Wiik, Kenneth Aarskaug; Holland, Jennifer A.

Working Paper
Partner choice and timing of first marriage among children of immigrants in Norway and Sweden

Discussion Papers, No. 810

Provided in Cooperation with:
Research Department, Statistics Norway, Oslo

Suggested Citation: Wiik, Kenneth Aarskaug; Holland, Jennifer A. (2015) : Partner choice and timing of first marriage among children of immigrants in Norway and Sweden, Discussion Papers, No. 810, Statistics Norway, Research Department, Oslo

This Version is available at:
http://hdl.handle.net/10419/192792
Kenneth Aarskaug Wiik and Jennifer A. Holland

Partner choice and timing of first marriage among children of immigrants in Norway and Sweden
Kenneth Aarskaug Wiik and Jennifer A. Holland

Partner choice and timing of first marriage among children of immigrants in Norway and Sweden

Abstract:
Using register data from Norway and Sweden, this study addresses the relationship between partner choice and the timing of first marriage among all migrant- and non-migrant-background individuals born between 1972 and 1989, who were either native-born or who immigrated prior to age 18 (generation 1.5). In multivariate models, we analyze the differential hazards of marrying an individual of majority- or migrant-background within a competing risk framework, by migrant generation and number of foreign-born parents. Multivariate results confirmed that in both countries the marital timing patterns of migrant-background individuals who married exogamously were more similar to the majority populations than among those who married another migrant-background individual. Our findings thus suggest that the Scandinavian pattern of late marriage tends to dominate, even where the immigrant-background composition of the couple is mixed. These results are an important starting point for new insights into adaptation drawn from investigations into the family life courses of children of immigrants in Europe, a population sub group currently entering family formation ages.

Keywords: Marriage timing; Partner choice; Exogamy; Endogamy; Sweden; Norway

JEL classification: J12

Acknowledgements: This research was financially supported by the Norwegian Research Council through the FAMGEN project, the Swedish Research Council, and by the European Research Council Starting Grant project “Families of migrant origin: a life course perspective” (project number 263829). The authors would like to thank Helga de Valk for useful comments on an earlier version of the manuscript.

Address: Kenneth Aarskaug Wiik, Statistics Norway, Research Department. E-mail: kaw@ssb.no
Jennifer A. Holland, University of Southampton, Social Statistics and Demography. E-mail: J.A.Holland@soton.ac.uk
Discussion Papers comprise research papers intended for international journals or books. A preprint of a Discussion Paper may be longer and more elaborate than a standard journal article, as it may include intermediate calculations and background material etc.

© Statistics Norway
Abstracts with downloadable Discussion Papers in PDF are available on the Internet:
http://www.ssb.no/en/forskning/discussion-papers
http://ideas.repec.org/s/ssb/dispap.html

ISSN 1892-753X (electronic)
Sammendrag

1 Introduction

In the literature on partner choice among immigrants and their descendants there is consensus that exogamous marriages (i.e., marrying outside of one’s national or ethnic and migrant-generation group) promote integration into the receiving societies (Kalmijn, 1998; Kulu and González-Ferrer, 2014; Schwartz, 2013). For instance, there is evidence that such exogamous marriages are positively associated with economic integration (Meng and Gregory, 2005; Nystedt and Dribe, 2015; Song, 2010). Endogamous marriages (i.e., marrying within one’s national or ethnic and migrant-generation group), on the other hand, may provide poorer opportunities for family members’ socioeconomic integration into receiving societies because they are subjected to stronger social control and perhaps render close contacts with majority-background individuals less necessary (Kulu and González-Ferrer, 2014).

Similarly, timing of first marriage could be regarded as a crucial component in the integration process and studying union formation is critical in understanding the direction of changes over time. Deferral of first marriage among immigrant background individuals could, for instance, signal adaptation of the receiving country’s norms (DeValk and Liefbroer, 2007). Also, early marriage and fertility is negatively associated with education and later labor market participation, particularly among immigrant-background women (Dale, Lindley and Dex, 2006; Heath, Rothon and Kilpi, 2008; Liversage, 2012).

