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Minority Labour Force Participation in the Post-Fordist era: the case of the Arabs in Israeli[1]

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ABSTRACT This study investigates the impact of economic restructuring on the labour force participation of subordinate minority men. Taking Israel as a case study, we review the trends of labour force participation of Arab men over the last two decades and compare their levels of participation with those of Jewish men. We also examine the main variables, which cause their withdrawal from the labour market. The data for the study was drawn from the *labour force surveys* that the Central Bureau of Statistics carries out on regular basis. The unique panel structure of these surveys enabled us to analyse the dynamics and shifts in the process of withdrawal. Results of the analysis indicate that age, education, class and unemployment at any given point in time are the variables that increase the likelihood of Arab men's dropout from the labour market. These variables effect the withdrawal of Jewish men from the labour market differently. The differences in the determinants of labour force withdrawal by Arab and Jewish men reflect the segmented nature of the Israeli labour market. These results are employed to evaluate the impact of restructuring on labour market's segmentation.

The economic crisis of the 1970s brought about a fundamental change in the socio-economic management and labour market processes in Western and many Third World countries. The Keynesian style economics which had been the dominant mode of socio-economic policies since the end of World War II came to an end, and along with it the idea that the State should strenuously intervene in the market to sustain high levels of employment, even at the expense of a budget deficit (Gerber, 1995; Stewart, 1967: ch. 2). This transformation reflected the crisis of the Fordist method of capitalist accumulation; a mode which is composed of constant modernisation of technology, changes in labour processes, the production of standardised goods for mass consumption and increase in real wages and productivity (Jessop, 1995; Lipietz, 1987). Mass unemployment and joblessness have become a common feature in the post-Fordist era, particularly during its initial phase. Increasing globalisation of capital along with changes in the organisation of work – e.g. part time jobs, subcontracting – have contributed to the trend of

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continual decline in men's labour force participation. Moreover, the boundaries between various types of non-participation in the labour market such as unemployment, early retirement, temporary absence and training were blurred (Kolberg and Kolstad, 1992; Walters, 1996). Research on unemployment and joblessness conducted in Europe and the US reveal that minorities and prime age men are the main groups effected by the contraction of labour markets.

Four explanations were given for the over-representation of these groups among the unemployed. The first draws on Becker's (1957) neo-classical theory of human capital. Becker assumes that labour markets function according to the normal mechanisms of supply and demand. In the labour market, employees convert their human capital – innate ability, education and training – to occupational attainments. Although he acknowledges that employers might have a 'taste for discrimination', this aberration from the objective functioning of the market's mechanisms is not supposed to obstruct the market's overall fair functioning. Following this perspective, various sociologists attributed the high rates of unemployment and joblessness among minorities to their low human capital (e.g. Wilson, 1978; Kasarda, 1983; 1989). For example, Kasarda (1983; 1989) argues that high unemployment among the subordinate minorities in the US is the result of a 'mismatch' between the low education of these groups and the growing demand in the expanding industries of communication and data processing for highly educated workforce.

The second explanation follows the line of the labour market segmentation theories (Doeringer and Piore, 1971; Piore, 1973; Edwards, 1979; Rosenberg, 1977; 1980; Hodson and Kaufman, 1982). High rates of unemployment and joblessness among minorities are attributed to their over-representation in the secondary labour market (low capacity and dead-end jobs). Such employment sectors are characterised by frequent layoffs, lack of advancement opportunities, low wages and poor work conditions. During economic crises, these workers are the first to loose their jobs (Schervish, 1981; Cornfield, 1987). Recently Goldthorpe made a basic distinction in his class schema between 'service relationship' and 'labour contract'. This contrast reflects two major characteristics of the work: the specificity of human assets required for the job and the difficulty in monitoring the work-tasks. A service relationship emerges in situations of high specificity of human assets and great difficulty in monitoring work-tasks. Meanwhile, a labour contract characterises situations where the task of monitoring is easy and the skills required for the fulfilment of the work are simple. Mixed employment appears where either high specificity of skills is needed or the monitoring task is difficult (Erickson and Goldthorpe, 1992; Goldthorpe, Yaish and Kraus, 1997).

The third explanation views high unemployment and joblessness among minorities in the general context of ethnic relations. Drawing on Bonacich's (1972; 1976) theory of a split labour market, researchers investigated the strategies that employees of the dominant ethnic group use to exclude minority workers from

lucrative jobs or from the labour market all together. High unemployment of minority workers is explained by racial discrimination by employers and fellow workers from the dominant group (Fainstein, 1987; Farley, 1987; Waldinger and Bailey, 1991; Daenzer, 1991).

