermediate and lower status occupations. This analysis revealed a general decline in the magnitude of the effect of education, as might be expected, but displayed the same pattern of differential returns to education.[10] We can conclude, therefore, that neither the shape of the occupational distribution nor the type of occupations generated the higher status returns to education in the public sector.

Earnings.—In table 3 we present four covariance models that estimate the earning returns to education for men and women. The models are designed according to the same logic discussed with regard to occupational status. Model 1 tests that hypothesis of differential earning returns in and outside the ethnic labor market. It incorporates variables traditionally used in earnings equations—education, potential labor market experience, and hours of work—and whether one is Christian or non-Christian. In addition, the model includes a dichotomous variable for type of labor market (ethnic vs. dominant) and interaction terms for labor market type with use of Hebrew and with education. In model 2 we replace labor market type with economic sector of employment to test the hypothesis of differential earnings returns in the public and private sectors. In model 3 we include a set of dummy variables to capture the four combinations of labor market type by sector and their interactions with education. Model 4 adds occupational status to the earnings equation to evaluate the role of job allocation.

Results of the analyses for all models reveal that earnings tend to rise with education, hours of work, and experience (experience has a curvilinear effect). Christian men earn significantly more than non-Christian men, but we find no significant differences among women.[11]

---

[10] Among men, the coefficient estimates for the effect of education (representing returns in the public sector of the ethnic labor market) in the restricted sample was $b = 2.00$, and the coefficients for the interaction terms were $b = -0.17$ for the public sector in the dominant labor market, $b = -1.21$ for the private sector in the ethnic labor market, and $b = -1.18$ for the private sector in the dominant labor market. Except for the private sector in and out of the ethnic labor market, the above-mentioned coefficients differ significantly from one another. For women the coefficient estimate for education was $b = 2.87$, and the coefficients for the interaction terms were $b = -0.15$, for the public sector in the dominant labor market, $b = -1.89$ for the private sector in the ethnic labor market, and $b = -1.49$ for the private sector in the dominant labor market. Only differences between the public sector and the private sector are statistically significant.

[11] We can only speculate at this point that the higher socioeconomic rewards that Christian men attain may be attributed to their concentration in large urban communities. They also tend to espouse less traditional orientations, enhancing their ability to successfully participate in modern economics (Al-Haj 1987). With regard to women, the negative effect of being Christian on occupational status may be due to the higher participation rates of Christian Arab women. Increased participation rates are associ-

The coefficients for Hebrew are also of substantive interest and clearly conform to our expectation. Among Arab men, knowledge of Hebrew increases earnings, but the effect is dissimilar in the ethnic and the dominant labor markets. Knowledge of Hebrew adds 27%–28% to the average earnings in the dominant labor market and only 12%–13% to earnings in the ethnic labor market. For women, knowledge of Hebrew has no statistically significant effect on earnings in the ethnic labor market but adds between 18% and 22% (depending on the model evaluated) to the earnings of women employed in the dominant labor market.

Since the focus of this paper is on socioeconomic returns to education, we turn now to evaluate the coefficients of education in the various models. According to the results in models 1 and 2, men employed in the ethnic labor market gain 1% more for every year of schooling than men employed outside the ethnic labor market. For men employed in the public sector earnings are 2% higher for every year of schooling than for men in the private sector. Women employed in the ethnic labor market earn 2% more for every year of schooling and accrue a similar benefit when working in the public rather than the private sector. Indeed, the data support the hypotheses that returns to education are higher both in the ethnic labor market and in the public sector.

Model 3 gives additional insight into the ways in which education determines earnings in the different segments of the labor market. Recalling that the coefficients for the variable "education" represent earnings returns for those in the public sector of the ethnic labor market (the excluded group), we found that every year of education adds 7% to earnings for men and 8% for women. Earnings returns are substantially lower in other segments of the labor market, as can be discerned from the negative coefficients for the interactions of education and labor market segments. For men, all coefficients are significantly different from one another. The lowest returns are in the private sector of the ethnic labor market, followed by the private sector of the dominant labor market, and returns to education are highest in the public sector of the ethnic labor market.[12] In the case of women, earnings in the public sector are

---

ated with lower selectivity and with an overflow into lower-status jobs (Lewin-Epstein and Semyonov 1992b). The insignificant effect of religion on earnings is consistent with a large body of research that repeatedly demonstrates the lack of race and ethnicity effects on women's earnings.