Considering the processes of partner choice and the timing of marriage simultaneously may further increase our understanding of the social position of immigrants and their descendants. For instance, deferral of first marriage among migrant-background individuals who marry endogamously may nonetheless signal adaptation to receiving country’s marriage pattern (Alba, 2005). Considering the nature of these unions, across immigrant generation and in reference to endogamous and exogamous marriages among majority populations, can help us understand processes of social change in countries with large or growing shares of migrant-background individuals. Moreover, if there are differences in marital timing among majority-background individuals who marry individuals of immigrant-background and those who marry endogamously, minority-majority adaptation may indeed be a two-way process.

Using Norwegian and Swedish longitudinal register data on all individuals born from 1972 to 1989 who were either native-born or who immigrated prior to age 18, we investigate how patterns of
exogamy and endogamy are associated with differential marriage timing across migrant generations, a topic that has received little study so far (Kulu and González-Ferrer, 2014). We focus on all first marriages occurring from 1990 to 2007 (Sweden) or 2012 (Norway), for all never-married individuals comprising these groups residing in Sweden (N = 1,923,865) and Norway (N = 1,023,110) at age 18. These high quality data allow for the investigation of family formation dynamics across migrant subpopulations, groups often too small to be captured in survey data and often hard-to-reach due to social exclusion, a lack of trust or language difficulties (Stoop et al., 2010).

Norway and Sweden are useful contexts for investigating the association between partner choice and marriage timing of immigrant-background individuals. Both countries share similar family and social welfare policy regimes and are on the leading edge of demographic trends associated with the Second Demographic Transition (Lesthaeghe, 2010), in particular, having high shares of unmarried cohabitation and comparatively late mean ages at marriage (Noack, Bernhardt and Wiik, 2014; Sobotka and Toulemon, 2008). The few extant studies investigating this interrelationship were not able to exploit such large variation between the dominant family formation timing regimes in countries of residence and origin (Sassler and Qian, 2003; Soehl and Yahirun, 2011). At the same time, the two countries have distinct histories of migration and different country-of-origin composition of their immigrant populations (Statistics Norway, 2015; Statistics Sweden, 2015). Comparisons of family formation behavior across sub-populations within similar family formation regimes allow us to better identify aspects of behavior that are attributed to migrant background, rather than to unobserved differences between country contexts. That is, uniformity in the association between partner choice and marriage timing across these contexts will make a stronger theoretical contribution regarding processes of adaptation among immigrants and their descendants in modern-day Europe (Neyer and Andersson, 2008).

2 Partner Selection and Its Determinants

Although an increasing number of European studies have addressed partner choice among immigrants and their descendants in recent years (Kulu and González-Ferrer, 2014), most studies have been conducted in the US (Schwartz, 2013). In Europe, marriages between one native-born and one foreign-born partner is gradually becoming more common, not least in countries with a shorter immigration history (Lanzieri, 2012). Further, second generation immigrants more often marry a majority-background individual than immigrants (Kulu and González-Ferrer, 2014; Muttarak and Heath, 2012), though in many countries second-generation immigrants have up until recently been so young that only a vague impression of their family behavior has been gained so far. Also, studies of the union
formation behavior of the second generation have mostly considered descendants of Turkish immigrants (e.g., Huschek, DeValk and Liefbroer, 2010; Milewski and Hamel, 2010), which is the largest single immigrant group in Europe.

Broadly, the explanations on why individuals tend to marry endogamously or exogamously can be categorized in the cultural and structural perspectives on partner choice (Kalmijn, 2012). According to the cultural perspective, individuals’ preferences, norms, and values are important factors when choosing a spouse. The structural perspective, on the other hand, emphasizes the chances that people have to meet in-group and out-group members and the way such chances are shaped by social and geographical constraints. In the following paragraphs, we outline the main arguments of these perspectives and then go on to discuss how these factors may be alleviated or aggravated by the timing of marriage in the life course.

