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Ethnic Segregation and the Quality of Local Government in the Minorities Localities: Local Tax Collection in the Israeli-Arab Municipalities as a Case Study

by

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Abstract

The negative effects of ethnic diversity on fiscal performance have been pointed out in several studies. These weaknesses are attributed to the lack of trust between ethnic groups, own-group bias in the willingness to support public expenditure, and a tendency to avoid, or evade, taxes when a feeling of injustice is prevalent – both within the majority group and among disadvantaged minorities. But, if ethnic diversity is bad for public policy, will a Tiebout (1956) type ethnic segregation lead to better performance? In this paper we show that, at least with respect to municipalities inhabited by a disadvantaged minority, the costs of segregation could be quite substantial. We examine one fiscal performance indicator in the local authorities in Israel: local taxes collected in each locality as a share of tax charges imposed by that locality. We find that this collection rate is substantially lower in Arab localities, than in Jewish ones, even after accounting for differences in socio-economic indicators and in various variables that affect tax exemptions and discounts. These findings are in line with those of studies in psychology, social work and education that point out low motivation and self-efficacy of discriminated minorities, which are reflected in inefficient – and sometimes destructive - behaviors.

1. Introduction

A large number of studies pointed out that ethnic diversity – at the national or local level – has a substantial negative effect on the ability to reach social consensus on various issues of public policy and, in particular, on the size and composition of public expenditure (see Section 2 below). Consequently, ethnic diversity is associated with lower quality of public services and a higher tendency to evade, or avoid, taxes. It was also found that, in ethnically mixed localities, members of each ethnic group oppose public expenditures that benefit the other groups; this phenomenon is exacerbated when the majority group decides on public expenditure directed at supporting minority groups. Other studies showed that individuals from minority groups develop mistrust in the political system and in other people and, consequently, tend to reduce their participation in social and political activity. Additionally, a markedly higher tendency to evade taxes was found in minority groups, especially when their members feel discriminated against. Furthermore, when different ethnic groups reside is separate parts of the same locality, the will to compress locally funded public services seems to intensify, especially with respect to services for the minority.

The costs associated with ethnic diversity raise the possibility that a Tiebout (1956) type segregation of the population into separate ethnically homogeneous communities may be advantageous both to the minorities and to the economy at large. Such segregation may facilitate collective action of each ethnic group to cater to its own priorities and tastes. There are examples of policies in the Netherlands that actively encourage the development of separate institutions on an ethnic basis, in order to facilitate mutual support of immigrants from the same origin (Van Poppel et al., 2003, Reinsch, 2001). Alesina et al. (1999) discuss the possible short-run benefits of segregation, although they conclude that they are unlikely to be long-lasting. Benabou (1996) presents a theoretical model with possible (short-run) positive growth effects of segregation. However, unlike the Tiebout model, the benefits of segregation in his model come from higher productivity of the high-skill group which more than offset the losses of the low-skill (minority) group. Thus, a first step in evaluating whether segregation may have some merits is to find empirical indications as to if, and to what extent, minority communities (particularly those with low socio-economic status) perform differently than majority dominated ones. It should be noted that most of the studies that found negative effects of ethnic diversity at the local level essentially compare majority

homogeneous communities with mixed ones, while their sample of minority-dominated localities is very limited and not analyzed separately.

There are good reasons to believe that, despite the advantages of homogeneity, minority-dominated localities will perform poorly, even beyond the direct effect of their low socio-economic status. Many studies in social and clinical psychology, social work, education and medicine indicate that the likelihood of dysfunctional conduct is much larger among minorities, especially disadvantaged ones. Members of minority groups tend to adopt behaviors that limit their chances for social and economic success, and sometimes lead to psychological, or even physical, damage to themselves. As a result, the damage of this behavior is added to the costs inflicted by discrimination itself. If such behavior is also adopted by the minority's leadership, one would expect poor performance of the minority's institutions. Yet, relevant to the issue of separate communities, it was found that social cohesion, mutual support and collective action within the ethnic group may moderate the effects of discrimination (real or perceived) and help members of the disadvantaged group to function more successfully. It was also shown that preserving the minority's sense of control over its own destiny, while retaining avenues for joint action, is helpful for effective coping with discrimination.

In this paper we look at a case study of minority-dominated local authorities: the Arab local authorities in Israel. The Arabs in Israel (within the 1967 borders) reside predominantly in separate and homogeneous municipalities, which provide them with the institutional infrastructure and the statutory powers to take collective action to enhance their own welfare. Given findings on the economic disadvantage of Israeli Arabs and evidence of discrimination against them in the labor market and resource allocation, the existence of separate local authorities facilitates an examination of the issues discussed above by observing data at the local authority level. These data are collected on a uniform basis from all the local authorities in Israel, hence allowing a comparison between the Jewish and Arab ones. On the one hand, one might expect that being a disadvantaged ethnic group would have negative consequences for the functioning of the Arab minority within its own municipalities; this would be consistent with the findings of dysfunctional behavior mentioned above and with findings that members of disadvantaged minority groups tend to mistrust people in general – and even more so, people from their own ethnic group - and to avoid collective action (Freshtman and Gneezy, 2001). On the other hand, the concentration

in homogeneous municipalities facilitates social support and joint action of the Arab public for itself – alleviating the suspicion that the fruits of these activities will reach the Jewish public, factors that were found to ease the negative effects of discrimination.

We focus on one aspect of the performance of the Arab local authorities: the rate of local tax collection as a share of the total amount charged by law (controlling for various parameters which are expected to affect this ratio). This rate is an indicator of both the degree of effort and quality of management by the elected leadership, and the public's willingness to carry the burden of payment for services. It is also quantitatively important: local tax revenue constitutes about two thirds of the current locally generated income of the Arab municipalities and is, hence, a central component of the resources they collect. Moreover, since most other local collection components reflect direct payment for services (such as water supply and extra-curricular education), the value of local property taxes as a source of "free" expenditure for the benefit of all residents in the locality is even larger.

The rest of this paper is organized as follows. Section 2 presents evidence from the literature on the effects of ethnic diversity on the magnitude and quality of fiscal variables in various countries and local authorities. Section 3 presents evidence on the behavior of minorities, especially disadvantaged ones, at the personal and collective levels and on the factors affecting it. In Section 4 we describe some characteristics of the Arab population in Israel, in light of the findings on ethnic diversity and the effects of segregation, and we present evidence about the disadvantaged status of the Israeli-Arab population. Section 5 describes the factors influencing local property-tax collection in Israel and the gaps between the various municipalities in collection rates. In Section 6 we present the results of the empirical analysis and in Section 7 we discuss the implications of these findings and raise some policy considerations.

