## (Extended Abstract) Cohabitation premiums in Denmark: income effects in immigrant-native partnerships

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In several contexts it is shown that (male) intermarried immigrants tend to have higher earnings than their single or endogamously married counterparts (cf. Meng and Gregory 2005 for Australia; Meng and Meurs 2009 for France; Dribe and Nystedt 2014 for Sweden; Mohn 2014 for Norway). Yet, the intermarriage premium can be separated into two parts: a general marriage premium and an additional premium for immigrants who marry natives. The general marriage premium has received broad attention in the literature (cf. Korenman and Neumark 1991; Nakosteen and Zimmer 1987; Nakosteen and Zimmer 1997; Dougherty 2006). The correlation between marital status and (male) earnings is usually explained either by productivity increases of married men or by selection. Through household specialization, married men have more resources to invest in human capital and thus become more productive (cf. Becker 1973; Becker 1985). The selection into marriage explanation states that no causal relationship between marital status and earnings exists: men with positive characteristics such as ambition and determination or general ability have more success on the labor market as well as on the marriage market. A male marriage premium is then no longer explained by a direct effect of marriage on earnings but simply by unobserved heterogeneity (as claimed in studies by Nakosteen and Zimmer 1987; Nakosteen and Zimmer 1997; Nakosteen and Zimmer 2001; Dougherty 2006; Barg and Beblo 2009; Dribe and Nystedt 2013).

Recently, intermarriage premium has received more attention in the literature (Meng and Gregory 2005; Meng and Meurs 2009; Nekby 2010; Dribe and Nystedt 2014; Mohn 2014). Intermarriage premiums can be explained by human capital spillover effects: through marrying a native, immigrants benefit from their spouses' human capital. Married men as compared to singles gain access to spousal support in form of information and advice (Benham 1974), networks (Furtado and Theodoropoulos 2010) and the financing of additional human capital investments (Kenny 1983) which increases their earnings. Intermarried immigrants benefit largely from their native spouses by gaining language skills, knowledge about customs, regulations and laws, and access to native networks (Dribe and Nystedt 2014). However, the intermarriage premium can equally well be explained by selection into intermarriage. Men with better language skills, for instance, may be more successful on the labor market and have a higher chance to find a native spouse.

The majority of studies concerned with the intermarriage wage premium attempt to control for unobserved heterogeneity. Meng and Gregory (2005) were the first to use immigrant group size and sexratio – that are related to the probability to marry within (Blau et al. 1984) – as instruments to account

for the endogeneity of marriage decisions. Their findings of a rather extensive intermarriage earnings premium for both male and female immigrants that increases after taking endogeneity into account suggest that there is *negative* selection into intermarriage in terms of earning potentials. These results have been replicated by a number of studies with similar instruments and for different contexts and measures of structural assimilation (Furtado and Theodoropoulos 2009; Meng and Meurs 2009; Furtado and Theodoropoulos 2010; Muttarak 2011). In a study for Denmark, Çelikaksoy (2007) uses similar instruments to study the effect of different kinds of *endogamous* marriages on labor market characteristics of immigrant children. Findings indicate that marrying another immigrant who is already residing in the country has a positive effect on employment as compared to marrying a spouse from the parents' country of origin. Nekby<sup>1</sup> (2010), Dribe and Nystedt (2014), and Mohn (2014) use distributed fixed effects to account for endogeneity and attribute the largest part of the intermarriage premium for most of the immigrant groups to unobserved heterogeneity and *positive selection* into intermarriage in terms of earning capacities.

Our study yields at contributing to the inconclusive state of previous research and is the first to investigate the process of economic integration through intermarriage for Denmark. However, the major advantage of our study is distinguishing cohabitation from marriage. This allows us to actually test theories related to marriage earnings premiums and theories related to intermarriage earnings premiums. Both, Beckerian specialization theory and the human capital spillover hypothesis do not actually relate to marriage<sup>2</sup> but to relationship or household formation. Since cohabitation before marriage is a common phenomenon especially in the Nordic countries (Kiernan 2004) both household specialization and human capital spillover can actually occur several years before marriage.