[12] One may argue that returns to education could be higher in the public sector even if sector of the labor market per se had no effect on level of returns. This would be the case if the functional form of returns to education were nonlinear, given the fact that the mean level of education is higher in the public sector than in the private sector. Our analysis, however, does not support such an explanation. First, the mean

the same regardless of the type of labor market (ethnic vs. dominant), and the same is true for the private sector. Differences in returns, then, are associated with public and private sector employment, with the former providing a "premium" of 3% for every year of schooling.

The Role of Job Allocation

The findings reported in the previous section (models 1–3) revealed earnings advantages in the ethnic labor market and in the public sector. In order to examine the extent to which earnings gains are mediated through job allocation, we reestimated the covariance models for earnings with occupational status added to the equations (model 4 in table 3). The results of this analysis shed light on the social processes underlying the patterns observed earlier. When occupational status is included in the earnings models, we find that the net earnings returns to education decline substantially. For example, for men in the public sector of the ethnic labor market the total added earnings for every year of schooling are 7% (model 3), while the net addition of every year of schooling, after controlling for occupational status, is 3% (model 4). For women the figures are 8% and 4%, respectively.

Examining the interaction terms in model 4, we find that for men earnings returns in the public sector of the ethnic labor market remain higher than in all other segments and that the differences are statistically significant with one exception (the private sector in the dominant labor market). Among employed women all differences in earnings returns disappear once we control for occupational status. Hence, for women most of the effect of education on earnings is mediated through occupational sorting.

Evaluating the Extent of Labor Market Sheltering—Comparing Arabs to Jews

Throughout the analysis we consistently find that the public sector provides Arab workers with higher status and earnings returns to education, and for men the benefits are significantly greater within the ethnic labor

---

level of education in the public sector is quite similar in the ethnic labor market and the dominant labor market. Yet returns to education are substantially higher in the ethnic labor market. Second, a direct examination of a nonlinear effect of education on occupational status and earnings (not presented in the paper) revealed no higher returns to higher levels of education. Hence, the explanation of the advantage of public sector employment within the Arab community should be derived from its unique position.

TABLE 3

Unstandardized OLS Coefficients for Covariance Models Predicting ln Earnings

VARIABLES	Arab Men				Arab Women			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
Education (years)	.05**	.04**	.07**	.03**	.07**	.06**	.08**	.04**
	(.002)	(.002)	(.003)	(.003)	(.005)	(.006)	(.007)	(.008)
Experience	.02**	.02**	.02**	.02**	.03**	.03**	.03**	.03**
	(.002)	(.002)	(.002)	(.002)	(.005)	(.005)	(.005)	(.005)
Experience²	−.0002**	−.0003**	−.0003**	−.0003**	−.0004**	−.0004**	−.0004**	−.0004**
	(.00003)	(.00003)	(.00003)	(.00003)	(.0001)	(.0001)	(.0001)	(.0001)
Christian	.06**	.09**	.08**	.07**	−.02	.02	.02	.04
	(.01)	(.01)	(.01)	(.01)	(.03)	(.03)	(.03)	(.03)
Hours of work (per week)	.005**	.006**	.006**	.006**	.005**	.01**	.007**	.009**
	(.0005)	(.0005)	(.0004)	(.0005)	(.001)	(.001)	(.001)	(.001)
Public sector		−.11**				.10		
		(.03)				(.07)		
Education × sector		.02**				.02**		
		(.002)				(.007)		
Ethnic labor market (EthLM)	.06**				.003			
	(.02)				(.076)			
Education × EthLM	.01**				.02**			
	(.002)				(.006)			
Hebrew in EthLM	.12**		.13**	.13**	.02		.06	.07
	(.01)		(.01)	(.01)	(.04)		(.04)	(.04)

