Socioeconomic and Institutional Factors underlying Fertility Stagnation among Muslims in Israel

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While there are recognized disputes regarding the mechanisms that trigger the onset of fertility decline as well as the role of mortality decline preceding fertility decline, the demographic transition model has gained wide support (Bulatao and Lee 1983). Particular attention has been paid to the modernization complex of rising urbanization, industrialization and literacy, and its relationship to fertility decline. It is within this context that the fertility pattern of Muslims in Israel is particularly interesting given the rapid economic growth experienced by Israel since the 1980s. Muslim fertility, which experienced dramatic declines between the 1960s and early 1980s, subsequently stopped falling and has remained stable at moderately high levels since then. This stagnation stands in strong contrast to the other Arab religious groups in Israel whose fertility levels have continued to decline as well as to the Jews who began their transition far before (see Figure 1). This project explores both household and institutional explanations for the cessation of fertility decline over the past 20 years among Muslims in Israel.

Past fertility trends among Arabs in Israel have been investigated in some detail (Baras and Peritz 1992; Eisenbach 1978; Friedlander, Eisenbach, and Goldscheider 1979; Keysar 1992; Schellekens and Eisenbach 2002) and continue to be also the focus of widespread political debate with strong nationalistic overtones. Earlier research studies generally found weaker than expected associations between SES variables (other than female education) and fertility, although female education has shown strong associations with fertility decline (Friedlander, Eisenbach, and Goldscheider 1979; Keysar 1992). This research has been important in noting the weak link between modernization and fertility decline, but is based on data that predates the stagnation of fertility. One exception is Sabatello and others (1996), who highlight the role of community size in determining fertility outcomes. This points to the focus of our analysis, the potential role of community factors and the institutional setting, including economic and political segregation, in determining fertility.

Explanatory Framework

The relatively weak relationship between modernization effects and fertility among Muslims suggests that recent fertility stagnation may be better explained by factors not associated with the modernization of Muslim households. Despite persistent inequalities between Arab and Jewish citizens documented by public-interest organizations such as *Sikkuy* (www.sikuy.org.il) and *Adva* (www.adva.org), we know that living standards have continued to rise, the size of Arab localities

continues to grow, agriculture continues to shrink and infant mortality to decline, and educational standards have risen dramatically for both male and female Arabs (CBS 2002). Building upon this evidence, we turn to the Easterlin and Crimmins model which we adapt to build upon minority fertility dynamics. In the Easterlin-Crimmins model fertility decline is regarded as a consequence of changes in demand, supply and regulation costs associated with childbearing. Given the rapid and large fertility declines already experienced by Muslims in Israel, we focus our attention here on demand factors, primarily associated with the costs and benefits of childbearing, and we assume that regulation costs and supply issues are relatively marginal.

Our theoretical framework (see Figure 2) leans heavily upon the work of Goldscheider and Uhlenberg (1969). In one of the few studies that has theorized on how minority-group status impacts childbearing, Goldscheider and Uhlenberg (1969) claimed that minority membership could have an independent effect on family size beyond the impact of the distinct socioeconomic profile of minority groups. In the USA "insecurities associated with minority group status" had discouraged fertility; but this might not be so in two special cases. First, if the minority is unable to join the majority in "the struggle to advance up... social and economic scales", then "real or perceived opportunity for social mobility" would not furnish a rationale to defer childbearing. Secondly, "If the desire for acculturation is not an integral part of the social situation of the minority group, members of minority groups often become concerned with group preservation and quantitative strength." (Goldscheider and Uhlenberg 1969:370,371).

Goldscheider and Uhlenberg's first hypothesis refers to *socioeconomic opportunity structures*, which in the case of the Palestinians inside Israel indeed suffer from severe barriers and blockages in comparison to the Jewish majority (for a comprehensive survey of both stability and change, see Haidar 1995). Still, the opportunity structures characterizing Arab communities are subject to significant diversity between the different localities in which they reside (e.g. Khalidi 1988). In addition, we know that Arab women in Israel have experienced a partially expanded opportunity structure over the last two decades, due to (a)the growth of local public sector employment, (b)the rise (but more recently, decline) of local textile and clothing plants, and (c)increasing numbers of support and service workers in local workplaces serving demand generated by the indigenous "ethnic enclave" (Kraus 2002:Chapter 9). It is reasonable to assume that women facing a tradeoff between investing in careers and investing in motherhood would be attentive to the probable returns on any potential investment in education and careers. A combination of factors results in this calculus operating primarily vis-à-vis the *local* opportunity structure so far as Muslim women in Israel are concerned: their communities are typically characterized by ecological isolation; their culture offers strong traditional norms mandating women's responsibility for childcare and limiting their independent movement; and their husbands are obliged to "commute" often great distances to jobs outside the

locality, thereby "maintaining women in their traditional position of housekeepers and preserving the extended family as a structure of solidarity".(Fargues 2000:461).