2. Effects of ethnic diversity on public services, tax payment and minorities

There is ample evidence for the negative effect of ethnic diversity on various fiscal and economic variables, at both the national and the local levels. Some studies also found various indications hinting at potential advantages for minority groups from concentrating on homogeneous self-managed localities. Alesina et al. (2003), in a cross-section study of 190 countries, found that ethnic diversity is negatively correlated with the quality of government, economic welfare and growth, and La Porta et al. (1999) show that the quality

of government services is positively correlated with homogeneity of the population. Knack and Keefer (1997) pointed out the importance of trust in social institutions and in other members of society as a basis for improving the quality of public services, the level of economic activity and the standard of living.[1] In a comparative study between countries, they find that trust and the norm of civic cooperation are stronger in ethnically homogeneous societies and that these variables indeed contribute to improvements in economic and fiscal indicators. They also report a positive correlation between the level of trust in other people, which is negatively correlated with ethnic diversity, and tax obedience. One of the factors affecting the relationship between trust and tax obedience is that government officials – as individuals – and the government in general are perceived as more trustworthy in societies where the level of trust is higher. This result is consistent with Arrow's (1972) analysis, which stressed that trust between individuals and various groups in society is needed in order to conduct joint activities that require future commitments; e.g., tax collection used for later service provision.

The link between population heterogeneity and trust, and between both and the quality of public services and the willingness to pay for them, also receive much empirical support when examined at the local authority level. Alesina et al. (1999) find that ethnic conflicts influence public finance at the local level. They point out that heterogeneous groups have more difficulty in agreeing on the allocation of public services and on their financing, and that the more heterogeneous cities are, the lower is tax collection and the smaller is the proportion of public expenditures allocated for efficient uses. In a study examining the association between heterogeneity and trust, Alesina and La Ferrara (2002) found that trust in other people is negatively correlated with the level of heterogeneity in their locality and is lower for groups that suffer, or have suffered, from discrimination. These findings are consistent with those of Coleman (1990) that familiarity encourages trust and that individuals residing in mixed communities tend to avoid social interactions and, therefore, do not develop trust. This creates a vicious cycle: individuals in mixed communities are not involved in social activities in areas like education, culture and entertainment – whose cost is often covered with local public funds – and, hence, do not want to pay the taxes financing them (Alesina and La Ferrara, 2000). The avoidance of involvement in social activity is also

[1] This approach is based on Putnam's (1993) book which examined the economic development of local authorities in Italy.

reflected in lower participation in local political processes and, consequently, smaller influence on resource allocation (Verba et al., 1995).

The potential contribution of homogeneous localities for collective social activity, especially of minorities, is suggested by Luttmer (2001). He found that the willingness of individuals to support expenditures on welfare is rising with the share of their ethnic group among the recipients of these funds, and that this relationship is not influenced by the individual's income level. Bobo and Klugel (1993) point out the phenomenon of "group interest": people are altruistic with respect to others from their own ethnic group, but not towards members of other ethnic groups. This phenomenon is important because it indicates a potential willingness of high income individuals to pay local taxes that finance social services for their own ethnic groups more than in heterogeneous localities. In experiments conducted by Glaeser et al. (2000) and Freshtman and Gneezy (2001) it was found that individuals from different ethnic origins tended to trust each other less and to cheat each other more (only in the former study) than people from the same origin. Spicer and Becker (1980a, 1980b) show that tax evasion is affected by the perceived fairness of the fiscal system: those feeling disadvantaged by the system tend to evade taxes more than those who see themselves as benefiting from the system; because mistrust leads to a perception of unfairness, heterogeneity is harmful to tax obedience, particularly among disadvantaged groups. The existence of a framework where the minority group controls the use of tax receipts can raise the level of confidence, decrease the perceived unfairness of the fiscal system and enhance tax obedience. It should be stressed that physical separation of residential areas within mixed cities and municipalities does not solve the problems of heterogeneity, and may even intensify them. For example, Cutler and Glaeser (1995) found that the situation of Afro-Americans is worse in areas where within-city segregation is more pronounced. Wilson, (1996) suggests that this phenomenon reflects the relative ease of isolating the weak minority and cutting public expenditure selectively in the presence of residential segregation.

The negative effects of ethnic diversity raise the possibility that homogenous localities may make it easier for minorities to cope with discrimination, and may allow them to organize in a more efficient way to provide the desired public services and the required support for members of their group. As Rabushka and Shepsle (1972) wrote: "The failure of the state to insure nonexcludeability makes individuals turn to their ethnic communities, as a sort of alternative statehoods, for the provision of public goods" (p. 85). Dividing the population

into segregated homogeneous localities, in the spirit of Tiebout (1956), would facilitate greater public influence on the composition of public goods and would therefore increase the willingness to pay the associated taxes.[2] In Benabou's (1996) model there are advantages, at least in the short-run, to income-based segregation, although the low-income group would be disadvantaged by the separation, unless sufficient transfers are made to compensate its members. Alesina et al. (1999) also discuss the potential (short-term) merits of homogeneous localities as a solution to the costs of mistrust and heterogeneity. Weingast (1993) argues that if individuals from a minority join an ethnically homogeneous group it creates more trust in the activities in which they participate. This raises the possibility that in homogeneous localities residents would have more trust in the local administration and cooperation would intensify. From a more specific angle, related to education, Lareau and Horvat (1999) found that a positive interaction between the manner in which parents' values and ambitions are expressed and the accepted ways of expression ("rules of the game") in school play an important role in the success of children. One may think of a homogeneous local authority as a mechanism allowing residents a more efficient use of public resources because of the larger similarity in values and ways of expression between them and the local administration. Another advantage of homogeneous localities, especially if they are relatively small (like most Arab localities in Israel, for example), is that social sanctions and stigmas against those who evade taxes may be more effective (Roth et al., 1989), relative to heterogeneous communities, because people find attitudes of their ethnic group as more meaningful.

3. The effect of perceived discrimination on minorities' behavior

Despite the advantages of segregated homogeneous localities, it is not clear that this mechanism would overcome the problems affecting the minority and increase the willingness to carry the burden of local services. This is particularly questionable in the case of disadvantaged minorities or minorities that suffer from discrimination. To begin with, segregation may increase the potential for unfair resource allocation at the national level and could cause a loss of returns to scale, but these issues are beyond the scope of this paper. However, the implications of segregation are not even clear with respect to the efficiency of provision of public goods, trust in local government and the obedience to local taxation.

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[2] Actual tax payments would differ across localities, according to the preferred level of services.

Ethnic discrimination influences the affected person's behavior and quality of life in many ways. Psychologists found that it leads to low life satisfaction and stress, and thus reduces the individual's quality of life. Furthermore, some studies report clinical responses to discrimination such as anger, anxiety, paranoia, hostility and helplessness (Clark et al., 1999). Zayas (2001) found that ethnic discrimination of youths distorted the development of their identity and affected their social adjustment abilities. As a result, their functioning suffered and some of them adopted destructive behaviors such as violence and drug abuse (Klonof et al., 1999).

In addition to the direct harm that discrimination inflicts on the disadvantaged group, it also affects its members' ability to face various challenges and to promote themselves in a way that would limit the impact of discrimination. Crockett et al. (2003) find that discrimination causes the aspirations of the disadvantaged group to be limited and, consequently, that their ability to achieve higher goals is constrained. Luzzo and McWhirter (2001) found that the perception of barriers to success in school – and at work in the future – is higher among students from minority groups and that these students also had lower self-efficacy with respect to their ability to overcome impediments. The perception (whether accurate or not) that there are barriers to a successful career depresses the process of translating areas of interest into operational targets and goals. Even individuals with interest in a certain area will not act to realize it if they believe that they face significant obstacles on the way (Brown and Lent, 1996). Self-efficacy was also found to be the most significant factor in the tendency of youth from minority groups to actively seek a job (Bandura, 1995, Eden and Aviram, 1993). Nasdale and Pinter (2000) showed that the main factor affecting the development of minorities' self-efficacy in the job market was the degree to which they felt accepted by the majority group. This may imply that ambitious, and potentially successful, members of minority groups would focus their efforts for success outside their communities, rather than on intra-group activities.