642

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Hebrew out of EthLM	.28** (.02)		.28** (.02)	.27** (.02)		.18** (.04)	.20** (.04)	.22** (.04)
Private sector in the ethnic labor market (PrEthLM)			.16** (.04)	.05 (.04)			-.10 (.11)	-.19 (.11)
Private sector in the dominant labor market (PrDomLM)			.02 (.04)	-.09** (.04)			-.16 (.11)	-.21* (.11)
Public sector in the dominant labor market (PuDomLM)			-.02 (.05)	.02 (.05)			-.04 (.11)	-.04 (.11)
Education × PrEthLM			-.04** (.003)	-.01** (.004)			-.03** (.01)	-.007 (.01)
Education × PrDomLM			-.03** (.004)	-.006 (.004)			-.03** (.01)	-.006 (.01)
Education × PuDomLM			-.02** (.004)	-.015** (.004)			-.016 (.009)	-.01 (.009)
Occupational status				.01** (.0004)				.01** (.001)
Intercept	8.66	8.84	8.65	8.55	8.05	8.13	8.15	8.11
Adjusted R^2	.15	.14	.18	.21	.22	.24	.26	.28
N				11,111				1,852

NOTE.—Nos. in parentheses are SEs. The comparison group for the labor market contrasts is the public sector in the ethnic labor market, and the comparison group for the interactions with Hebrew is "no knowledge of Hebrew."

* $P < .05$.
** $P < .01$.

TABLE 4

COSTS (OR BENEFITS) IN OCCUPATIONAL STATUS AND EARNINGS THAT ARABS WOULD
RECEIVE HAD THEIR RETURNS TO EDUCATION BEEN EQUAL TO THOSE OF JEWS

	ETHNIC LABOR MARKET		DOMINANT LABOR MARKET	
	Public	Private	Public	Private
Arab Men:				
Occupational SES	−3.78	5.65	−1.68	11.20
Earnings	−.21	.07	.15	.35
Earnings (controlling for SES)	−.16	−.07	.08	.11
Arab Women:				
Occupational SES	−4.51	8.27	3.31	5.60
Earnings	−.34	.37	.10	.15
Earnings (controlling for SES)	−.19	.23	.05	.13

NOTE.—See n.11 above for a description of the calculation procedure.

market. It is important, therefore, to examine whether employment in
the public sector actually offers the ethnic minority some protection from
economic discrimination or whether the observed differences simply re-
flect a general advantage enjoyed by all those who work in the public
sector (Jews and Arabs alike). In order to explore this possibility, we
compare the status and earnings returns of Arabs in each of the four
labor market segments with those of relevant Jewish workers (e.g., Arab
men in the public sector in the ethnic labor market and in the dominant
labor market are compared with Jewish men employed in the public
sector).

For the sake of parsimony we focus only on the status and earnings
returns to education (although the models analyzed include all the vari-
ables discussed earlier in the text). We evaluate the magnitude of status
and earnings costs (or benefits) for Arabs with average education when
compared to Jews in the same industrial sector. Positive values represent
socioeconomic costs, whereas negative values indicate socioeconomic
benefits enjoyed by Arabs.[13]

The results of the analysis are presented in table 4 and provide addi-
tional insight into the role of the public sector and the ethnic labor market
as shelters from economic discrimination. The findings reveal that the

[13] The figures in table 4 were calculated from the formula $(b_J - b_A) x_A$, where b_J
and b_A represent the partial regression coefficients for education for Jews (J) and
Arabs (A), respectively, and x_A is the mean education of Arabs. We performed the
computation separately for each segment of the labor market, and the models con-
trolled for all variables included in the covariance models.

disadvantage of Arabs (at least with regard to returns to education) is greater in the private sector than in the public sector. The disadvantage in the former sector is evident for both men and women, whether inside or outside the ethnic labor market. For example, had Arab men employed in the private sector in the dominant labor market been rewarded for their education to the same extent as Jews in the private sector, their occupational status would be 11.2 status points higher. Similarly, the occupational status of Arab women employed in the private sector of the ethnic labor market would increase by 8.27 points had their status been determined like that of Jewish women in the private sector.