Goldscheider and Uhlenberg's second hypothesis refers to what we term *political and symbolic integration* (or its opposite, marginalization). While the authors clearly had in mind voluntary non-acculturation by inward-looking groups, their argument should apply equally well to minorities such as the Palestinian citizens of Israel who harbor historic grievances against the majority, suffer ongoing discrimination and are denied the option of identifying with an overarching civic collectivity (Ghanem 2001; Kimmerling and Migdal 1993). The a priori exclusion of Arab citizens from the "Republican" collectivity is the product of Israel's Zionist definition of the "common good" to which a good citizen can contribute (Y. Peled 1992). Complicating the field of potential identities is the rise of Islam, manifested in both religious revival and a political movement that is partly oppositional and partly a social service agency (A. Peled 2001).

Data and Methods

The process by which Muslim fertility is determined in our model is hierarchical and includes two levels. We treat national conditions as given and focus on the impact of community level variation on household fertility. Modernizing and other macro forces carry varying local weights are assumed to result in diverse community profiles. However, individual fertility is not directly determined by these profiles because local socioeconomic opportunities and political and symbolic integration mediate the effect of each community's conditions on fertility. Figure 2 summarizes these relationships.

Ideally we would like to measure year-by-year changes at the individual and community levels for a panel of households. In the absence of panel data we employ the last 2 censuses in two different ways. First, a cross-sectional approach involving separate estimations of the same two-level multilevel model in 1983 and 1995. This allows us to examine the most important determinants of fertility and to see whether they have changed over time. Second, to gain a more direct understanding of the effect of changing conditions over time, we employ a linked 1983-1995 census file which is a 4% sample of households included in the public use files in both census years. This provides us with data on two points in time for a large sample of Muslim women. The census data were used to construct a unique "merged" file where birth registration data is linked to the census data providing both accurate fertility information and essential socioeconomic details. For both models, we use standard multilevel (hierarchical) techniques employing MLWIN software to avoid biasing the standard errors of the parameter estimates (Goldstein 1995).

The dependent variable in both models is based on whether the woman has given birth in the year following the census. (In cases where there is more than one woman of childbearing age in the household, a "representative woman" is randomly selected.) Using births in the year following the census, which is obtained by linking the census files with birth registration data, is preferable to children ever born because the explanatory variables are more relevant to the immediate time than to

the woman's entire birth history. In the cross-sectional analysis, for each census year we estimate the impact of community characteristics and of individual attributes, as well as their joint interaction, on the number of children born between censuses. The explanatory power of each level can be partitioned and complex cross-level hypotheses may be easily tested. In the second approach, we create a virtual panel of women who were sampled in both the 1983 and 1995 censuses and measure all variables as the difference between their values in 1983 and 1995. This first-difference model allows us to estimate how changes in community conditions stimulate changes in fertility behavior both directly and through interactions. Of course, first-differencing means that all variables that are unchanging over time are dropped. However, the impact of these variables will be captured using the first approach.

While our focus is on Muslim fertility, we also plan to examine a series of simplified models in order to apply a comparative perspective using parallel data for other Arab religious groups (Christians and Druze) and for Jews. The purpose will be to establish whether causal mechanisms operate in similar ways for different groups and also whether there are residual differences in their fertility rates once differences in their characteristics at the community and individual levels are accounted for. Either type of variation would support arguments that focus on enduring cultural differences across these groups. The alternative -- that these differences are fully explainable by our model – would highlight the kinds of economic and political inequalities which we are inclined to believe lie behind stalled fertility among Muslims.