Many of the negative effects of discrimination on minority groups' ability to compete in the economic and social systems are described by the term "learned Helplessness" (Martinko and Gardner, 1982). This term characterizes the behavior of individuals who attribute continuous lack of success to external factors (such as prejudice) and therefore give up trying to promote their position. One of the implications of this phenomenon is that even when the external conditions that caused the original failure disappear, these individuals no

longer believe in their ability to succeed. It follows that discrimination (perceived or real) of a minority may hurt the functioning of its members even in tasks where they are not directly exposed to it, a finding with direct implication for the performance of minorities in segregated localities.

While the concentration of a disadvantaged minority group in a segregated locality bears the risk of creating a mass of individuals with low motivation and ambitions, such a concentration may also entail potential advantages, which may moderate the effects of separation. Some of these advantages depend on whether members of the group believe that they have some control over their situation or that the cause of their difficulties is exogenous (e.g., discrimination) or determinant (low ability). In this context, Ruggerio and Taylor (1997) found that individuals from minority groups tend to understate the significance of the discrimination they face and attribute failures to themselves, even when relating the failure to discrimination could protect their self-value. The reason for this behavior is that admitting discrimination reduces one's sense of controlling one's destiny and is, psychologically and functionally, more harmful than attributing the failure to one's own efforts and ability. This approach is supported by other studies indicating that a sense of control is significant in improving an individual's well-being,[3] as well as for his/her performance and success (Chapman et al., 1990).

One of the important channels allowing minorities to gain a sense of control is joint activity and mutual support. Hackett and Byars (1996) stress that self-confidence in the ability to confront challenges may lead to successful coping, despite barriers like discrimination. Moreover, they determine that a collective effort by the disadvantaged group to overcome impediments assists in building this confidence. Pearlin (1989) points to the role of social ties as an instrument to confront discrimination, and Noh and Kaspar (2003) find that when given sufficient social resources, individuals from ethnic minorities have a better chance to confront ethnic bias rather than accept it. Verkuyten and Lay (1998) also find a significant role for collective action and shared identity in narrowing the psychological damages of discrimination and Van Poppel et al. (2003) point more directly to the role of segregated ethnic institutions in facilitating mutual support among minority groups. It was noticed in the Netherlands that immigrants tend to concentrate in separate areas in order to enjoy the

[3] For a review of these findings see Thompson and Spacapan (1991).

advantages of a unified group and to build a support mechanism that would facilitate social mobility (Gilberston, 1995).

4. The Arab Population in Israel

Israeli Arabs account for 18.8 percent of the urban population in Israel (residents of cities and municipalities).[4] Most of the Arab urban population – 72 percent – resides in Arab local authorities (90 percent, if East Jerusalem is excluded)[5] in which the vast-majority of the population is Arab. The Arab population is broadly divided into three religious groups: Muslims, Druze and Circassians, and Christians; Muslims are by far the largest group. Most Arabs live in localities which are populated by only one of these groups, except the Christians who reside, in some cases, in localities dominated by Muslims. These local authorities have their own statutory powers, mandated by the State, and like all other cities and municipalities are managed by directly elected mayors and by councils elected via a system of proportional representation.

The disadvantaged position of the Arab population in Israel is documented in many studies that examine income distribution, the relative position of Israeli Arabs in the labor market, the education system and the share of public expenditure allocated to them. Flug and Kassir (2001) pointed out the higher frequency of poverty in the Arab sector than in the Jewish population. They found that the risk of poverty is significantly higher for Arabs, even when household characteristics such as education, age, and the number of children and their age, are accounted for. Their findings indicate that the Arabs are deprived in employment options and in wages. Klinov (1999) and Gharrah and Cohen (2001) also show indications of discrimination against Arabs in the labor market and point to gaps in education that constrain the ability of Arabs to compete effectively in the labor market and contribute to the wage gaps between Jews and Arabs. Achdut, Lavi and Sola (2000) estimated a risk function for unemployment and found that the probability of an Israeli-Arab being unemployed is higher than that of a Jew with similar measured qualities. Lewin-Epstein et

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[4] Israeli Arabs are defined as Arabs who reside in localities which are subject to Israeli law. These include all the localities within Israel's pre-1967 borders, the Golan Heights and East Jerusalem.

[5] The Arabs in East Jerusalem (about 30 percent of the city's population) are eligible to a resident status in Israel and to Israeli citizenship. Most of them declined citizenship but enjoy the benefits associated with residency, such as social security allowances and the right to vote in the local elections. In practice, however, Arab participation in the local elections in Jerusalem is minimal and no Arab candidate was elected to the 31-member council in the past 35 years.

al. (1994) attribute the inferior position of Arabs in the Israeli labor market to their difficulty to be hired for jobs in Jewish localities along with the scarcity of jobs in Arab localities.

Other studies directly examined differences in the allocation of public resources between Jewish and Arab localities. Zeira and Strawczynsky (2002) demonstrate the bias against the Arab sector by comparing public expenditure per student in the Arab sector with that in the Jewish sector – controlling for other factors that could influence this expenditure. Justman and Spivak (2001) find that the general grants transferred to Arab local authorities were substantially lower than those allocated to Jewish ones and Lavi (1999) identifies discrimination in the disbursement of education funding – although the latter two studies suggest that the magnitude of discrimination has decreased in recent years. Razin (1999) finds that government funding of Arab local authorities is markedly lower than that of Jewish localities, and Shachor (2003) – controlling for population size, socio-economic status and location – finds significantly lower transfers to the Arab localities than to Jewish and Druz ones, although he also shows that the gap narrowed between 1994 and 2000.[6]

The discussion in the preceding sections suggests that the concentration of the Arab population in separate localities provides it with a potentially powerful instrument for collective action to tackle its disadvantaged position. This instrument, which most minorities in other countries lack, is the existence of an institutional framework with a statutory authority that makes collective action for its own interests more feasible. This framework allows the Arab population more control of its destiny, especially in light of the significant role of local authorities in Israel in developing and maintaining the tools to reduce poverty in the long-run (education and physical infrastructure) and alleviating it in the short-run (welfare services).

However, along with the potential advantages of segregation, other forces may cause the segregation to actually enhance the gaps between the Jewish and Arab populations. As discussed in Section 3, the functioning of disadvantaged minorities tends to suffer. If this is so, the performance of the minority's local government could be inferior to that of other

[6] The feasibility of analyses based on financial data of the local authorities expanded since the mid-1990s, due to changes in the Ministry of the Interior reporting requirements, and their enforcement. For a description see Brender (2003).

localities.[7] Moreover, individuals from disadvantaged minority groups tend sometimes to adopt a prejudice against their own group (Freshtman and Gneezy (2001). In this case, the confidence of the minority population in a local administration run by members of their own group may be reduced. Additionally, the willingness to support welfare transfers is declining as the share of grants and/or welfare services in the environment of the individual is increasing (Luttmer, 2001). If minority localities are characterized by a high proportion of people in need of local welfare services, it may lead to a lower inclination to carry the burden of these services, despite the ethnic homogeneity of the locality. As Lassen (2003) argues, the success in tax collection depends to a large degree on the perceived yield on taxes to the payee. If, due to the above factors, taxpayers feel that they do not receive the desired services in return for their taxes, and in an efficient manner, their incentive to pay these taxes will decline (Slemord, 2001).