Contrary to the three explanations discussed above, which view unemployment as involuntary, the fourth regards exit from the labour market particularly by prime-age men as largely voluntary. Proponents of this explanation argue that the decline in the volume of work led to an increase in paid non-work, including generous schemes of early retirement. Many prime-age men, particularly the older members of this category, tend to take advantage of such offers (Juhn, 1992; Parsons, 1980). This contention contradicts the long-standing research in social psychology of work, where work is described as essential for the satisfaction of various psycho-social needs (Brown, 1980). Indeed, a study on discouraged older workers reveals that, although they stopped their search for work, their identification with work did not decrease (Rife and First, 1989). More recently, Sjoberg (2000) basing his research on data from 17 OECD countries for the period of 1960–90, reported that the relationship between unemployment and unemployment benefits is neither straightforward nor unidemensional; time specificity and the nature of the labour market's transformation should be accounted for when the impact of social benefits on labour force participation is studied. Yet, one fundamental conclusion comes out in his study ' .... [I]t is not surprising that this rise in unemployment generosity has been proposed as a major factor explaining the rise in OECD unemployment during the last two decades. However, empirical work using microeconomic data has failed to definitively support these theoretical claims' (Sjoberg, 2000:71).

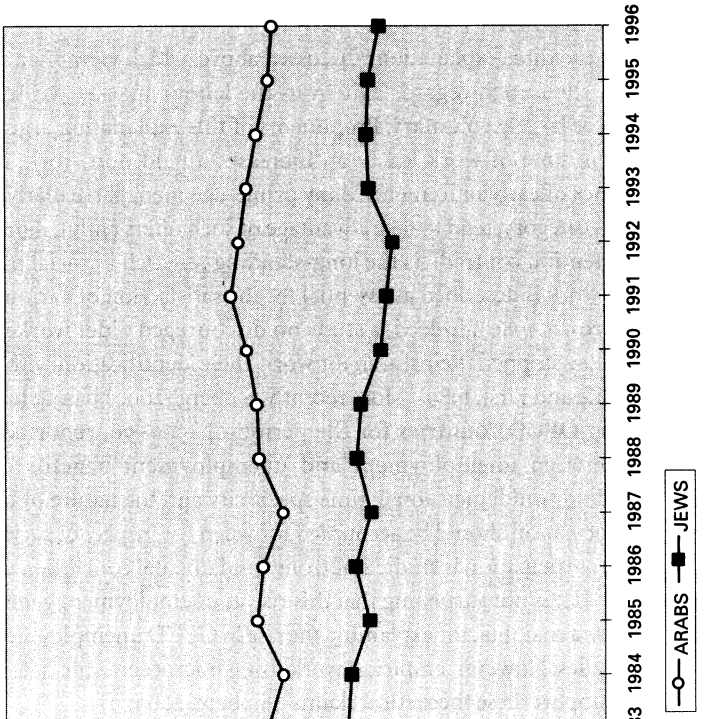
The last theoretical perspective alludes to an additional direction of research, namely labour force participation could be tied up with an additional sources of income. Thus we hypothesize that the tendency of prime-age men's withdrawal from the labour market is associated with the number of younger employees in the family. Specifically, we intend to investigate whether prime age Arab men tend to exit the labour market and become dependant for their livelihood on the support of their children.

The present study aims at investigating the changing patterns of labour force participation of Jewish and Arab men following the increasing trend of economic liberalisation in Israel. This case study will help to shed light on the dynamics of labour market processes, which eventually lead to disproportionate joblessness among subordinate minorities.

Jews and Arabs in Israel

Israeli society is deeply divided according to ethnic, religious and national lines; yet, the cleavage between the Arab minority – which composes about 17 per

Figure 1
Labour force participation rates of Arab and Jewish Men[1]



1 Age 14 and over (from 1985, age 15 and over)
Note: Data are from the Central Bureau of Statistics, Statistical Abstracts, 1976–1997

cent of the country's population – and the Jewish majority, is the dominant one. Although the Arabs who remained within Israel's boundaries after the State's creation in 1948 were given Israeli citizenship and along with it formal rights, they have been subjected to discrimination in all aspects of life (Kretzmer, 1987; Sa'di, 1995). They attain fewer years of schooling (Shavit, 1990; Swirski, 1990; Mazawi, 1994; 1998) and hold less desirable and rewarding jobs (Lewin-Epstein and Semyonov, 1986; 1993; Semyonov and Lewin-Epstein, 1989; Sa'di, 1995). Moreover, they are over-represented among the low income and poor population (Sa'di, 1992: 251–75). Jews and Arabs are also spatially segregated. The Arabs live mostly in over-sized villages, which lack worthwhile industries and modern infrastructure. Consequently, more than half of the Arab workforce is employed in the Jewish localities where they suffer from discrimination and exclusion from lucrative jobs and positions of responsibility and authority (Wolkinson, 1989). The data on the occupational distribution of Jewish and Arab employees illustrates the discrepancies between them. In 1994, 10 per cent of Jewish employees worked in professional and scientific jobs in comparison to 4 per cent only of Arab men. Meanwhile, at the lowest end of the occupational structure 36.2 per cent of Jewish men and 58.6 per cent of Arab men worked in skilled and unskilled/ manual jobs (CBS, 1995).