2.1 Cultural and Structural Perspectives on Partner Choice

When people are looking for a spouse they take multiple characteristics of potential partners into account. Apart from obviously important factors like love and looks, there is a well-documented tendency toward “like seeking like” (Kalmijn, 1998; Schwartz, 2013). Within an economic-demographic framework it is argued that individuals maximize their utility by finding a partner with whom the highest level of economic and emotional utility is expected (Becker, 1991). Similarly, in social exchange theory marriage is seen as an exchange in which individuals act rationally by evaluating advantages and disadvantages and exchange material, emotional, as well as symbolic resources (Homans, 1961). For most individuals it would be rational to select an ingroup partner, as they share traits such as language, culture, and religion, and thereby a common “universe of discourse” (DiMaggio and Mohr, 1985).

Regardless of their immigrant background, individuals are socialized into their groups’ values and norms, and it is usually expected that they marry within their own or a similar group. Research confirms that immigrants’ family behavior is influenced by the norms of their countries of origin (Adserà and Ferrer, 2014; Dribe and Lundh, 2011; Holland and De Valk, 2013; Scott and Stanfors, 2011). Third parties, such as family and friends, may thus play a role in reinforcing or relaxing group identity and cohesion (Huschek et al., 2012; Kalmijn, 1998), and marriage across group lines is often discouraged. Children internalize parental expectations and attitudes through childhood socialization. Children’s own preferences for when and whom to marry, is thus indirectly a product of their parents’ preferences (Barber, 2000; Jennings, Axinn, and Ghimire, 2012). The transmission of preferences
from parent to child might also be direct, particularly with respect to issues that parents find important, like partner choice (De Valk and Liefbroer, 2007). Alternatively, children may behave in ways they believe will please their parents even when parents do not invoke social control techniques (Barber, 2000).

Individuals’ preferences and behaviors are also shaped by structural constraints which may limit their partnership market, such as residential segregation and the degree to which they interact with others of similar backgrounds in their day-to-day lives, at work and social activities (Blau, Blum and Schwartz, 1982). The partnership market is shaped by structural and demographic factors, such as the population’s sex and age ratios. A shortage of available men or women could limit the number of partners with the desired traits thus constraining the partner selection (Ni Bhrolcháin and Sigle-Rushton, 2005; Raley and Bratter, 2004).

Not only the age and sex ratios but also the ethnic composition of the marriage market, could influence the likelihood of marrying exogamously or endogamously. Thus, the relative availability of co-ethnic partners or partners with a similar migrant-background, as well as their residential patterns, shape contacts opportunities between groups (Qian and Lichter, 2007). Correspondingly, endogamous marriages are more common in countries with large immigrant populations (Lanzieri, 2012), as well as in urban areas, where immigrants are more likely to settle (Castles and Miller, 2009).

2.2 Linking “When” and “Who”

Cultural and structural influences on processes of intermarriage may also influence as well as be conditioned by the timing of marriage in the life course. When individuals grow older, in-group preferences may weaken and characteristics in a potential spouse other than their nativity or ethnicity, such as their socioeconomic potential, may become more important (Kalmijn, 2012). If so, those who delay first marriage might place more emphasis on potential partners’ other characteristics and thus be less likely to marry endogamously.