5. Tax collection ratios as an indicator of local effort and performance

Examination of the Arab local authorities' performance should be based on variables that are directly connected to their own efforts, are subject to their control and are comparable to other local authorities. For that purpose, an examination of various expenditure components is problematic, as they are not subject to clear criteria, which impedes effective cross-section comparisons. Moreover, the composition of expenditure is affected by the locality's ability to generate resources that would be used to draw matching government funds, especially if one accepts that there is discrimination against the Arab sector in the allocation of government funds. Finally, a comparison of the composition of expenditure in Israel is hampered by the diverse mechanisms used for the provision of services in different localities; some cities and municipalities finance various services through direct budgetary transfers, or they use municipal employees, while others use extra-budgetary agencies and corporations (e.g., for water supply, educational services and cultural activities). The various methods of organization also render the use of total local budgetary revenue collection as a problematic base for comparison.

Local property tax payments are a better measure to examine the degree of "own effort" by the Arab population to provide its needs through the local authorities. However, the

[7] Lewin-Epstei et al. (1994) discuss the implications of the Arab population's concentration in segregated localities on the quality of management in the Arab sector. Landau (1993) points to the increasing relevance of political processes in the elections for Arab local administrations in a period in which it was found that Jewish localities increased the emphasis on the managerial aspect (Brender, 2003).

comparison should not be based on total collection: since income levels and property values in the Arab sector are low, local tax charges are low as well. Furthermore, while local tax rates were originally set locally, their annual adjustments in the past 20 years were determined by the Knesset (the Israeli Parliament), generally at the same rate for all the localities (typically, the annual change in the CPI). Therefore, although they are generally consistent with local tastes, tax rates cannot be treated as reflecting only independent decisions of the local authorities.[8] Accordingly, the examination of the authorities' "own effort" should be based on the share of collected taxes in total tax charges, rather than on total collection (e.g., per capita). This ratio better reflects the effort of the local authority in collecting the taxes along with the willingness of the local public to obey the tax rules and carry the burden of financing local public services.

Nevertheless, the collection rate does not reflect only the collection effort and efficiency of the local administration and the willingness of the residents to obey. National laws and regulations determine substantial discounts for various population groups, such as handicapped people, recipients of income support, elderly individuals, and families with a large number of children. The execution of these discounts and exemptions, including the determination of individual eligibility, is the responsibility of the local authority. Local authorities may also grant relief for households based on their economic circumstances. Since some of these criteria may affect the Arab sector substantially more than the Jewish population, one needs to control for their effect in order to identify the degree of "own effort" in the Arab localities.

The collection rate of local property taxes was calculated using the annual reports of the Local Authorities Audit Department of the Ministry of the Interior (MOI). These reports have been published regularly since 1996 and cover all the local authorities (more than 250 in total). They contain information on current tax charges[9] and actual collection in each locality. Because the collection data do not separate payments of current charges and collection of debts (although the latter are quite small) measurement of the collection ratio is

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[8] Examiniation of the tax rates shows that they are positively correlated with residents' salaries, with the size of the locality, and with the share of the elderly. Regression analysis shows statistically significant lower tax rates in the Arab localities compared to Jewish ones in the 5 lowest socio-economic clusters (to which all the Arab localities belong).

[9] That is, charges related to the current year. Charges related to uncollected taxes from previous years are reported separately.

smoothed by using 3 year averages for each locality. Additionally, since the 1996 data include a relatively large number of irregular values for various variables – probably reflecting problems with the initiation of the reporting system – the variables were calculated for 1997-1999 and 2000-2002. Regional councils were excluded from the analysis because each council includes several localities, which may be spread over a large area, and, hence, their character is less relevant for the issues studied here. The remaining sample includes 195 cities and municipalities. Information on collection ratios in Jewish and Arab local authorities are reported in Table 1, and show a gap of more than 30 percentage points, a gap that has widened in recent years.

As mentioned above, the collection ratio depends on various characteristics of the locality and its residents, which affect discounts and exemptions as well as the residents' ability to pay. Data on these characteristics were obtained by matching the MOI data with Central Bureau of Statistics (CBS) data on the socio-economic parameters of the local authorities. As a result of this match the sample decreased to 184 localities – 115 Jewish and 69 Arab – for which data are available for the entire period.

The control variables in the estimation represent two categories: those directly reflecting the official criteria for tax discounts and exemptions, and those reflecting the socio-economic status of the locality and, accordingly, the ability of the residents to pay their taxes. The former category includes: 1) the number of social security income support recipients per 1,000 residents; 2) the percent of third and successive children[10] among all children in the locality; 3) the percent of disability allowance recipients; 4) the percent of old-age allowance recipients. The latter category includes: 1) the average salary of a resident male employee; 2) the number of private cars per capita; 3) the average age of privately owned vehicles;[11] 4) the socio-economic index calculated by the CBS for each locality.[12] Data on unemployment by locality were not available for all the years, but their inclusion in the analysis, when they exist, did not have a noticeable effect of the measured differences between Jewish and Arab localities. Arithmetic averages of the control variables in Jewish and Arab localities are reported in Table 1. The comparison shows that the average salary of a Jewish male employee is almost double that of an Arab, that cars in the Arab localities are

[10] That is, the percent of children born as third or subsequent child to the same mother. In the later years we also use the ratio for fifth and subsequent children when it is available (see discussion below).
[11] When this variable is excluded the sample expands to 185 localities.
[12] The use of this variable reduces the sample to 182 localities.

older, that there are relatively more income support recipients in the Arab localities and that the gaps between Jewish and Arab localities expanded in recent years. On the other hand, the percent of disability and old-age allowance recipients in the Jewish localities is higher. Additionally, local tax discounts are granted for disabled veterans – discounts which are obviously more common in Jewish localities – but the lack of data on this group prevented us from controlling for it in the econometric analysis.

The equations were estimated using OLS where the dependent variable is the ratio of local property tax collection to current charges in the years 1997-1999 and 2000-2002. In addition to the control variables mentioned above the equations included a binary variable that received the value 1 for all the Arab local authorities and 0 for the Jewish ones.[13] The coefficient of this variable is intended to test whether there is a significant difference between Jewish and Arab localities in collection rates, beyond the effect of the control variables. We also included a binary variable for the Druze local authorities in the Golan Heights,[14] whose behavior is markedly different from that of the other local authorities. Moreover, the CBS does not calculate the socio-economic index for these localities (except for Rajar).