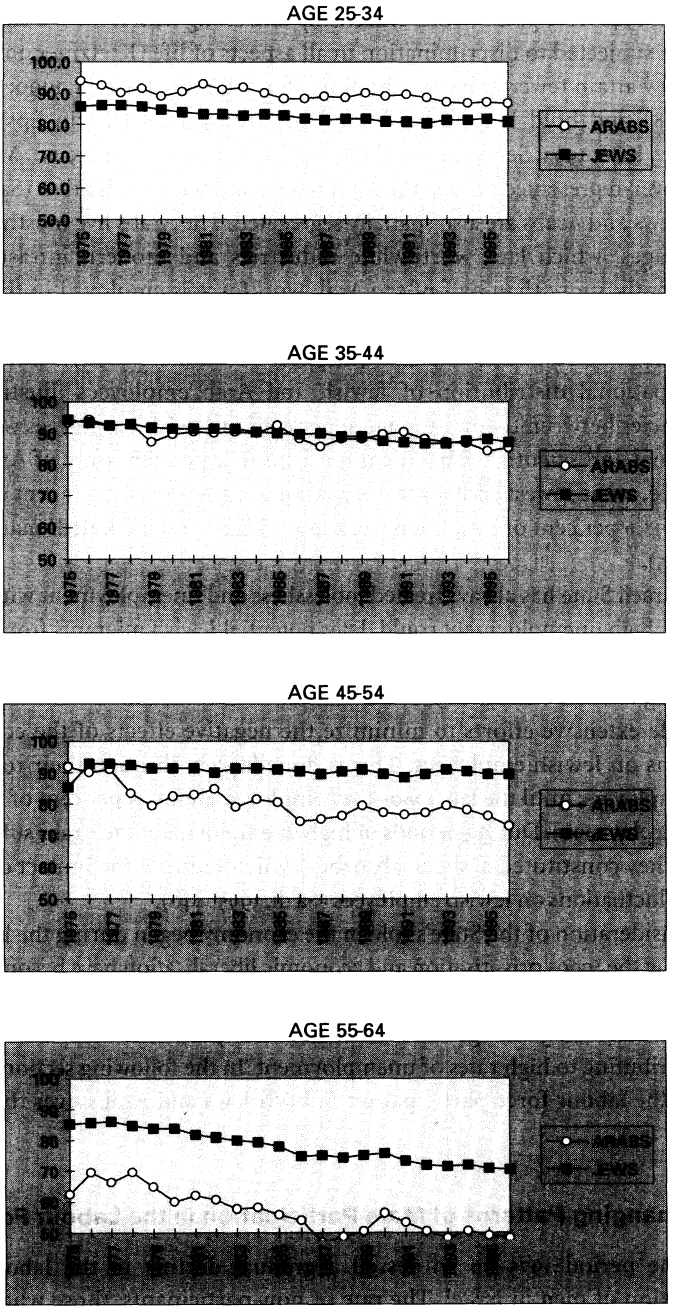
The Israeli State has always treated joblessness and unemployment with special care, since high unemployment could deter potential Jewish migrants from coming to Israel, thus causing the failure of one prime objective of the State, namely the ingathering of Jews. Since the 1950s the State and the trade union – the *Histadrut* – have made extensive efforts to minimize the negative effects of the economy's downturns on Jewish employees. This is done largely through their role as the largest employers; until the late 1980s they employed about 45 per cent of the work force (Murphy, 1994). During periods of high unemployment the Arabs suffered the most, as they constituted a 'shock absorber' which reduced the impact of labour market's fluctuations on Jewish employees (Sa'di, 1995: 440).

Reconsideration of the State's role in the economy began during the late 1970s and, during the 1990s privatisation and economic liberalisation have become widely accepted by Israeli policy makers (Nitzan and Bichler, 1999). As happened in similar cases of restructuring, the age-old inefficient and unprofitable industries declined, thus contributing to high rates of unemployment. In the following section we shall describe the labour force participation of both Jews and Arabs over the period 1975–96.

Changing Patterns of Male Participation in the Labour Force

The period 1975–96 witnessed a gradual decline in the labour force participation of men in Israel. The rate of non-participants, those who neither

Figure 2
Labour force participation rates of men, by age and population group



worked nor looked actively for work, increased from 35.1 per cent to 37.9 per cent. The participation rates among Arab men have been, throughout this period, higher than among Jewish men. For example, in 1996 the participation rates of Arabs and Jews were 66.6 per cent and 61.2 per cent respectively.

High rates of labour force participation among Arab men do not reflect a preferable position in the labour market. Rather the age-related ethnic differences of participation and the overall dropout rates point to their disadvantage. The data presented in figure 2 illustrate a fundamental imbalance in their participation rates along the different age stages. To highlight this disadvantage, we will explore the participation rates of both Arab and Jewish men in the different age categories. Among the youngest cohort, 25–34 years old, their labour force participation has been throughout the discussed period higher than among Jewish men, although both groups experienced a decline in their labour force participation. The participation rate of Arab men decreased from 94 per cent in 1975 to 86.8 per cent in 1996, while among their Jewish counterparts the participation rate declined from 85.8 per cent to 81.1 per cent respectively. The labour force participation of the age cohort, 35–44 years old, of Arab and Jewish men has been virtually similar, and in both cases the participation rate declined significantly; among Arabs it decreased from 93.3 per cent to 85.4 per cent in comparison to 94.1 per cent and 87.0 per cent among Jewish men respectively.