Norms held by parents, third parties and by society at large influence not only the choice of a partner, but also the timing, sequencing and quantum of important demographic events, such as childbearing and first union formation (Liefbroer and Billari, 2010; Willoughby et. al., 2012). Parent’s attitudes and involvement can be particularly salient for the likelihood that children marry early or late, as well as their choice of partner. Pressure to marry endogamously may be stronger for those who marry at younger ages as parents and other third parties have more influence on the choice of a spouse in such
cases (Kalmijn, 1998). For instance, as children reach adulthood, independence and intellectual maturity may put them in a stronger bargaining position vis-à-vis their parents, relatives or other third parties. In such a way, children may also actively delay marriage to avoid objections on their choice of partner. Correspondingly, Norwegian immigrant background individuals of Pakistani origin who reported autonomous spouse choice were older upon marriage than those who reported more parental influence (Elgvin and Grodem, 2011). Also, among Turkish and Moroccan immigrants in the Netherlands, parents’ involvement in the partner choice was greatest among those who married at younger ages (van Zantvliet, Kalmijn and Verbakel, 2014).

The tendency toward exogamy at older ages may also be reinforced by unsuccessful partnership searches. As immigrant background individuals tend to marry earlier than natives (Bernhardt et al., 2007; Milewski and Hamel, 2010) this may result in a “temporal separation” in the marriage market (Soehl and Yahirun, 2011). That is, migrant background individuals who marry relatively late and thereby fail to find a suitable partner from their own group may have to “cast a wider net” and marry natives as few potential in-group partners remain unmarried. Both cultural and structural theories of assortative mating lead us to hypothesize that individuals who defer first marriage are more likely to marry exogamously than those who marry earlier in life (H1).

Few studies have considered partner choice and marriage timing simultaneously. One exception, Soehl and Yahirun (2011) studied the timing of union formation and its implications for partner selection using urban samples from Germany (Berlin and Frankfurt am Main) and the US (Los Angeles). They found that second generation Turks (Germany) and Mexicans (the US) who married within their ethnic group did so at younger ages than those with partners from another ethnic group. Other studies have included marital age as an independent variable and found that there is a positive age gradient in intermarriage. This is true in countries like Britain (Muttarak and Heath, 2010), the US (Kalmijn and Van Tubergen, 2010), France (Safi, 2010) and the Netherlands (van Tubergen and Maas, 2007). Among second generation Turks in Europe, women with a first generation partner were younger than those with a second generation or native partner (Huschek et al., 2012). Similarly, US immigrants from countries with tradition of early marriages more often married endogamously than those from other countries (Kalmijn and Van Tubergen, 2010).

2.3 Differences across Migrant Generations and Gender

Taken separately or in combination, intermarriage and marriage timing may also be understood as facets of the adaptation process into receiving societies. Structural assimilation may lead immigrants
to adopt patterns of family formation more similar to those of the majority population over time and across generations (Blau, 1992). Also, immigrants may conform to the practices of their country of residence over time in order to optimize their chances of socioeconomic success (Adserà and Ferrer, 2014). Second generation immigrants are born and socialized within their countries of residence and share the same institutional contexts, including educational and political institutions, and many cultural outlets, with majority populations (Huschek et al., 2010; Bernhardt et al., 2007; De Valk and Milewski, 2011). At the same time, norms, practices and behaviors of their parents’ countries of origin may be transmitted and maintained through links to first generation family and friends (De Valk and Liefbroer, 2007; Foner, 1997; Nauck, 2001). In such a way, these migrant-background individuals occupy a “sociocultural middle ground” between their countries of descent and their home countries (Holland and De Valk, 2013; Foner, 1997).

Indeed, there is evidence that immigrant women’s fertility converge towards non-immigrant levels with length of stay (Sobotka, 2008). Immigrants with longer durations of residence and the children of immigrants may adopt preferences for the timing of marriage (Holland and De Valk 2013) and actual marital behavior (Sassler and Qian 2003) that are more similar to majority-populations, and they are more likely to intermarry than their recently arriving first-generation counterparts (Dribe and Lundh 2008; Gordon 1964). Still, this pattern may be contingent upon social distance between countries of origin and residence (Dribe and Lundh, 2008; Holland and De Valk, 2013; Portes and Zhou, 1993). Taken together, this leads us to hypothesize that second generation immigrants who postpone marriage are more prone to intermarry than their 1.5-generation counterparts, net of differences in countries of origin (H2).

