

The role of demographic and market characteristics in the changing structure of family formation patterns in Sweden: The case of individuals with an immigrant background

Aycan Çelikaksoy

How individuals sort into household units has potential implications not only for individual outcomes such as fertility, employment and income but also for the development of social and economic inequality between groups over time and across generations. Numerous studies in the social sciences and biology show that partnership formation is more likely to take place among individuals with similar characteristics, so called positive assortative mating, on characteristics such as education, income, socioeconomic background, ethnicity, religion and religiosity as well as height, weight, IQ, and social class (Epstein and Guttman, 1984; Mare, 1991; McPherson *et al.*, 2001; Pencavel, 1998).

Explanations vary as to why individuals mate assortatively. Economists tend to focus on the efficiency gains arguing that similarity in certain partner characteristics simplifies, for example, joint decision making and the rearing of children (Becker, 1974). The degree of assortative mating in different dimensions can however also be seen as a measure of the degree of openness in the social structures of interest. How individuals of different ethnic origin sort into household units in a multicultural society, like Sweden, can be seen as an indicator of the strength and persistence of social boundaries between ethnic groups. This is important due to the potential long term impact assortative mating has in sustaining economic and social inequality across generations. The literature on the partnership formation patterns of individuals with an immigrant background document for the US and Europe, that a large proportion of immigrants marry within their ethnic or national group or bring spouses from origin countries (Chiswick and Houseworth, 2008; Çelikaksoy, 2007; Jasso *et al.*, 2000; Lievens, 1999; Kalmijin 1993).

This paper intends to answer questions regarding the direction of change in assortative mating patterns in different dimensions, such as ethnic background and education over marriage / cohabitation cohorts, calendar time and immigrant generation, as well as along the partnership types, i.e., marriage and cohabitation. In addition, the role that various factors play in this change is analyzed. More specifically, the focus is on the role of demographic characteristics

of the individual and his/her parents as well as labour market and marriage market characteristics. Furthermore, after a separate analyzes, the interrelationship between ethnic and educational homogamy is analyzed more closely.

The data used in estimation stems from registered information at Statistics Sweden (SCB) on the entire working age population (16-65 years of age) residing in Sweden. Included in the data is detailed individual information on personal and demographic characteristics (including marriage dates), education, employment and income. In addition, information is available on country of birth and migration dates for the foreign-born portion of the population as well as information on parental characteristics. Due to partner identification numbers, it was possible to link all individuals with their partners. As such, detailed information is not only available on the main individual but also on partners.

The current preliminary results are from a cross section analysis from 2005. However, I will be using the panel data set from 1997-2006 (including registered and unregistered but with common children cohabitation information) (to be available soon) to answer the questions addressed in this paper.

The preliminary analysis includes two types of assortative mating, by country of origin (ethnic endogamy) and by level of education (educational homogamy). In both cases, the probability of being in a partnership characterized by positive assortative mating is estimated via a number of probit models controlling for varying sets of individual, marriage market and parental characteristics. All estimations are run separately by gender.

Results are largely in line with theories suggesting that higher levels of host country specific human capital decrease the likelihood of ethnic endogamy and increase the likelihood of educational homogamy. Both second generation status and duration of residence is found to be negatively correlated with ethnic endogamy probabilities and positively correlated with educational homogamy probabilities with one exception. Second generation women are less likely to be in educationally homogamous relationships than first generation women once controls for differences in marriage market and parental characteristics are included in estimation.

Years of education is also found to be negatively correlated with ethnic endogamy and positively correlated with educational homogamy in line with predictions concerning a greater orientation towards attained characteristics such as education and lower orientation towards ascribed characteristics such as ethnicity with higher levels of education (own and parents). Marriage cohorts are found to be positively correlated to ethnic endogamy and negatively correlated to educational homogamy, as expected. This may be a reflection of a higher degree

of emphasis on educational attainment versus ethnic background for younger cohorts among the immigrant population in Sweden.

Variation in assortative mating probabilities is found by regional background for both types of unions. However, this variation is larger between regional groups in estimation of ethnic endogamy suggesting that varying cultural norms about marriage matter more for assortative mating in terms of ethnicity. The determinants of respective type of assortative mating are found to vary by both country of origin and gender.

Opportunity as measured by sex ratios and relative group size is found to be positively correlated to ethnic endogamy. A comparison of the magnitude of the marginal effects suggests that relative group size and sex ratios have a larger impact on assortative mating by ethnicity for women. Estimation also indicates that a larger number of potential mates within the ethnic group (sex ratios) increase the likelihood of assortative mating on education suggesting that individuals can assortatively mate along both dimensions. The role of opportunity for educational homogamy is found to be smaller than that for ethnic endogamy as reflected by significantly and considerably lower estimated marginal effects.

Father's education is found to be negatively correlated with both ethnic endogamy and educational homogamy for men. The latter result is somewhat unexpected but may reflect a greater freedom of choice in spousal selection among men raised in relatively well educated families. Finally, parental ethnic endogamy is positively associated with own ethnic endogamy while parental educational homogamy is positively associated with own educational homogamy (men).

The findings indicate that the accumulation of local human capital has a similar role to play as educational attainment; both indicate a shift in preferences in the direction from ascribed characteristics to attained characteristics as a basis for spousal choice. Results indicate that observable individual characteristics play a relatively more important role for male preferences for assortative mating both on the grounds of ethnicity and education, than for female preferences suggesting that the social boundaries defined by ethnicity in the marriage market can more easily be crossed by males with the accumulation of local and general human capital. In the main models, it is found that the availability of potential spouses in the relevant group increases the probability of intra-group marriages, but the strength of these variables are again stronger for females than that for males suggesting that marriage market constraints are relatively more binding for females. In addition, parental assortative mating (ethnic/educational) indicators measuring group identity are significantly larger for females than for males in terms of ethnically endogamous marriages and vice versa for educationally

homogamous marriages. This result suggests that group identity is relatively more important for females in terms of intra-ethnic marriages and relatively more important for males in terms of educationally homogamous marriages, although there are variations by country of origin.

Taken together, the preliminary results from cross sectional data suggest that mating along the lines of ascribed characteristics such as ethnicity will decrease over time and across immigrant generations. This is in turn an indicator of social integration between immigrants and natives suggesting that social inequalities between groups should diminish over time, albeit with variations across gender and immigrant groups due to varying norms about marriage as well as varying parental and community involvement in the marriage decision.

However, as explained above, further analyzes will be carried out with the panel data to take a closer look at the role of changing levels of educational attainment in the population, time trends, changing population sizes etc. And further analyzes will be carried out focusing on the various assortative mating patterns associated with marriage versus cohabitation.