Figure 1

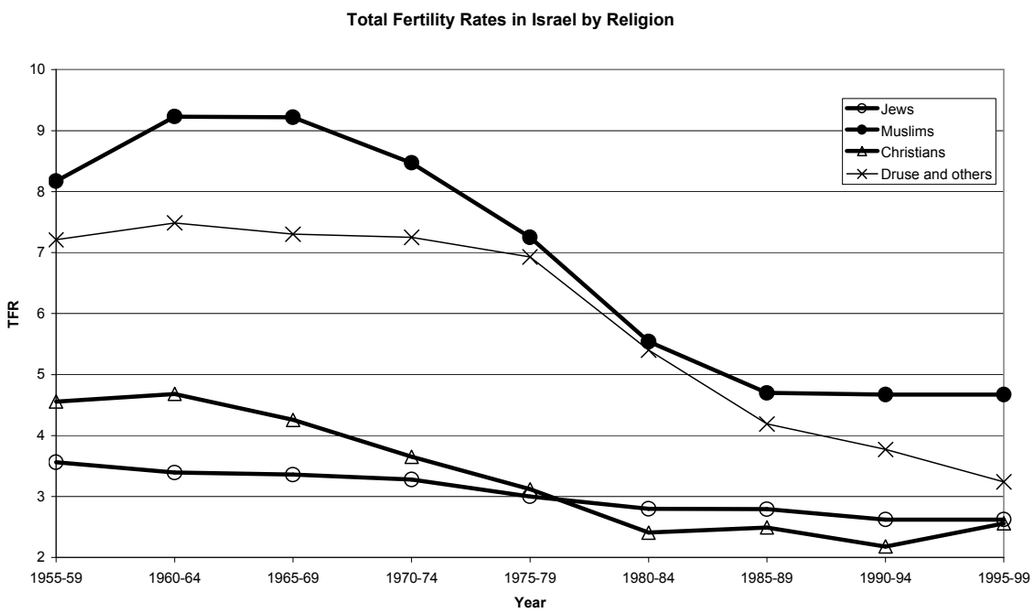
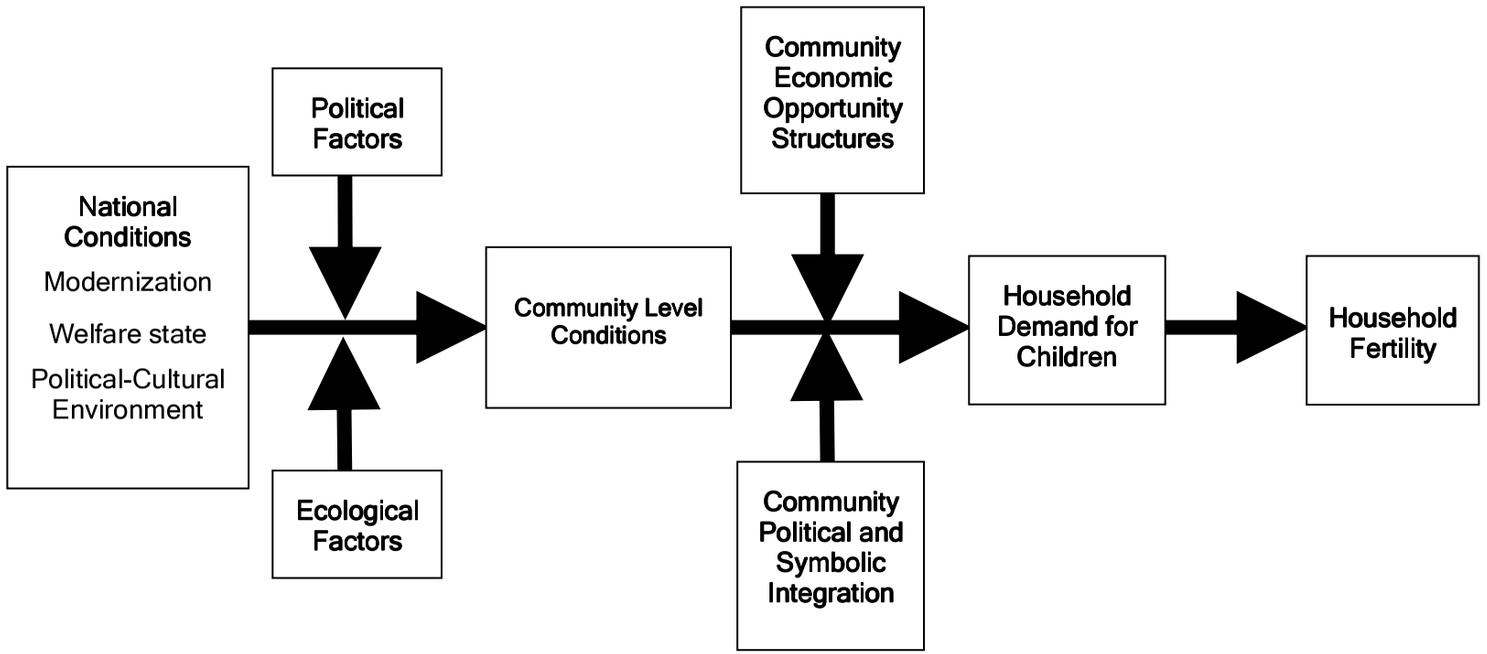


Figure 2: Minority fertility determinants at three levels



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