The trajectories of labour force participation of Arab and Jewish men take divergent directions at the older age cohorts. While the participation rate of Arab men at the age category of 45–54 years old declined from almost 92 per cent to 73 per cent, among Jewish men it increased from 85.2 per cent to 89.4 per cent. At this stage, the differences in the labour force participation between Arab and Jewish men become conspicuous. More striking are the differences at the oldest cohort, 55–64

Table 1
Cohort analysis of labour market withdrawal

Year	*1975*	*1985*	*1995*
Age		*Jews*	
25–34	85.8	82.8	81.9
35–44	94.1	89.9	87.9
45–54	85.2	91.0	89.4
55–64	85.2	77.9	71.1
		Arabs	
25–34	94.0	88.2	87.1
35–44	93.5	92.2	84.1
45–54	91.9	80.6	76.1
55–64	62.5	55.6	49.2

years old. The participation rate among Arab men dropped dramatically from 62.5 per cent to only 48.3 per cent in comparison to a decline from 85.2 per cent to 70.5 per cent among Jewish men.

These results reveal two major differences in the labour force participation of Arab and Jewish men. Firstly the participation of the two groups in the labour market follows distinct patterns. Secondly, the differences between the highest and the lowest rates (the overall dropout) are almost three times higher among the Arab men than among their Jewish counterparts.

Another way of highlighting these differences is through tracing the labour force participation of the same cohort throughout the period of two decades, 1975–1995. This data, presented in Table 1, shows that 94 per cent of Arab men in the age category of 25–34 participated in 1975 in the labour force; two decades later (they were 45–54 years old) only 76.1 per cent remained in the labour market. Meanwhile, 93.5 per cent of those in the cohort of 35–44 years old participated in 1975 in the labour force, and two decades later only 49.2 per cent of them sustained an involvement in the labour market.

Different dynamics characterize the labour force participation of Jewish men. In 1975 85.8 per cent of Jewish men in the cohort of 25–34 participated in the labour force. Two decades later they increased their participation to 89.4 per cent. Meanwhile, 94.1 per cent of those who were in 1975 at the age category of 35–44 participated in the labour force and two decades later 71.1 per cent of this cohort continued their participation.

Research conducted on men's labour force participation in Northern Ireland (Miller, 1998) and on British ex-miners (Fieldhouse and Hollywood, 1999) shows that mid 40s is a critical period for their future in the labour market. After this age the ability of these men to continue their labour force participation dramatically declines. These cases show that the pattern of Arab men's labour force participation is applicable to areas, which are either experiencing restructuring or facing economic hardships. The question is why, despite living in the same country, have Jewish-men followed a different pattern?

In the following section we shall investigate the causes which lead to withdrawal from the labour market by focusing on the individual-level factors which render certain individuals more susceptible than others to labour force dropout. Particularly we are interested in the factors that differently affect the likelihood of Jewish and Arab men's quitting the labour force, and which could account for the difference in the rates of non-participation among them.

Data and Variables

Characteristics of the data set

The data used in the analysis is drawn from the labour force surveys that the

Israel Central Bureau of Statistics (CBS) carries out every three months. These surveys are comprised of a rotating panel design whereby in any given time about one quarter of the respondents are interviewed for the first time and the remainder are respondents who are interviewed for the second, the third or the fourth time. The first time that the respondent is approached is taken as (I_1), then he is interviewed after three months (I_2). The third interview (I_3) takes place after nine months of the second. Finally, the fourth and last interview (I_4) occurred three months after the third. Hence, the same person is interviewed four times over a period of fifteen months. The interval between I_1 and I_3 is the same as between I_2 and I_4, one year. Our data includes males in the age category of 25–64 years who were interviewed during the years 1979 to 1992.

A concatenated file was created for all men whose first interview took place between 1979 and 1992. Each individual had a maximum of four records, one for each interview. This procedure resulted in a sample of 52,720 individuals for whom panel data was available. Of these respondents 47,367 (89.8 per cent) were Jews and 5,325 were Arabs. In order to study the changes in the labour force status we took the period of one year as our time frame. Specifically, we studied individuals who were in the labour force in the first interview (I_1) and examined their labour force status a year later (I_3). A total of 44,382 persons have complete records for these time points (representing 84 per cent of the sample). In cases where either of the records or both were not completed we used the data of the interviews conducted at I_2 and I_4. Detailed information on the distribution of the cases, according to the year in which the interviews were conducted and the number of the interviews completed, is presented in appendixes A1 and A2.

Variables

The dependent variable – *withdrawal from the labour force* – is treated as dichotomous. The value 1 is given if the person was in the labour force at the time of the first interview, which we will refer to as t1 (I_1 or I_2), and was not in the labour force a year later – t_2 – (I_3 or I_4). The value 0 is given if the person continued his participation in the labour force in the two points in time.

In the statistical analysis we included various independent variables, these are:

(1) *Ethnicity*: we distinguished between Jews (coded 1) and Arabs (coded 0). The Arabs comprise about 10 per cent of the cases, a slightly lower figure than their share in the labour force. In 1992, Arab men aged 25–64 composed 11.7 per cent of the men in the civilian labour force at these ages (CBS 1993).