The findings regarding the public sector are more complex and high-light the protective nature of the ethnic labor market. In general, Arabs experience less discrimination in the public sector. Furthermore, in the public sector of the ethnic labor market Arabs are advantaged even in comparison to Jews. The benefit is revealed in the negative sign preceding all figures in the column of the public sector in the ethnic labor market. For example, had Arab men in the public sector of the ethnic labor market been rewarded similarly to Jews, their expected occupational status would be 3.78 points lower than their actual status and their earnings would decrease by 16%. For women, the benefits associated with employment in the public sector of the ethnic economy amount to 4.5 status points and 19% of their earnings. We can conclude, therefore, that the public sector is less discriminatory toward the ethnic minority. Moreover, the public sector within the ethnic labor market not only shelters minority workers from discrimination but provides absolute socioeconomic advantages.

DISCUSSION AND CONCLUSIONS

The structural position of Arabs in the economy of Israel strongly affects their socioeconomic rewards. The Arabs' ability to convert human capital resources (i.e., education) into occupational status and earnings depends upon the segment of the labor market in which they are employed. Our analysis reveals that returns to education are higher in the ethnic labor market than in the dominant labor market and in the public sector than in the private sector. Employment sector (public vs. private), however, more strongly affects returns to education than labor market type (ethnic vs. dominant), and in the public sector Arabs are less disadvantaged when compared to Jews. In fact, sector and labor market type combine to produce the highest status and earnings returns to education in the public sector of the ethnic labor market.

The concept of a sheltered labor market outlined at the outset of the paper appears to have some validity in the case of the Arab minority.

Employment in the ethnic labor market is advantageous for Arab workers. These advantages, however, can be attributed in large part to the industrial structure and in particular to the predominance of the public sector in the ethnic labor market. Put differently, there appears to be a sheltered labor market effect in the public sector but not in the private sector of the ethnic labor market. The findings reveal that returns to education are similar in both segments of the private sector.

Several factors may be germane to the lack of any advantage to private sector employment in the ethnic labor market. First, business establishments are small (all but a handful employ fewer than 10 employees), and they provide very little managerial, professional, or other high-status job opportunities. Second, without exception, private sector workshops and firms in the ethnic labor market are in peripheral industries that are highly competitive and low profit. In particular, competition with Jewish-owned firms minimizes the ability to offer earnings advantages to their employees. Evidently, outcomes in the private sector, whether in the ethnic labor market or the dominant market, are governed by market processes.

Our data did not permit us to directly examine the ethnic enclave thesis. Nonetheless, we found no indication that a network of exchange and support among firms has emerged in the private sector of the ethnic market to provide advantages that characterize the primary industrial sector of the economy. Indeed, many firms in the Arab market serve as subcontractors for large Jewish-owned firms and are thus dependent on the terms of exchange set by the latter firms. Under these conditions ethnic hegemony in private sector activity cannot be achieved and the ethnic labor market cannot serve as a sheltered market.

Our findings demonstrate that the public sector provides the Arab minority with higher socioeconomic rewards and higher returns to education. The public sector's bureaucratic characteristics and its openness to greater public scrutiny create a more advantageous environment. In the case of Arabs in Israel, as in other social settings (e.g., Rein 1985; Wilson 1978), government services provide higher status and higher paying jobs since they require educated and trained labor. Of central importance to our study, however, is the fact that status and earnings returns to education are generally higher in the public sector within the ethnic labor market than in any other segment of the economy. It should be noted that these conclusions more appropriately apply to Arab men than to Arab women, for whom public sector employment provides similar returns whether in or outside the ethnic labor market. Possibly, the small numbers of employed Arab women, and the limited range of jobs held by them in the public sector (mostly teaching and health care), render such a labor market effect untenable.

In considering the advantages associated with public sector employment in the ethnic labor market it is useful to distinguish between market processes and institutional processes. As we have seen, most of the advantages in the public sector of the ethnic labor market are mediated through job allocation. Arabs in this segment of the economy gain access to jobs of high status and authority (mostly in education, health, and welfare services) with hardly any competition from Jewish employees. The lack of competition is both a result of the ecological segregation of Arab communities and of cultural barriers. We noted specifically that language is likely to serve as a barrier, since daily interaction in the Arab communities takes place in Arabic, a language with which most Jews have little facility. Our findings shed some light on this issue from the flip side. Particularly with respect to earnings, we found that knowledge of Hebrew added only slightly to the earnings of men and provided virtually no additional earnings for women in the ethnic labor market. Yet, knowledge of Hebrew considerably increased earnings for those employed in the dominant labor market. Hence, Jews would have a difficult time competing for most jobs in the Arab ethnic market.