6. Results

The equations in Table 2 suggest that the socio-economic variables included in this study describe quite closely the factors that affect the tax collection rate. The equations explain between 77 to 80 percent of the variance between the localities, although in some cases the specific coefficients are not statistically significant, due to the high correlation between them. As expected, we find that the higher the average salary and the newer the vehicles in the locality (as indicators for the income level and wealth), the higher the tax collection rate. We also find that higher shares of disability and old-age allowance recipients are associated with lower collection (see also Tables 3 and 4) – a finding consistent with the rules for exemptions and discounts. As for income support recipients, the effect of their share in the population on the collection rate became significant only in 2000-2002, in line with the substantial and continuous rise in this share in recent years. The increase in the proportion

[13] Mixed localities with a Jewish majority were coded as Jewish. See further discussion below.
[14] These local authorities are Buk'ata, Majdal Shams, Mas'ada, Ein Kina and Rajar. These localities are officially subject to Israeli law even though they were not annexed to Israel. Their residents object to the decision to subject them to Israeli law.

of recipients is particularly marked in the Arab localities (Table 1), a development stressing the relevance of controlling for this variable in this study.

Using slope dummy variables, we tested whether there is a significant difference between Jewish and Arab localities in the way the socio-economic variables influence the collection ratio. We found no evidence of a statistically significant effect in any of the socio-economic variables. We also tested whether the size of the locality's population affects collection rates and found no statistically significant effect.[15]

The percent of children from large families (defined as third and subsequent children) is included in a non-linear form, because the tax discount rates are increasing with the number of children in the household – especially for families with 5 or more children. The results support this characterization of the relationship between the number of children and collection rates: the larger the share of children from large families, the lower the collection rate. This is reflected in the negative and statistically significant coefficient of the quadratic form of the variable.[16]

Unfortunately, data on the percent of fifth and consecutive children are not available prior to 1999, and therefore we use the data on third and successive children. However, in the later period (2000-2002) we can also use the information on fifth and subsequent children (equation 5). We find that this variable eliminates the significance of the percent of third and successive children, and that when it is available there is no need for the quadratic form. Regardless of which variation of this variable we use in each specification, the key research variable is not qualitatively affected.[17]

Beyond the effect of the control variables, the equations show a substantial and statistically significant difference in the collection rate between Jewish and Arab local authorities. This

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[15] The estimated coefficient was negative, as expected (assuming that in small localities the peer pressure to obey is stronger), but when Jerusalem, whose large size makes it an outlier, is excluded, the coefficient loses its statistical significance. The inclusion or exclusion of this variable has no bearing on the coefficients of the other variables, including the dummy variable for the Arab local authorities.

[16] The effect of the number of children from large families turns negative when the share of third or successive children is above 45 percent. In the vast majority of the localities, including all the Arab ones, this share is higher.

[17] When the share of fifth and successive children is included in the equations, the negative coefficient of the binary variable for Arab local authorities increses.

difference amounted to 15 percentage points in the late 1990s and was between 16 and 19 percentage points in 2000-2002; the change from the early to the later period is not statistically significant. That is, even after accounting for the income level and for differences in the composition of the population, which affect tax discounts and exemptions, the Arab local authorities collect 15-19 percent less of the current tax charges. Since, on average, the Arab local authorities collect 45 percent of their current charges (Table 1), a "corrected" collection rate similar to that of the Jewish authorities would have increased their tax revenue by more than one third.

Table 3 shows the effect of adding the socio-economic index of the localities to the equations. Because it is not computed annually, we used the index for 1999 in the equations for 1997-1999 and the index for 2001 in the 2000-2002 equations. The inclusion of this variable slightly improves the precision of the equations. This addition reduces, but does not eliminate, the significance of the variables that reflect the tax discounts, even though the index calculation is partially based on these variables. This remaining significance may indicate that the contribution of these variables does not only reflect their correlation with the socio-economic status of the locality, but also their direct effect on tax discounts and exemptions. In these equations, the measured gap between Jewish and Arab localities in collection rates is estimated at 20 percentage points in 1997-1999 and 20-22 percentage points in 2000-2002 (the difference between the early and later period is not statistically significant). This gap amounts to almost 50 percent of total tax collection in the Arab local authorities.

One factor that is sometimes mentioned as impinging on the willingness to pay local taxes in Israel is the attitude towards the state. Although the taxes paid to the Arab local authorities are used solely for expenditures designated for the benefit of the Arab public, it may be that hostility towards the State increases the tendency to evade activities that are subject to State laws. One way to investigate this is to examine the development of the "corrected" gap in collection rates between Jewish and Arab localities over time. Arab-Jewish relations in Israel have deteriorated since the mid-1990s, following the fading of the Oslo peace process, a deterioration that peaked in the October 2000 riots and the following escalation of the Israeli-Palestinian conflict through 2001-2002. If the Israeli-Palestinian conflict influences collection rates, one would have expected the Arab-Jewish gap to widen over time. However, there was no statistically significant increase in the gap during that

period. A second way to examine this question is by comparing the Muslim and Christian localities to the Druze and Circassian ones. The latter's attitudes toward Israel are less influenced by the Israeli-Palestinian conflict, and their men serve in the Israeli army. Such a comparison appears in Table 4 and shows that there is no statistically significant difference between the Druze and Circassian localities and the other Arab localities, and that this difference did not change significantly in recent years. These findings suggest that the national conflict itself is not the factor that generates the low collection rates in the Arab localities. Nevertheless, the inclusion of a dummy variable for the Druze and Circassian localities increases somewhat the estimated gap between the Jewish and other Arab localities in the period 2000-2002 to the order of 23-25 percentage points – more than 50 percent of total collection in the Arab localities. We have also tested whether there is a difference between Muslim and Christian localities by controlling for the percent of Christians in each Arab locality.[18] We found no statistically significant difference between Muslim and Christian localities (equations 4-6).

Since all the Arab localities are in the lower socio-economic clusters, we also estimated the equations only for the localities in the lowest 5 clusters (out of 10), which include all the Arab localities. This estimation is intended to remove unobserved characteristics of low-income localities that may have an impact on the results. We find that the relative gap between Jewish and Arab localities remains at the same magnitude as that observed for the full sample (Table 5) and that there are still no significant differences between Muslim, Druze and Christian local authorities.

7. Discussion and policy implications

The empirical findings suggest that the concentration of most of the Arab population in Israel in segregated homogeneous localities does not contribute, to say the least, to a collective effort that would help to improve the quality of public services in the Arab localities. Segregation provides the Arab population with a convenient statutory setting to mobilize resources that would help to constrain the effect of its disadvantaged position, while avoiding the risk of diverting these funds by local Jewish-dominated administrations. However, we find that as far as it is reflected in payment/collection of local taxes this

[18] In some Arab localities the population is a mix of Muslims and Christians, while others are homogeneous. Therefore, we controlled for the proportion of Christians, rather than simply using a dummy variable for Christian localities.

mechanism is not utilized; collection rates are substantially lower than in the Jewish localities, even when the socio-economic variables that affect the collection rates are accounted for.

Whether a country is ethnically homogeneous is, in most cases, a given, but the organization of its municipal structure is, to some extent, a choice variable, especially in small and densely populated countries. The findings of the current case study imply that the costs associated with segregation could be quite substantial to an ethnic minority, in terms of the quality of management of its localities. These costs are beyond other potential caveats such as a better ability of the national majority to divert government resources away from the minority, and a loss of returns to scale. While it is not possible to come out with a strict verdict whether a disadvantaged minority is worse off in a segregated homogeneous locality, the great inefficiency identified in this paper, and ample anecdotal evidence that it is not limited to tax collection, suggest that the advantages of segregation in other fields would have to be very large to make segregation beneficial to the minority.