(2) *Age*: we adopted the age categories, which were used in the previous section. This classification was found useful for capturing the phenomenon of rapid increase in exit of Arab men from the labour force after the age of 44. These categories are 25–34; 35–44; 45–54 and 55–64.[3]

(3) *Education*: is measured in years of schooling.
(4) *Marital status:* This variable was treated as dichotomous, whereas married received the value of 1 and the rest were coded 0.
(5) *Earners*: indicates the number of breadwinners in the household who contribute to family's budget. We included this variable to test the hypothesis, which predicts an increase in the tendency of prime-age Arab men to leave the labour force if there are additional breadwinners in the family.
(6) *Locus of employment*: A trichotomous variable that indicates the type of locality in which Arab men were employed at the time of the first interview. These are: Arab localities, mixed Jewish-Arab cities and Jewish localities.[4]
(7) *Class position and occupational status*: To capture the impact of the employee's position in the stratification system, two interrelated variables are introduced, class and occupational status. Class classification is based on Erikson and Goldthorpe's (1992) class schema, modified for the Israeli labour force (Goldthrope, Yaish and Kraus 1997) which includes five categories (classes).[5] We also included the continuous occupational hierarchy of Tyree (1981) in order to determine whether the likelihood of withdrawal from the labour force is affected by class position, after controlling for the linear effect of status.[6]
(8) *Unemployment:* This category includes all men who did not work for pay at least one hour during the last full week prior to the interview, and who actively searched for work at some time during the four weeks prior to the interview.

Finding

Descriptive overview

Before going into a detailed analysis of the determinants of withdrawal from the labour market, we shall present a short description of the characteristics of the respondents. Similar proportions of the two groups were not in the labour force at the time of the first interview (I1); 12.4 per cent among Jewish interviewees and 12.9 per cent among their Arab counterparts. However, the proportion of men who were unemployed was higher among Arabs than among Jews by a factor of 1.75. These figures do not represent the unemployment rates at any given year; rather they represent a weighted average for the entire period of the study. As such they point to the greater hardship experienced by Arab men in the labour market.

Looking at the rates of non-participation among Jewish men a U-shaped pattern appears. Higher non-participation rates occur among the younger age cohort (25–34 years old) and among the oldest one (55–64 years old) reaching 16 per cent and 17 per cent respectively, while the lowest non-participation rate has been among the cohort of 45–54 years old reaching only 7.2 per cent. A totally different picture received from the non-participation of Arab men. Low non-participation rate of about 9 per cent persists until the age of 44 years old. Thereafter a steep

Table 2
The distribution of employment status at first interview, by age and population group (per cent)

		Jews					*Arabs*				
Employment status	*Age*	*25–34*	*35–44*	*45–54*	*55–64*	*Total*	*25–34*	*35–44*	*45–54*	*55–64*	*Total*
Employed		79.4	87.3	90.2	80.2	84.3	83.9	85.9	77.7	60.1	81.3
Unemployed		4.9	3.0	2.5	2.2	3.3	6.9	5.5	5.4	2.8	5.8
Not in Labor Force		15.7	9.6	7.2	17.3	12.4	9.2	8.6	17.0	37.1	12.9
Total		100	100	100	100	100	100	100	100	100	100
(Number of Cases)		*(14679)*	*(13940)*	*(10291)*	*(8457)*	*(47367)*	*(2279)*	*(1592)*	*(990)*	*(464)*	*(5325)*

increase occurred reaching 17 per cent at the age category of 45–54 years old, and yet another dramatic increase takes place after that, reaching 37 per cent at the oldest age category of 44–64 years old.

Aggregate data for Jewish and Arab men who were in the labour force in the first interview, either employed or unemployed, and dropped out within one year is presented in Table 3. The data reveal that overall 3.7 per cent of all Jewish men who were in the labour force at I1 or I3, and 4.5 per cent of Arab men were no longer in the labour force one year later. The data, also, confirm the age-specific patterns of non-participation described above.

Furthermore, the data – in the lower panel – point to an inverse relationship between exit from the labour market and years of schooling, a pattern which becomes pronounced among men 45 years old and over. In this age group the rate of withdrawal among men with 11 years or less is almost double the rate for men with 13 years of schooling or more. Does this support the theories of human capital and 'mismatch'? The analysis in the coming section aims at answering this question.

Determinants of likelihood of withdrawal

To test the impact of various individual and labour market characteristics on the likelihood of withdrawal from the labour market during one year following the first interview, a multivariate logistic regression analysis was conducted. The labour force participation/non-participation at the end of the first year (t_2) was regressed on personal and labour market characteristics at t_1 for all the interviewees who were active in the labour force. The logistic regression is employed to estimate the odds of withdrawal from the labour market (i.e. the ratio of the probability of withdrawal to the probability of staying active). Since the logistic model is not linear, the logistic regression coefficient should be interpreted as the change in the log-odds associated with one-unit change in the independent variables evaluated at the mean of all other variables. The exponent of the coefficient, in the right-hand column of each model, provides the odds ratios, which are more readily interpretable than the coefficients themselves. Unstandardised coefficients are provided in the left-hand column (standard errors are given below coefficients in parentheses). Since the data is drawn from surveys conducted over a period of fourteen years, a set of dummy variables was introduced to represent the year of the survey, thus all the coefficients included in the models should be interpreted as partial coefficients controlling for the time of the interview.