The circumstances of extreme residential segregation and substantial cultural barriers (e.g., language) that separate Arabs from Jews probably accentuate labor market sheltering in Israel. Nonetheless, the phenomenon is by no means unique. In many multiethnic societies the economic hardship of disadvantaged minorities is mitigated by particular market structures. In Britain, for example, Asian shopkeepers appear to benefit not only from cultural affinity with potential patrons but as a result of ethnic residential segregation as well (Aldrich et al. 1985). Indeed, most research in this area has underscored the important role of ethnic entrepreneurship (see Waldinger et al. [1990] for a review). We argue, however, that greater attention should be devoted to the public sector, where alternative mechanisms may develop as a result of special ethnic needs (Jones 1993), cultural boundaries, or political empowerment.

Expansion of opportunities in the public sector in Israel is institutionally (politically) determined, because the state controls much of local government and public-service funding (Al-Haj and Rosenfeld 1988). Hence, when highly educated Arabs are faced with labor market hardships, expansion of the public sector in the Arab community is an apparent strategy to co-opt the elite. The role of the state notwithstanding, the public sector serves as a major resource for the ethnic group. It leaves substantial autonomy in hiring and promotion decisions to members of the group and is an avenue for the mobilization of jobs for members of the minority. Thus, ethnic sentiments and solidarity can easily operate in the public sector of the Arab labor market to provide advantages similar to those in some ethnic enclaves in North America. It is possible,

although our data do not directly address this issue, that the private sector in the ethnic market displays no effect on status and earnings returns (similar to that of the public sector) because the distribution of power and resources in the ethnic market is skewed. That is, in face of a small and rather weak private sector, the public sector may in fact expropriate most resources. Under these circumstances, then, ethnic minority "control" over the public sector in the ethnic market may be a primary means of effecting opportunities. Such control can be construed within the conceptual framework of "ethnic hegemony" offered by Jiobu (1988).

The hegemonic situation implies, first, that the group achieves some measure of command over its economic destiny and, second, that resources are transferred to the minority through the interface with the dominant group. The hegemonic position in a particular area of economic activity in turn minimizes antiminority discrimination and helps uplift the entire subordinate group. The case of Arabs in Israel extends Jiobu's notion of control and accumulation through pure market processes to nonmarket mechanisms. The political activity by means of which the public sector in Arab communities expands, and becomes an important source of jobs and advantages, is one example of such mechanisms.

The findings discussed throughout the paper clearly demonstrate the differential effect of labor market structure on socioeconomic outcomes. Moreover, our findings underscore the role of the public sector in the ethnic labor market in generating rewarding job opportunities for members of the ethnic minority. Not only does the public sector constitute an important component of the ethnic labor market, but it also emerges as a resource for the subordinate community. It serves as a major avenue of social mobility for the Arab labor force. On the basis of these findings we argue that greater attention should be devoted to studying the ways in which the public sector affects individuals' opportunities for achievement and affects ethnically-linked socioeconomic inequality, not only in Israel but in other multiethnic societies as well.

REFERENCES

Abowd, J. M., and M. R. Killingsworth. 1985. "Employment, Wages, and Earnings of Hispanics in the Federal and Nonfederal Sectors: Methodological Issues and Their Empirical Consequences." Pp. 77–125 in Hispanics in the U.S. Economy, edited by G. J. Borjas and M. Tienda. Orlando, Fla: Academic Press.
Aldrich, H., J. Cater, T. Jones, D. McEvoy, and P. Velleman. 1985. "Ethnic Residential Concentration and the Protected Market Hypothesis." Social Forces 63: 996–1009.

Al-Haj, M. 1987. *Social Change and Family Processes: Arab Communities in Shefar-Am*. Boulder, Colo.: Westview.

Al-Haj, M., and H. Rosenfeld. 1988. *Arab Local Government in Israel*. Tel Aviv: International Center for Peace in the Middle East.