These findings are consistent with those of studies in psychology, social work and education that investigated the effects of discrimination on the behavior of the group discriminated against. According to these studies, discrimination creates a sense of mistrust in other people, reduces self-efficacy and hurts the minority's members' motivation to improve their situation. As a result, the quality of management in localities dominated by an ethnic minority could be harmed, which in turn would harm the efficiency of tax collection and reduce the willingness of the residents to pay local taxes. Some studies suggest that the concentration of the population in homogeneous localities could ease the negative effects of ethnic diversity on the public administrations' quality and on trust in other people and cooperation. However, it appears that the behavioral consequences of discrimination are dominant. It is likely that the positive effects of homogeneity, found in other studies in other countries, reflected the fact that the homogeneous localities in these countries were predominantly populated by the ethnic majority in the country. The Israeli-Arab example suggests that for a disadvantaged minority segregation may actually intensify the harm to the quantity and quality of public services.

One of the key links between perceived discrimination and tax obedience is trust, as highlighted, for example, by Scholz.[19] Against this background, it is important to examine whether the disadvantaged economic and social position of Arabs in Israel is accompanied by lower degree of trust in people than is the case among the Jewish public. We study this issue with data from the World Values Survey (WVS),[20] which were used in several studies that investigated the issue of trust in various countries.[21] The findings in Table 6 show that trust among Israeli-Arabs is substantially lower than among the Jewish population. Moreover, this gap does not seem to reflect cultural differences between Jews and Arabs because the level of trust among Israeli Arabs is much lower than that in Arab countries and even more so than in Muslim countries. Moreover, the level of trust among the **Jewish** population is similar to that found in Arab countries. These findings imply that the starting point for collective action of the Arab public, even for its own benefit, is demanding. Local administrations in the Arab sector are faced with an especially heavy burden of proof, given that their cliental is a suspicious mistrusting community. The mistrust is augmented by greater acceptance of non-normative behaviors, such as bribery, in the Arab sector – which also indicates mistrust of the authorities.[22]

Another factor that may affect the willingness of the Arab public to support its local administration is the degree to which discrimination is perceived to be related directly to the activity of the local authorities. We examined this question by comparing the general grants allocated by the central government to Jewish and Arab local authorities. These grants constitute a resource complementary to the funds collected through local taxes, as both are not directly tied to specific expenditure items, and allow some freedom to the local administration in deciding how to allocate these funds. The general grants are allocated on the basis of stringent criteria, which are not supposed to be biased against the Arab localities – except for the determination of national priority areas, which receive additional support. As suggested by Knack and Keefer (1997) setting a stringent and unbiased formula which does not discriminate against the minority is a trust-building mechanism. Because this mechanism is specific to the allocation of the free funds at the disposal of the Arab local

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[19] See: Scholtz and Pinney (1995), Scholtz and Lubell (1998) and Scholtz (1998).
[20] Source: Inglehart (2004).
[21] I am indebted to Efraim Yaar for the data and statistical analysis of trust among Israeli Arabs.
[22] Only 62 percent of the Israeli Arabs replied "never" to the question whether accepting a bribe in the course of one's duties is justifiable, as compared to 89 percent of the Jews (based on WVS data). The difference between the averages of Arabs' and Jews' responses to this question – on a scale between 1 and 10 - was statistically significant at 0.0001 percent.

authorities it may reduce the sense of unfairness in the Arab sector, at least in this context. Importantly, since the adoption of the general grants' formula in the early 1990s, there is no connection between local tax collection and the allocation of the grants, so there is no place for "strategic" behavior by Arab local authorities to maximize them.

To examine whether the allocation of these funds is biased against the Arab localities, we estimated equations where the dependent variable is the per capita amount of the general grant. The explanatory variables are socio-economic variables that are supposed to influence the grants' allocation. As can be seen in Table 7, as far as the general grants are concerned, there is no evidence that the Arab local authorities are discriminated against as compared to the Jewish localities.[23] We also find no evidence for a difference between Muslim and Christian localities on the one hand to Druze localities on the other, or for any discrimination in the late 1990s. Moreover, when the dummy variable specifying whether the locality is in a national priority zone – a potential instrument for favoritism in itself - is removed from the equations, these results hold (equations 3 and 4.[24]

Another factor that may explain the results is the familial/tribal structure of the Arab population that may cause residents to perceive their localities as heterogeneous, even though they are ethnically homogeneous. Landau (1993) points to the significance of this factor in the management of Arab localities - which is consistent with the psychological mechanisms for coping with discrimination, mentioned in section 3 - although he also finds that this effect is diminishing over time. If such a split is important in Arab localities it may impede the ability to cooperate and diminish the trust between various groups - an important factor impinging on tax obedience.

In light of the Arab local authorities' failure to collect the local resources that would allow them to provide appropriate public services, it may be necessary for the government to step in to provide a minimal service level and ensure more fairness in local tax payments. Even if

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[23] However, since we find a positive correlation between the socio-economic status and the size of the grant (when controlling for income and wealth which have the expected negative signs) this may be reflected in a sense of unfairness in the weak localities, many of which are Arab.

[24] Since the equations control for the population size in the locality, Jerusalem is an outlier in this variable. To examine whether its inclusion in the sample alters the results we also estimated the equations without Jerusalem (equations 5 and 6). The results with respect to the Arab localities were not qualitatively affected. We also estimated the equations only for the localities in the five lower socio-economic clusters, and found that the coefficient on the Arab localities dummy remains insignificant (the results are available upon request).

some of the poor functioning of the Arab local authorities can be attributed to behavioral effects of the Arab population's disadvantaged position, closing this disadvantage may be a lengthy process. While this process has advanced markedly with respect to the allocation of government funds to the localities, progress in other areas, such as the labor market, is likely to be slower and waiting for its completion may be too costly. However, to avoid aggravating the perceptions of discrimination - a demanding and delicate task - intervention should be limited to the necessary minimum and shall facilitate a return to full self-management as soon as possible. In this respect, it would be useful to follow the path described by Martinko and Gardner (1982): stress the role of the lack of effort in creating the current situation while training devoted and professional leadership and an administrative cadre that will have the self-efficacy to mobilize the Arab population for the collective action it so badly needs.

Recent legislation provides the government with better instruments to handle local management problems. The MOI is now allowed to nominate tax collectors and/or treasurers in localities that do not collect taxes at an acceptable rate, or that show weaknesses in controlling their expenditures. Decisions about the use of the available funds would still remain the responsibility of locally elected officials. This is a substantial change from the past, when the government's only instrument was to transfer all the responsibilities of the local administration to a nominated committee. The new mechanism is a way to tackle low tax collection while providing the residents some confidence that the funds are used for their benefit (Alt, 1983). Moreover, systematic tax collection could go some way in healing residents' feelings of unfairness when many residents avoid taxes while others carry the burden. A sense of fairness could increase the willingness to pay taxes because free tax obedience requires that taxpayers believe that other residents also pay their share (Levi, 1988). As Knack and Keefer (1997) stressed, institutional reforms that facilitate a more reliable enforcement of contracts (in this case between local authorities and their residents) are particularly useful where trust is low and is not expected to develop in the near future. The importance of an efficient administration for collection rates is also indicated by our finding that the regression-corrected collection rates are not lower in mixed Arab-Jewish localities, where the administration is dominated by the Jewish majority.[25] While more research is required before any decisive statements can be made, the findings may suggest

[25] There are no mixed localities with an Arab majority.

that the current government policy of avoiding mergers of Jewish localities with Arab ones may require rethinking. If the mismanagement of many Arab local authorities is as large as suggested by our findings, there should be Pareto-improving policy designs that would make such mergers beneficial to both merging localities.