The analysis was conducted in two phases: in the first phase, referred to as model 1, all the subjects were included in the analysis and the impact of ethnicity was directly tested. In the second, the impact of the variables on the likelihood of Jewish and Arab men's withdrawal from the labour market was separately tested. Furthermore, the interaction of ethnicity with various background and labour market

variables was assessed. The results of model 1 reveal that ethnicity does not exercise a direct impact on exit from the labour market. Education, as expected, has a negative impact on withdrawal from the labour market, as opposed to marital status. The age group of 55–64 is more likely to exit the labour market than the comparison group of 25–34. The employment status at the first interview (t1) exerts a strong significant impact on the likelihood of exit from the labour market; those who were unemployed were more likely to leave the labour market altogether. The impact of class is also in line with a commonsense expectation. The affiliates of class I were less likely to withdraw from the labour market, as opposed to the members of class V.

However, an enquiry into the ethnic make up of the different classes reveals an uneven distribution of the two groups in the class structure, as Table 5 illustrates. Whereas more than 26 per cent of the Jewish subjects were situated in class I, only 11 per cent of their Arab counterparts where in this class. At the other end, 16 per cent of the Jewish interviews were located in class V in comparison to 36 of the Arab interviewees. These finding show that ethnicity *per se* does not exercise a direct impact on men's withdrawal from the labour market. However, its indirect influence is most significant. The members of class V, whether Jews or Arabs, are more likely than others to exit the labour market, however, since Arabs are over-represented in

Table 3
Withdrawal from the labour force within one-year, among men who were in the labour force at the first interview

	Jews		Arabs	
	Number of cases	Per cent*	Number of cases	Per cent*
Total	1546	3.7	208	4.8
by Age Groups:				
25-34	523	4.2	79	3.8
35-44	280	2.2	52	5.8
45-54	283	3.0	46	5.0
55-64	460	6.6	31	10.6
by Years of Education:				
11 Years and under	800	4.6	158	5.0
12 Years	318	3.3	20	3.0
13 Years and over	367	2.7	18	2.7
Men 45–64 Years Old by Years of Education:				
11 Years and under	413	5.3	65	7.8
12 Years	148	4.4	2	2.6
13 Years and over	136	2.8	3	3.1

*Of the total number of men who were in the category during the first interview.

Table 4

Logistic regression coefficients (standard errors) predicting the likelihood of withdrawal from the labour force within one year, among men who were in the labor force at the first interview

	Model 1		*Model 2*	
Variables	*B (s.e.)*	*Odds ratio*	*B (s.e.)*	*Odds ratio*
Ethnicity (1 for Jews)	0.010	1.010	−0.654	0.520
	(0.098)		(0.456)	
Year of Education	−0.030*	0.970	−0.087*	0.917[a]
	(0.009)		(0.029)	
Marital Status (1 for Married)	−0.886*	0.412	−1.182*	0.307
	(0.069)		(0.243)	
Number of Providers	−0.014	0.986	−0.082	0.921
	(0.028)		(0.073)	
Unemployed at t_1	1.957*	7.076	1.597*	4.938
	(0.070)		(0.199)	
Age Groups[b]				
Age 35–44	−0.299*	0.742	0.115	1.122
	(0.076)		(0.212)	
Age 45–54	0.088	1.092	0.645*	1.907
	(0.077)		(0.230)	
Age 55–64	0.844*	2.325	1.274*	3.576
	(0.073)		(0.288)	
Community of Employment[c]				
Arab Community	0.050	1.051	−0.011	0.989
	(0.162)		(0.190)	
Mixed Arab and Jewish Community	−0.094	0.911	0.063	1.065
	(0.053)		(0.182)	
Occupational Class[d]				
Class I	−0.237*	0.789	−0.035	0.966
	(0.089)		(0.410)	
Class II	0.084	1.087	0.601*	1.823
	(0.092)		(0.290)	
Class III	0.049	1.051	0.414	1.513
	(0.078)		(0.237)	
Class V	0.206*	1.228	−0.008	0.992
	(0.071)		(0.209)	
Ethnicity * Years of Education			0.066*	0.979[e]
			(0.031)	
Ethnicity * Marital Status			0.315	0.420
			(0.254)	
Ethnicity * Number of Providers			0.071	0.989
			(0.079)	
Ethnicity * Unemployed at t_1			0.427*	7.569
			(0.212)	

Table 4
Continued

Variables	*Model 1*		*Model 2*	
	B (s.e.)	*Odds ratio*	*B (s.e.)*	*Odds ratio*
Ethnicity * Age 35–44			−0.488*	0.689
			(0.227)	
Ethnicity * Age 45–54			−0.640*	1.005
			(0.244)	
Ethnicity * Age 55–64			−0.475	2.223
			(0.297)	
Ethnicity * Arab Community			−1.095	0.331
			(1.034)	
Ethnicity * Mixed Community			−0.165	0.903
			(0.191)	
Ethnicity * Class I			−0.221	0.774
			(0.420)	
Ethnicity * Class II			−0.562	1.039
			(0.305)	
Ethnicity * Class III			−0.436	0.978
			(0.252)	
Ethnicity * Class V			0.281	1.314
			(0.222)	
Constant	−2.659*		−2.085*	
	(0.189)		(0.445)	
−2 Log Likelihood	13084.814		13041.173	
Sample Size			45362	

*P < 0.05

[a] The odds ratio for Arabs is presented starting from this variable till the variables indicating Class

[b] The comparison group is age 25–34.