Asher, M., and J. Popkin. 1984. "The Effect of Gender and Race Differentials on Public-Private Wage Comparisons: A Study of Postal Workers." *Industrial and Labor Relations Review* 38:16–25.

Becker, G. S. 1975. *Human Capital*, 2d ed. New York: National Bureau of Economic Research.

Ben-Rafael, E. 1994. *Language, Identity, and Social Division: The Case of Israel*. Oxford: Clarendon.

Blalock, H. M. 1967. *Toward a Theory of Minority Group Relations*. New York: Wiley.

Blank, R. 1985. "An Analysis of Workers' Choice between Employment in the Public and Private Sectors." *Industrial and Labor Relations Review* 38:211–24.

Blau, P., and O. D. Duncan. 1967. *American Occupational Structure*. New York: Wiley.

Bobo, L., and F. D. Gilliam. 1990. "Race, Sociopolitical Participation, and Black Empowerment." *American Political Science Review* 84:377–93.

Boyd, R. L. 1991. "A Contextual Analysis of Black Self-Employment in Large Metropolitan Areas, 1970–1980." *Social Forces* 70:409–29.

Central Bureau of Statistics. 1983. *Population and Households: Provisional Results*. Jerusalem: Central Bureau of Statistics.

———. 1984. *Statistical Abstract of Israel*. Jerusalem: Central Bureau of Statistics.

Dye, T. R., and J. Renick. 1981. "Political Power and City Jobs: Determinants of Minority Employment." *Social Science Quarterly* 62:475–86.

Eisinger, P. 1986. "Local Civil Service Employment and Black Socioeconomic Mobility." *Social Science Quarterly* 67:169–75.

Esping-Andersen, G. 1990. *Three Worlds of Welfare Capitalism*. Cambridge: Polity Press.

Evans, M. D. R. 1987. "Language Skills, Language Usage, and Opportunity: Immigrants in the Australian Labour Market." *Sociology* 21:253–74.

Frazier, E. F. 1957. *Black Bourgeoisie*. Glencoe, Ill.: Free Press.

Haidar, A. 1990. *The Arab Population in the Israeli Economy*. Tel Aviv: International Center for Peace in the Middle East.

Jiobu, R. M. 1988. "Ethnic Hegemony and the Japanese of California." *American Sociological Review* 53:353–67.

Jones, F. L. 1993. "Unlucky Australians: Labour Market Outcomes among Aboriginal Australians." *Ethnic and Racial Studies* 16:420–58.

Kretzmer, D. 1990. *Legal Status of the Arabs in Israel*. Boulder, Colo.: Westview.

Lewin-Epstein, N. 1986. "Effects of Residential Segregation and Neighborhood Opportunity Structure on the Employment of Black and White Youth." *Sociological Quarterly* 27:559–70.

Lewin-Epstein, N., and M. Semyonov. 1986. "Ethnic Group Mobility in the Israeli Labor Market." *American Sociological Review* 51:342–52.

———. 1992a. "Local Labor Markets, Ethnic Segregation, and Income Inequality." *Social Forces* 70:1101–19.

———. 1992b. "Modernization and Subordination: Arab Women in the Israeli Labour-Force." *European Sociological Review* 8:39–51.

Lieberson, S. 1980. *A Piece of the Pie*. Berkeley and Los Angeles: University of California Press.

Light, I., and E. Bonacich. 1988. *Immigrant Entrepreneurs: Koreans in Los Angeles, 1965–1982*. Berkeley and Los Angeles: University of California Press.

Lustick, I. S. 1980. *Arabs in the Jewish State: Israel's Control of a National Minority.* Austin: University of Texas Press.

Maume, D. J., Jr. 1985. "Government Participation in the Local Economy, and Race- and Sex-Based Earnings Inequality." *Social Problems* 32:285–99.

Meyer-Brodnitz, M., and D. Czamanski. 1986. "Industrialization of Arab Villages in Israel" (in Hebrew). *Rivon lekalkala* (Economic quarterly) 128:533–46.

Mincer, J. 1974. *Schooling, Experience, and Earnings.* New York: National Bureau of Economic Research.

Model, S. 1992. "The Ethnic Economy: Cubans and Chinese Reconsidered." *Sociological Quarterly* 33:63–82.