To be sure, there are important gender differences, not only in the incidence of exogamy, but also in its determinants. In several European countries, including the Scandinavian, higher shares of immigrant women are in exogamous marriages than their male counterparts. Among majority-background individuals, on the other hand, men are generally more likely to have a foreign-born spouse than women (Lanzieri, 2012). This pattern is probably due to marriage-related immigration, that is, men “importing” wives from abroad (van Bavel, 2012).

Moreover, there is evidence that the level of parental involvement in children’s spouse choice is greater for immigrant women than men (van Zantvliet et al., 2014). Also, some have argued that gender socialization teaches women to be submissive and to prioritize family over career (Xiao, 2000). This is true for majority-background and immigrant women alike, though immigrant-background
women often are “guardians of tradition” (Liversage, 2012) and have a central role in transmitting ethnic traditions to the next generation (Kalmijn and van Tubergen, 2010; Sassler, 2005). This could imply that immigrant background women are more susceptible to a social pressure to marry within their group at prescribed ages than their male counterparts. We therefore expect to find that immigrant-background women who partner endogamously will be particularly likely to marry at young ages (H3).

2.4 The Scandinavian Immigration Context

While there is a long history of migration flows between the Nordic countries, in the past 50 years immigrants from rest of Europe and the world constitute a growing share of migrant stocks in Northern Europe (Castles and Miller, 2009). Although Norway and Sweden share many similar institutional, economic and cultural characteristics, they represent two different immigrant flow destination types, with implications for the size and composition of the immigrant background populations in the two countries. Whereas a large number of migrant workers, mainly from Southern Europe, had been arriving in Sweden already in the 1950s, Norway first became a country of net immigration in the late 1960s, with the arrival of labor migrants from new sending countries, such as Pakistan, Turkey, Morocco and India. Since the non-Nordic immigration stop was introduced in the mid-1970s, non-Nordic/non-EU immigration to both countries has been dominated by family reunification and humanitarian migrants (Brochmann and Hagelund, 2011). Since the EU enlargements in 2004 and 2007, there has also been substantial labor immigration from Eastern Europe.

Sweden still has the largest immigrant background population, with immigrants and their descendants born in Sweden making up 21.5% of the country’s total population in 2014 (Statistics Sweden, 2015). The comparable figure for Norway was 15.6% (Statistics Norway, 2015). As elsewhere in Europe, the second generation is a growing population subgroup, currently comprising 2.6% of the total population in Norway (Statistics Norway, 2015) and 5% in Sweden (Statistics Sweden, 2015). In both countries, large groups of the migrant-background populations come from countries in Asia, the Middle East and North Africa with a predominantly Islamic cultural heritage (Dribe and Lundh, 2011; Elgvin and Tronstad, 2013), characterized by a traditional family formation pattern centered on early and universal marriage and many children, as compared with majority populations in Northern Europe (DeValk and Milewski, 2011; Lapegård, 2006).
3 Method

3.1 Data and Samples
In the current study, we used comparable Norwegian and Swedish longitudinal register data. Besides population register information on all first marriages contracted in the two countries and vital demographics such as age, children, dates of immigration and emigration, gender and (parents’) country of birth, we used register data on education and place of residence. Because there is no dwelling register in Sweden, and the Norwegian household register contains information on cohabitation only from 2005 onwards, it was not possible to identify complete non-marital cohabiting union histories.

We considered all first marriages occurring from 1990 to 2007 (Sweden) or 2012 (Norway), for all never-married individuals born 1972 to 1989 residing in their countries at age 18. These birth cohorts were selected in order that all civil status changes from age 18 could be obtained. Our data contain no information about immigrants’ possible previous marriages contracted abroad. As including immigrants who married abroad may overestimate rates of endogamy (Hwang and Saenz, 1990), we excluded immigrants who arrived at ages above 17 (n = 337,653 (Norway), 237,601 (Sweden)). Our final samples consisted of 1,023,110 individuals for Norway and 1,923,865 Swedes.1 In order to have balanced samples across migrant generations, we took 10% random samples of majority-background individuals. Our final analysis samples comprised 209,603 Norwegians and 592,765 Swedes.