Our study therefore aims at analyzing cohabitation and/or marriage and the different effects these transitions have on immigrants' economic integration. Apart from human capital spillover that can occur both during cohabitation and marriage, there are also potential direct marriage effects: signaling effect from status change and effects of name change. Employers might regard marriage as a positive individual trait since it signals loyalty, maturity, and responsibility and reward it with more trainings and promotions (Hersch and Stratton 2000). Changing a foreign sounding name to a native sounding name is found to have a positive effect on labor market outcomes (Arai and Thoursie 2009).

Compared to other Western European countries, Denmark has with less than 7 percent a rather low proportion of immigrants (Liebig 2007) and a relatively low level of mixed marriages which is just under 10 percent (Lanzieri 2012). Denmark had very limited immigration until the 1980's and 90's when the number of asylum seekers increased rapidly (Nielsen et al. 2003). The first waves of migrants consisted mainly of labor migrants from neighboring Nordic countries, but also from Pakistan and Turkey. In the subsequent decades, the largest immigrant groups were refugees and immigrants that entered Denmark due to family reunion (Pedersen 2000). These immigrants mainly originate from Sri Lanka, Iran, Iraq, Lebanon and the Balkans (Roseveare and Jorgensen 2004).

<sup>&</sup>lt;sup>1</sup> Nekby in fact uses a staggered treatment design which is, however, very close to the distributed fixed effects design. Its major difference is that she includes only the ever-married in the population under study.

<sup>&</sup>lt;sup>2</sup> or the birth of a first child as included by Nekby (2010) and Dribe and Nystedt (2014).

There has been a gradual deterioration of immigrant's labor market situation in Denmark; from high employment rates and about the same income levels as natives for the first labor migrants, to high unemployment and lower incomes today (Roseveare and Jorgensen 2004). Immigrants in Denmark are also to a larger extent dependent on welfare benefits in comparison to the native born (Büchel and Frick 2005). This might be partially explained by the shift in composition of immigrants (Pedersen and Smith 2001). A major problem identified for immigrants in general and refugees in particular is obtaining work experience and continuous employment histories as wage gaps would narrow substantially in this case (Husted et al. 2001); (Nielsen et al. 2004).

For our study, we use a unique set of register data from statistics Denmark, with yearly observations from 1981 until 2007. The dataset contains information on dwellings, i.e. place of residence at apartment level for all individuals which gives the possibility of isolating cohabitating couples. Cohabiting partners are defined as either having common children or living in the same dwelling, are of opposite sex, the age gap between them is less than 15 years, they are not kindred and no other adult person is registered at the same address. The minimum age for being defined as cohabiting is 17 years. The study population consists of immigrants entering Denmark in the period 1980 to 2005 as singles who then eventually cohabit with a native Dane or with an individual descending from the same country. The dataset furthermore contains information on annual earnings, as well as basic characteristics such as age, sex, presence of children, country of origin, and level of education. We restrict our sample to first cohabitations after immigration. Furthermore, we restrict earnings to those exceeding one bottom bracket tax in Denmark, adjusted to year 2000 (33400 DKK<sup>3</sup>) to exclude very low incomes earned in e.g. student jobs.

For our main analysis, we group immigrants' countries of origin according to level of development and cultural proximity (e.g. immigrants from Nordic countries, Western countries, less developed countries). Our grouping mirrors general pattern of immigrants' labor market integration, with immigrants from other Nordic countries having the easiest access and highest earnings. However, the groups do not differ markedly in terms of age, age at migration and year of entry. Except from differences in earnings, we see differences in education with immigrants from Nordic countries being more highly educated, and residence, with immigrants from Nordic countries being more concentrated in the Copenhagen area.

Results show comparatively high intercohabitation premiums of more than 20 percent for male immigrants. However, once we account for endogeneity by controlling for time-invariant unobserved heterogeneity using fixed effects models, this premium reduces noticeably. Substantial cohabitation premiums nevertheless remain for immigrants from countries with lower levels of overall economic development.

<sup>&</sup>lt;sup>3</sup> In current exchange rate this means limiting our sample to earnings exceeding around 4500 Euro per year.

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