[c] The comparison group is employed in the Jewish community.

[d] The comparison group is class IV.

[e] In the shaded area the odds ratio for Jews is presented (starting from this variable till the last variable).

Note: Year of first interview was included in the model to control for annual fluctuations. Models 1 and 2 are significantly different (P < 0.05) as can be determined from the change in log likelihood.

this class the chances of Arab men's ejection from the labour market becomes higher than the chances of Jewish men.

In model 2 the interaction of ethnicity with various background and labour market variables is tested. In line with the finding in model I, ethnicity did not directly influence the chances of withdrawal from the labour market. However, the strength or the impact of the variables – education, marital status, status of

employment, age and affiliation to class II – were different for the two groups. While education is negatively associated with exit from the labour market by Arabs (b=−0.087), as one would expect, it is positively correlated with the withdrawal from the labour market by Jewish men (b=0.066). This finding seems to reflect the disparities in class composition of both groups, where Arabs are disproportionally present in the lowest class. In contrast to education, the status of employment at the first interview affected the chances of withdrawal from the labour market by both groups, although its impact on Jewish men was more decisive. This means that the unemployed were by far more likely to withdraw from the labour market than those who were employed. The ratio of the probability of withdrawal to the probability of staying active for the unemployed in relation to the employed (i.e. the odds ratios) among Arab men was higher by almost five times and among the Jewish men by seven and a half times.

The effect of age on withdrawal from the labour force is estimated by contrasting the likelihood of withdrawal for each group with the youngest cohort (25–34 years old). As described earlier, Arab men follow the pattern of continuous increase of the likelihood of withdrawal from the labour market after the age of 45. Men of the age category of 45–54 years old are almost two times as likely as men of comparison group are to exit the labour force, and this probability increases to three- and-a-half times for the age category of 55–64. For Jewish men, the U shape described earlier still depicts the age dependant pattern of labour force exit even after controlling for the other variables. Men of the age categories of 35–44 and 45–54 years old are less likely to exit the labour force b=−0.488 and b=−0.64 respectively. Meanwhile, the oldest group (55–64 years old) is not significantly different from the comparison group. It should be remembered that the youngest and the oldest age category of Jewish men were characterised by lower rates of labour force participation.

Turning to the effect of class, we considered class IV as a criterion for

Table 5
Per cent distribution of class categories by ethnicity among men who were in the labour force at the first interview

	Ethnicity	
Class Category	*Jews*	*Arabs*
Class I	26.4	11.3
Class II	10.6	8.6
Class III	17.4	24.2
Class IV	29.4	19.7
Class V	16.2	36.1
N	40097	4560

comparison. The only effect of class was the likelihood of Arab men in class II to exit the labour market. It seems that the main significant impact of class is its independent effect as the findings of the first model revealed.

The particularistic variables – which might influence the Arab but not Jewish men's exit from the labour market – number of breadwinners in the family and locus of employment did not have significant effect on the likelihood of Arab men's withdrawal from the labour market.

Discussion and Conclusion

In this article we analysed the impact of the post-Fordist mode of capitalist accumulation on the labour force participation of a subordinate group in comparison with the dominant one. Our research shows that the structural changes in the economy have deepened the segmentation and the ethnicisation of the labour market. Arab men, who are over-represented in the lowest class (these jobs are dead end, physically demanding and do not require special skills), have been increasingly unable to secure employment after the age of 45, a fairly young age. Their dropout rate increases after that age, and only less than half of them are able to maintain involvement in the labour market until the age of retirement. Thus, age for minority men constitutes an important variable in determining their employment prospects. Moreover, unemployability at these 'mid-career ages' and the shortened work cycles give rise to new conceptions of work and retirement.

Education, which is regarded by the neo-classical theory as the most important variable of human capital, is negatively associated with withdrawal from the labour market by Arab men, but positively associated with the exit of Jewish men. In contrast to the neo-classical theory's postulate, which is stated in universalistic terms, we found that education is one of the mediating variables of ethnic inequality. Indeed, the impact of ethnicity is commonly mediated by 'universalistic variables' including education and class. Jewish men with low education seem to enjoy a safety net, which helps them to sustain their labour force participation. In their discussion of this safety net, Lewin-Epstein, Semyonov and Wright (1999) write:

> **There is a growing body of literature which ... shows that ethnic group disadvantages usually extend beyond what can be explained by variations in human capital resources. Recent research underscores the roles of agency, commercial enterprises, and institutional structures play in biasing labour and resource acquisitions markets to the disadvantage of minorities. By agencies we mean government-affiliated policies or procedures which draw influence from legal authority... (p. 111)**