3.2 Dependent Variable and Approach
The transition to first marriage was modelled in discrete time using multinomial logistic regression. The dependent variable is the log of the odds of two categories of marital partnerships relative to continuing to be (i) unmarried: (ii) married to an individual of immigrant-background, defined as a spouse born abroad or native-born with at least one foreign-born parent, or (iii) married to an individual of majority-background, defined as a native-born spouse with two native-born parents.2

The duration dependence was age in years, which was specified with linear and second-degree polynomial terms, and spells consist of unmarried periods after age 18. Alternative specifications of the age variable (e.g., linear splines) yielded similar results. Individuals were censored if they out-migrated, died, or at the end of the observation period (December 2007 (Sweden) / 2012 (Norway)). Although data for Norway were available through 2012, still unmarried individuals were censored after 18 years in order that the results be comparable across countries. As the data were stored at the
Norwegian and Swedish statistical offices, it was not possible to conduct pooled analyses of the two country sub-samples.

In the multivariate results section, we first present models pooled by gender. To assess the association between partner choice and marriage timing by generation and gender, we ran separate models by gender including interactions between age and age-squared and immigrant generation. For ease of interpretation, we present the results from these interaction models graphically as predicted probabilities.

3.3 Independent Variables

We first grouped individuals into four *migrant generations* based on their country of birth as well as the number of foreign born parents: (i) The 1.5 generation (i.e., foreign-born, migrated prior to age 18), (ii) second generation (i.e., Norwegian- or Swedish-born with two foreign-born parents), (iii) 2.5 generation (i.e., native born with one foreign-born parent), and (iv) majority-background individuals (i.e., born in Norway or Sweden by two native born parents). Next, using information on individuals’ own as well as their parents’ birth country, we disaggregated individuals by seven *regions of (parents’) origin*: (i) The Nordic countries (including the majority populations), (ii) Europe (excluding Eastern Europe), North America, Australia, and New Zealand, (iii) Eastern Europe, (iv) Asia and rest of Oceania, (v) Sub-Saharan Africa, (vi) Middle East and North Africa, including Turkey (MENA); and (vii) South and Middle America.\(^3\) As women marry at younger ages than men (e.g., Huschek et al., 2010; Wiik, 2009) and there are gender differences in intermarriage (e.g., Kalmijn, 1998), in pooled models we controlled for *gender* with values 0 for men and 1 for women.

Additionally we controlled for characteristics related to marriage timing as well as assortative mating. First, immigrants with higher levels of education are more likely to marry a majority-background spouse (Kalmijn, 2012), and education is positively related to marriage timing once student status is accounted for (Wiik, 2009). Using information on *educational level* achieved as of the previous year, education was recoded into four categories: (i) primary education (<11 years), (ii) secondary education (11-13 years), (iii) tertiary education (14+ years), and (iv) missing. Next, we constructed a variable measuring whether individuals were *enrolled in education* (1) or not (0) at time \(t-1\). Further, the influence of *having children* was captured by a time-varying dummy measuring whether individuals became parents to at least one child (1 = *yes*, 0 = *no*). Another potential confounder is *place of residence*. As immigration in Europe is an urban phenomenon and the majority of migrants and their decedents live in cities (Castles and Miller, 2009), there are, for instance, more co-ethnic partners.
available in urban areas. Those living in the municipalities of one of Norway’s (i.e., Oslo, Bergen, and Trondheim) and Sweden’s (i.e., Stockholm, Gothenburg, Malmö) three most populated cities at time $t-1$ were defined as urbanites and coded 1. Otherwise, this indicator was set to 0.