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Table 1: Economic and Social Charectaristics of Jewish and Arab Localities in Israel[1]

Variable	Period	All Localities	of which:		Of the Arab localities	
			Jewish	Arab	Druze	Golan Height
Number of localities		184	115	69	11	5
Average salary per employed man (NIS per month)	1997-1999	6,274	7,490	4,249	5,249	3,647
	2000-2001	6,794	8,298	4,393	5,590	3,029
Average age of private cars (years)	1997-1999	7.5	6.5	9.0	8.6	8.9
	2000-2002	7.9	6.7	9.8	9.2	10.1
Share of 3rd and subsequent children among the children in the locality	1997-1999	63.4	54.7	77.9	77.8	74.5
	2000-2002	61.7	53.2	75.8	74.1	67.9
Share of recipients of disability allowance in the population	1997-1999	3.4	3.6	3.2	3.0	1.8
	2000-2002	4.0	4.2	3.7	3.5	2.3
Income support recipients (per 1,000 residents)	1997-1999	59.7	48.3	78.9	38.4	47.6
	2000-2002	79.1	55.0	119.2	55.3	73.0
Socio-economic index	1999	0.03	0.49	-0.78	-0.67	…
	2001	0.08	0.57	-0.80	-0.50	…
Share of local property taxes collected from total charges	1997-1999	68.1	79.9	48.5	50.5	73.5
	2000-2002	66.6	79.5	45.1	53.5	61.1

[1] All the variables are calculated as arithmetic means of the localities in the category.

Source: Central Bureau of Statistics, except for local tax collection, which is calculated from data reported by the Local Authorities Audit Department at the Ministry of the Interior.

Table 2: Ethnic Differences in Tax Collection Rates

Variable	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
	1997-1999	2000-2002	1997-1999	2000-2002	2000-2002
Constant	66.610 (4.657)***	71.965 (5.512)***	92.070 (8.206)***	88.268 (7.890)***	92.180 (11.059)***
Arab local authority	**-15.159** (6.425)***	**-16.417** (5.956)***	**-15.316** (6.238)***	**-16.543** (5.764)***	**-19.224** (7.092)***
Arab\Druze in the Golan Height	25.086 (3.860)***	12.929 (2.136)**	20.575 (3.231)***	10.449 (1.851)*	14.613 (2.407)***
Average age of private cars	-2.342 (2.074)**	-2.000 (1.994)**	-3.844 (4.050)***	-2.850 (3.157)***	-1.968 (2.103)**
Income support reepients	-0.031 (1.462)	-0.054 (3.127)***	-0.039 (1.917)*	-0.059 (3.527)***	-0.049 (2.796)***
Percent of 3rd and subsequent children.	0.738 (2.187)**	0.745 (2.261)**	0.923 (2.706)***	0.802 (2.366)**	...
Percent of 3rd and subsequent children squared	-0.008 (2.502)**	-0.008 (2.673)***	-0.010 (3.015)***	-0.009 (2.768)***	...
Percent of 5th and subsequent children.	...	...	...	...	-0.252 (3.548)***
Average salary per employed man	0.002 (3.417)***	0.001 (2.537)**	...	...	0.001 (2.247)**
Recipients of disability allowance	...	...	-1.444 (2.842)***	-0.694 (1.526)	...
Adjusted R^2	0.779	0.784	0.777	0.779	0.787
S.E of regression	9.185	9.654	9.179	9.736	9.582
Average of Dependent variable	68.307	66.722	68.117	66.590	66.722
F statistic	93.913	96.375	92.130	93.600	114.401
Significance of F ststistic	0.000	0.000	0.000	0.000	0.000

The equations were estimated for 185 local authorities for which data are available for the entire period. Equations 3 and 4 were estimated for 184 localities. Absolute values of t statistics are in parantheses.

* - significant at the 1 percent level. ** - significant at the 5 percent level. *** - significant at the 10 percent level.

Table 3: Ethnic Differences in Tax Collection Rates: The Effect of the Socio-Economic Status

Variable	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
	1997-1999	2000-2002	1997-1999	2000-2002	2000-2002
Constant	70.230 (6.032)***	66.361 (4.943)***	54.077 (5.950)***	62.787 (6.483)***	82.063 (34.699)***
Arab local authority	**-19.707** (8.209)***	**-21.634** (8.259)***	**-18.912** (8.104)***	**-20.499** (8.059)***	**-22.485** (10.364)***
Arab\Druze in the Golan Height	57.928 (30.537)***	34.482 (19.542)***	57.470 (29.860)***	33.939 (18.473)***	35.523 (17.202)***
Socio-economic index	6.817 (7.541)***	8.251 (7.501)***	7.202 (5.457)***	5.911 (4.336)***	4.780 (3.319)***
Percent of 3rd and subsequent children.	0.651 (1.867)*	0.546 (1.340)	0.942 (2.905)***	0.683 (1.925)*	...
Percent of 3rd and subsequent children squared	-0.008 (2.665)***	-0.006 (1.717)*	-0.009 (3.158)***	-0.007 (2.119)**	...
Percent of 5th and subsequent children.	...	...	...	...	-0.213 (2.767)***
Old-age allowance recepients	-0.063 (2.351)**	-0.036 (1.481)	...	...	...
Income support reepients	...	...	-0.008 (0.318)	-0.046 (2.393)**	-0.046 (2.396)**
Adjusted R^2	0.798	0.782	0.794	0.790	0.792
S.E of regression	8.869	9.768	8.960	9.585	9.527
Average of Dependent variable	68.328	66.931	68.328	66.931	66.931
F statistic	119.810	108.473	116.807	113.750	138.407
Significance of F ststistic	0.000	0.000	0.000	0.000	0.000

The equations were estimated for 181 local authorities for which data are available for the entire period. Absolute values of t statistics are in parantheses.
* - significant at the 1 percent level. ** - significant at the 5 percent level. *** - significant at the 10 percent level.