Another variable, which reflects the segmentation and ethnicisation of the labour market, is unemployment. Unemployment is strongly associated with dropout from the labour market; yet it affects Jews more than it affects Arabs. One

possible interpretation is that unemployment is a 'revolving door' with more than one exit. Many persons leave the state of unemployment by means of a job and rejoin the gainfully employed, but for others, it is a decisive step on the way of dropping out. The differences in the impact of unemployment reflect the person's position in the labour market. For those who occupy a stable position and have developed the required skills, unemployment is usually associated with a serious interruption – such as illness, which could lead to exit from the labour market. Meanwhile, for those who are in the lowest class, where work is neither stable nor does it require special training, unemployment is frequently considered as another twist in an insecure career. In this respect, it should be recalled that Arabs suffer

Table A1
Distribution of cases by year of first interview

Year	*Number of cases*	*Percentage of cases*
1979	3876	7.4
1980	3447	6.5
1981	3316	6.3
1982	3441	6.5
1983	3768	7.1
1984	3699	7.0
1985	3847	7.3
1986	3502	6.6
1987	3697	7.0
1988	3760	7.1
1989	4026	7.6
1990	4214	8.0
1991	4283	8.1
1992	3844	7.3
Total cases	52720	100

Table A2
Number (and percentage) of cases who participated in surveys one year apart

	Total	Jews	Arabs	Missing
Interviewed at I1, I3	44382	40030	4331	21
	(100)	(90.2)	(9.8)	(0.0)
Interviewed at I2, I4	44279	39836	4425	18
	(100)	(90.0)	(10.0)	(0.0)
Interviewed at I1, I3 or in I2, I4	52720	47367	5325	28
	(100)	(89.8)	(10.1)	(0.1)

from higher unemployment rates; weighted averages of unemployment, during the studied period, are higher for Arabs than for Jews by a factor of 1.75.

Class seems to be the main social mechanism through which ethnic inequality is reproduced. Although the effect of class on withdrawal from the labour force is direct and universal, the composition of classes is ethnically uneven. More than one third of the Arab labour force was in the lowest class, thus the work insecurity, interruptions, discontinuity and early exit from the labour market which are characteristic of this class effect them considerably. Marital status has a restraining effect on Arab men though not on their Jewish counterparts. Married Arab men tend less than single men to exit the labour market. The differences between Arab and Jewish men seems to lie in the differences in the workforce participation of women, where the rate of Arab women's workforce participation is very low in relation to that of Jewish women. Finally, we found that cultural variables, which could counteract the impact of capitalism such as the support that working children might extend to their fathers and ethnic solidarity in local labour markets, are ineffective. Capitalism's homogenizing effects override the impact of such variables.

Given the limits of generalisations, which could be formulated on the basis of available research, we could reasonably argue that the sociological interest in this issue resonates an alarming reality. Our findings on Arab men, in line with research findings from others areas where economic restructuring was implemented, suggest that such a change decreases the employment prospect of prime-age men. Indeed, a new social reality where large segments of minority men in their 40s and 50s become unemployable could be looming on the horizon. Furthermore, labour market related variables such as education, class and age continued to mediate racially grounded discrimination in the labour market.

NOTES

1. In this study, we analyse the labour force participation of men only. Females we excluded for both substantive and methodological reasons. From the substantive viewpoint, the process of labour force entry and exit is quite different for women and men. From the methodological point of view, the labour force participation of Arab women has been quite low. For example in 1995, only 16.9 per cent of Arab women participated in the labour market.
2. The authors are equally responsible for the article. This research was partially supported by a grant from the Pinhas Sapir Center for Development, to which we are grateful. Moreover, we are thankful to Paul Kelemen and Rachel pollard from the university of Manchester for reading and commenting on the final draft, to Irena Kogan from Tel-Aviv University for her assistance in the re-analysis of the data and to *Work, Employment and Society,* anonymous reviewers for particularly helpful and illuminating remarks. Yet the authors assume the responsibility for the content of the article.
3. We limited the presentation here to men 25–64 years old in order to focus on the population for whom employment is likely to be the primary activity. This will permit a comparison over time that is little affected by such changes as school enrolment or pension coverage.

4. This variable was included to indirectly test the hypothesis that Arabs enjoy a degree of labour market protection in Arab communities. However, it was not included in the analysis of labour market exists among Jewish men since very few Jews are employed in Arab localities and the mixed Jewish-Arab communities are dominated by Jewish population. For all practical purposes, then, Jews are employed only in Jewish dominated labour markets.
5. In the present study we collapse the EGP class schema into a five-category classification as follows: (1) The service class (EGP classes I+II) consisting of professionals, administrators, managers and high-grade technicians. (2) Routine non-manual employees in administration and sales (class III). (3) Small proprietors and self-employed. (4) Skilled workers (classes V+VI). (5) Unskilled workers (class VII).
6. We also estimated the model that includes occupational status in addition to the class categories. This was done in order to capture the linear effect of occupational hierarchical position on the likelihood of withdrawal from the labour market. Controlling for occupational status we are also able to test whether class position affects the likelihood of exit from the labour force which is separate from the status dimension. The occupational status effect was negative and statistically significant in the Jewish population, suggesting a status effect within class categories. Other things being equal, the higher the occupational status the lower the likelihood that the person would exit the labour market during a one-year interval. Among Arab men, however, occupational status has no significant effect. Adding occupational status to the models, only slightly modified the direct effects of other variables on the likelihood of withdrawal. For further information see Lewin-Epstein and Sa'di (1998).

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