4 Results

Descriptives for the two country samples are presented in Table 1. From this table we first note that 29% of the Norwegian sample married during the period of observation compared with 13% of the Swedish. In Norway, 16% had chosen a majority-background spouse (56% of those married), whereas 13% married a person who either immigrated or was born in Norway by at least one immigrant parent (44% of those married). In Sweden, on the other hand, 8% had married a majority-background spouse (60% of those married) and 5% chose an immigrant-background spouse (40% of those married). Note, however, that the large share married to an immigrant-background spouse reflects the fact that we include a 10% random sample of the majority.

Next, 75% of the Swedish sample as compared to 57% of the Norwegian migrated to their countries of residence as children or teens or have at least one parent with a migration experience. The share of second generation immigrants was substantially higher in Sweden (17%) than in Norway (7%). Table 1 further confirms that there are notable differences between the regions of origin of immigrant-background populations across the two country contexts. In Norway 69% was either born in or originated in another Nordic country or Western Europe (i.e. Europe (excluding Eastern Europe), North America, Australia or New-Zealand). The comparable figure for Sweden was 61%. In both countries, immigrant-background individuals from Asia (12% in Norway, 7% in Sweden) and MENA (7% in Norway, 13% in Sweden) comprised the two largest non-European region-of-origin groups.

As can be seen from Table 2, those immigrant-background individuals who married a majority-background partner were significantly older upon marriage compared with those who married endogamously. Most notably, second generation immigrants with an immigrant-background spouse were on average 2.6 (Sweden) and four (Norway) years younger than those who married exogamously. In both countries, 1.5-generation immigrants who married endogamously were three years younger than their counterparts who married exogamously. Interestingly, even among majority-background individuals, those who married an immigrant-background spouse married at younger ages than those who married endogamously.
Table 1. Descriptive statistics of Norwegian and Swedish analysis samples

<table>
<thead>
<tr>
<th>Variable</th>
<th>Norway</th>
<th>%</th>
<th>Sweden</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td></td>
<td>n</td>
<td></td>
</tr>
<tr>
<td><strong>Dependent variable</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marriage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Majority-background spouse</td>
<td>34,359</td>
<td>16.4</td>
<td>48,051</td>
<td>8.1</td>
</tr>
<tr>
<td>Immigrant-background spouse</td>
<td>27,288</td>
<td>13.0</td>
<td>32,239</td>
<td>5.4</td>
</tr>
<tr>
<td>Never married(^a)</td>
<td>147,956</td>
<td>70.6</td>
<td>512,475</td>
<td>86.5</td>
</tr>
<tr>
<td><strong>Time-fixed covariates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5 generation (immigrated &lt; age 18)</td>
<td>45,059</td>
<td>21.5</td>
<td>173,448</td>
<td>29.3</td>
</tr>
<tr>
<td>2(^{nd}) generation, 2 foreign-born parents</td>
<td>13,924</td>
<td>6.6</td>
<td>98,708</td>
<td>16.7</td>
</tr>
<tr>
<td>2.5 generation, 1 foreign-born parent</td>
<td>60,291</td>
<td>28.7</td>
<td>172,709</td>
<td>29.1</td>
</tr>
<tr>
<td>Majority</td>
<td>90,329</td>
<td>43.1</td>
<td>147,900</td>
<td>25.0</td>
</tr>
<tr>
<td>Region of origin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Majority/ Scandinavian countries</td>
<td>116,129</td>
<td>55.4</td>
<td>287,751</td>
<td>48.5</td>
</tr>
<tr>
<td>Western Europe(^b)</td>
<td>28,827</td>
<td>13.8</td>
<td>71,437</td>
<td>12.1</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>13,012</td>
<td>6.2</td>
<td>70,695</td>
<td>11.9</td>
</tr>
<tr>
<td>Asia, rest of Oceania</td>
<td>25,234</td>
<td>12.0</td>
<td>39,053</td>
<td>6.6</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>13,602</td>
<td>6.5</td>
<td>74,205</td>
<td>12.5</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>7,347</td>
<td>3.5</td>
<td>11,372</td>
<td>1.9</td>
</tr>
<tr>
<td>South and Middle America</td>
<td>5,452</td>
<td>2.6</td>
<td>38,252</td>
<td>6.5</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woman</td>
<td>101,748</td>
<td>48.5</td>
<td>288,701</td>
<td>48.7</td>
</tr>
<tr>
<td>Man</td>
<td>107,855</td>
<td>51.5</td>
<td>304,064</td>
<td>51.3</td>
</tr>
<tr>
<td><strong>Time-varying covariates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any children</td>
<td>272,796</td>
<td>13.0</td>
<td>441,935</td>
<td>9.2</td>
</tr>
<tr>
<td>Educational attainment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>838,258</td>
<td>40.0</td>
<td>1,790,308</td>
<td>37.3</td>
</tr>
<tr>
<td>Secondary</td>
<td>796,467</td>
<td>38.0</td>
<td>2,384,661</td>
<td>49.7</td>
</tr>
<tr>
<td>Tertiary</td>
<td>350,851</td>
<td>16.8</td>
<td>391,539</td>
<td>8.2</td>
</tr>
<tr>
<td>Missing</td>
<td>109,822</td>
<td>5.2</td>
<td>228,381</td>
<td>4.8</td>
</tr>
<tr>
<td>Enrolled in education</td>
<td>925,974</td>
<td>44.2</td>
<td>2,209,969</td>
<td>46.1</td>
</tr>
<tr>
<td>Urban residence</td>
<td>583,600</td>
<td>27.8</td>
<td>1,155,126</td>
<td>24.1</td>
</tr>
<tr>
<td>N Person-years</td>
<td>2,309,398</td>
<td></td>
<td>4,794,889</td>
<td></td>
</tr>
<tr>
<td>N Individuals</td>
<td>209,603</td>
<td></td>
<td>592,765</td>
<td></td>
</tr>
</tbody>
</table>