Table 4: Ethnic Differences in Tax Collection Rates: Diversity Between Muslim, Druz and Christian Local Authorities

Variable	(1)	(2)	(3)	(4)	(5)	(6)
	1997-1999	2000-2002	2000-2002	2000-2002	1997-1999[1]	2000-2002
Constant	53.671 (6.237)***	62.290 (6.453)***	81.361 (33.635)***	80.988 (33.043)***	84.543 (29.643)***	83.452 (30.607)***
Arab local authority	**-19.679** (8.119)***	**-21.859** (7.600)***	**-23.799** (9.841)***	**-25.184** (9.225)***	**-25.593** (10.807)***	**-26.721** (8.799)***
Arab\Druze in the Golan Height	57.349 (32.841)***	35.020 (17.007)***	36.709 (16.514)***	37.448 (15.645)***	59.296 (31.510)***	37.714 (15.431)***
Druze local authority	3.716 (0.841)	5.448 (1.204)	5.938 (1.323)	6.611 (1.470)	4.894 (1.062)	7.169 (1.568)
Population share of Christians (in Arab local authorities)	...	...	...	8.143 (1.376)	9.875 (1.617)	9.479 (1.499)
Socio-economic index	7.436 (5.908)***	6.286 (4.484)***	5.061 (3.493)***	5.096 (3.491)***	5.949 (4.504)***	5.076 (3.519)***
Percent of 3rd and subsequent children.	0.942 (2.946)***	0.665 (1.868)*	...	...	...	...
Percent of 3rd and subsequent children squared	-0.009 (3.174)***	-0.007 (2.023)**	...	...	...	...
Percent of 5th and subsequent children.	...	...	-0.210 (2.724)***	-0.189 (2.419)***	-0.295 (4.293)***	-0.224 (2.774)***
Old-age allowance recepients	...	...	...	...	-0.059 (3.077)***	-0.030 (1.878)*
Income support reepients	-0.001 (0.030)	-0.037 (1.846)*	-0.037 (1.850)*	-0.035 (1.749)*	0.012 (0.470)	-0.029 (1.353)
Adjusted R^2	0.795	0.792	0.795	0.796	0.805	0.797
S.E of regression	8.933	9.541	9.468	9.435	8.718	9.420
Average of Dependent variable	68.328	66.931	66.931	66.931	68.328	66.931
F statistic	101.009	98.781	117.313	101.563	94.008	89.357
Significance of F ststistic	0.000	0.000	0.000	0.000	0.000	0.000

The equations were estimated for 181 local authorities for which data are available for the entire period. Absolute values of t statistics are in parantheses.

* - significant at the 1 percent level. ** - significant at the 5 percent level. *** - significant at the 10 percent level.
[1] Data on the share of 5th and subsequent children are for 1999.

Table 5: Ethnic Differences in Tax Collection Rates at the Lowest Five Socio-Economic Clusters

Variable	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
	1997-1999	1997-1999[1]	2000-2002	1997-1999[1]	2000-2002
Constant	68.425 (2.143)**	82.084 (13.313)***	76.823 (18.060)***	84.228 (14.594)***	77.052 (18.189)***
Arab local authority	**-17.950** (5.812)***	**-21.235** (6.396)***	**-18.903** (6.714)***	**-23.094** (7.570)***	**-20.497** (5.688)***
Arab\Druze in the Golan Height	58.804 (5.780)***	57.911 (5.729)***	33.856 (14.329)***	58.934 (26.653)***	35.190 (12.426)***
Druze local authority	...	...	...	3.891 (0.830)	5.507 (1.210)
Population share of Christians (in Arab local authorities)	...	...	...	0.983 (0.185)	-1.572 (0.259)
Socio-economic index	8.012 (2.716)***	7.242 (2.381)**	20.116 (4.632)***	7.348 (2.169)**	17.800 (3.903)***
Percent of 3rd and subsequent children.	0.680 (0.796)	...	...	...	...
Percent of 3rd and subsequent children squared	-0.008 (1.328)	...	...	...	...
Percent of 5th and subsequent children.	...	-0.278 (2.794)***	0.091 (0.599)	-0.294 (3.241)***	0.040 (0.271)
Old-age allowance recepients	-0.035 (0.474)	-0.010 (0.171)	-0.029 (0.922)	-0.032 (0.631)	-0.024 (0.742)
Adjusted R^2	0.688	0.689	0.701	0.693	0.796
S.E of regression	9.961	9.940	10.621	10.059	9.435
Average of Dependent variable	57.990	57.990	56.365	57.990	66.931
F statistic	42.186	50.720	53.460	37.057	101.563
Significance of F ststistic	0.000	0.000	0.000	0.000	0.000

The equations were estimated for the113 local authorities at the bottom5 socio-economic clusters, as defined by the CBS, for which data are available for the entire periodAbsolute values of t statistics are in parantheses

* - significant at the1 percent level. ** - significant at the5 percent level. *** - significant at the10 percent level.

[1] Data on the share of5th and subsequent children are for1999.

Table 6: The Share of Respondents Stating that People, in General, Can be Trusted[1].

	Can be trusted	Cannot be trusted
	(Percent)	
Israel	**23.4**	**76.6**
Arabs	5.5	94.5
Jews	25.9	74.1
Arab Countries		
Algeria	11.2	88.8
Egypt	37.9	62.1
Jordan	27.7	72.4
Morocco	22.8	77.2
Average for these countries	**24.9**	**75.1**
Muslim Countries		
Iran	65.4	34.7
Indonesia	51.6	48.4
Pakistan[2]	24.8	75.2
Average for these countries	**41.7**	**58.3**

[1] Source: World Values Survey data for 1999-2002.

[2] Average of the responses in 1996 and 2000.

Table 7: Differences in Per-Capita General Grants Beteeen Jewish and Arab Localities

					Excl. Jerusalem	
Variable	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
	1997-1999	2000-2002	1997-1999	2000-2002	1997-1999	2000-2002
Constant	272.288 (5.913)***	393.063 (6.262)***	315.190 (7.076)***	428.371 (6.965)***	284.734 (6.447)***	398.166 (6.552)***
Arab local authority	**3.211** (0.201)	**27.710** (1.128)	**-14.077** (0.927)	**9.492** (0.404)	**-7.523** (0.484)	**12.386** (0.512)
Socio-economic index	50.249 (3.078)***	116.920 (4.029)***	56.004 (3.387)***	119.183 (4.063)***	47.667 (3.049)***	109.812 (3.901)***
Population size	-0.466 (5.879)***	-0.432 (-4.141)***	-0.508 (6.380)***	-0.473 (4.552)***	-0.790 (7.299)***	-0.811 (5.592)***
Average salary per employed man	-0.013 (2.300)**	-0.022 (-3.705)***	-0.016 (2.854)***	-0.025 (4.059)***	-0.016 (2.877)***	-0.025 (4.301)***
Percent of car-owners	-0.355 (2.749)***	-0.630 (2.805)***	-0.407 (3.110)***	-0.664 (2.929)***	-0.271 (2.163)**	-0.473 (2.136)**
Druze locality	38.728 (1.694)*	7.489 (-0.227)	45.734 (1.971)*	13.862 (0.416)	40.243 (1.839)*	10.462 (0.327)
National preference A zone	47.973 (2.925)***	53.939 (2.270)**			41.806 (2.652)***	46.145 (1.998)**
Adjusted R^2	0.289	0.207	0.260	0.189	0.346	0.259
S.E of regression	67.305	98.205	68.688	99.320	64.413	95.04
Average of Dependent variable	116.287	121.042	116.287	121.042	116.836	121.463
F statistic	11.920	8.003	11.983	8.288	15.163	10.338
Significance of F ststistic	0.000	0.000	0.000	0.000	0.000	0.000

The equations were estimated for 188 local authorities for which data are available for the entire period. Absolute values of t statistics are in parantheses.
* - significant at the 1 percent level. ** - significant at the 5 percent level. *** - significant at the 10 percent level.