Moss, P. I. 1988. "Employment Gains by Minorities and Women in Large City Government, 1976–1983." *Monthly Labor Review* 111:18–24.

Nachmias, C. 1979. "Community and Individual Ethnicity: The Structural Context of Economic Performance." *American Journal of Sociology* 85:640–52.

Portes, A., and R. L. Bach. 1985. *Latin Journey: Cuban and Mexican Immigrants in the United States.* Berkeley and Los Angeles: University of California Press.

Portes, A., and L. Jensen. 1987. "What's an Ethnic Enclave? The Case for Conceptual Clarity." *American Sociological Review* 52:768–71.

Rein, M. 1985. *Women in the Social Welfare Labor Market.* Berlin: WZB Working Papers.

Rein, M., and L. Rainwater. 1987. "From Welfare Labor State to Welfare Society." In *Stagnation and Renewal in Social Policy: The Rise and Fall of Policy Regimes,* edited by G. Esping-Andersen, M. Rein, and L. Rainwater. Armonk, N.Y.: M. E. Sharpe.

Rosenfeld, H. 1988. "Nazareth and Upper Nazareth in the Political Economy of Israel." Pp. 45–66 in *Arab-Jewish Relations in Israel,* edited by J. F. Hofman. Bristol, Ind.: Wyndham Hall Press.

Sanders, J. M., and V. Nee. 1987. "Limits of Ethnic Solidarity in the Enclave Economy." *American Sociological Review* 52:745–67.

Semyonov, M. 1988. "Bi-Ethnic Labor Markets, Mono-Ethnic Labor Markets, and Socioeconomic Inequality." *American Sociological Review* 53:256–66.

Semyonov, M., and Y. Cohen. 1990. "Ethnic Discrimination and the Income of Majority Group Workers." *American Sociological Review* 55:107–14.

Semyonov, M., and N. Lewin-Epstein. 1989. "Segregation and Competition in Occupational Labor Markets." *Social Forces* 68:379–96.

———. 1994. "Ethnic Labor Markets, Gender, and Socioeconomic Inequality." *Sociological Quarterly* 35:51–68.

Shavit, Y. 1990. "Segregation, Tracking, and the Educational Attainment of Minorities: Arabs and Oriental Jews in Israel." *American Sociological Review* 55:115–26.

———. 1992. "Arabs in the Israeli Economy: A Study of the Enclave Hypothesis." *Israel Social Science Research* 7:45–66.

Smooha, S. 1992. *Arabs and Jews in Israel: Change and Continuity in Mutual Intolerance.* Boulder, Colo.: Westview.

Tienda, M., and D. T. Lii. 1987. "Minority Concentration and Earnings Inequality: Blacks, Hispanics, and Asians Compared." *American Journal of Sociology* 93:141–65.

Tienda, M., and F. D. Wilson. 1992. "Migration and the Earnings of Hispanic Men." *American Sociological Review* 57:661–78.

Tyree, A. 1981. "Occupational Socioeconomic Status, Ethnicity, and Sex in Israel: Considerations in Scale Construction" (in Hebrew). *Megamot* 27:7–21.

Viteretti, J. 1979. *Bureaucracy and Social Justice.* Port Washington, N.Y.: Kennikat.

Waldinger, R. 1987. "Changing Ladders and Musical Chairs: Ethnicity and Opportunity in Post-Industrial New York." *Politics and Society* 15:369–401.

Waldinger, R., H. E. Aldrich, and R. Ward. 1990. *Ethnic Entrepreneurs: Immigrant Business in Industrial Societies*. Beverly Hills, Calif.: Sage.

Wilson, K., and W. A. Martin. 1982. "Ethnic Enclaves: A Comparison of the Cuban and Black Economies in Miami." *American Journal of Sociology* 88:135–60.

Wilson, W. J. 1978. *The Declining Significance of Race: Blacks and Changing American Institutions*. Chicago: University of Chicago Press.

Zhou, M., and J. Logan. 1989. "Returns on Human Capital in Ethnic Enclaves: New York City's Chinatown." *American Sociological Review* 54:809–20.

Zwerling, C., and H. Silver. 1992. "Race and Job Dismissals in a Federal Bureaucracy." *American Sociological Review* 57:651–60.