Note: 10% random samples of majority background individuals. \(^a\) For Sweden this category includes 2,763 married individuals with missing information about spouse’s immigrant status (censored at marriage). \(^b\) This category comprises countries in Europe (excluding Eastern Europe) as well as US, Canada, Australia, and New Zealand.

From Table 2 we further note that in Norway about 87% of the second generation and 86% of the 1.5 generation had married endogamously, compared with respectively 56% and 67% in Sweden. The corresponding shares among majority-background individuals were 83% (Sweden) and 78% (Norway). Among those native-born with one foreign-born parent (i.e. generation 2.5), 75% (Sweden) and 70% (Norway) had a majority-background spouse.
Table 2. Mean age at first marriage by type of marriage and migrant generations. Married men and women born 1972-1989 residing in Norway and Sweden at age 18.

<table>
<thead>
<tr>
<th>Generation</th>
<th>Majority-background spouse</th>
<th>Immigrant-background spouse</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD) %</td>
<td>M (SD) %</td>
</tr>
<tr>
<td>Norway</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5 generation</td>
<td>27.0 (3.9) 14.3</td>
<td>23.9 (3.8) 85.7</td>
</tr>
<tr>
<td>2nd generation</td>
<td>27.9 (3.8) 13.3</td>
<td>23.9 (3.6) 86.7</td>
</tr>
<tr>
<td>2.5 generation</td>
<td>28.3 (3.7) 69.6</td>
<td>26.1 (4.3) 30.4</td>
</tr>
<tr>
<td>Majority</td>
<td>28.2 (3.7) 77.7</td>
<td>25.7 (4.2) 22.3</td>
</tr>
<tr>
<td>All</td>
<td>28.1 (3.7) 55.7</td>
<td>24.7 (4.1) 44.3</td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5 generation</td>
<td>26.5 (3.8) 32.5</td>
<td>23.4 (3.8) 67.5</td>
</tr>
<tr>
<td>2nd generation</td>
<td>26.9 (3.8) 44.5</td>
<td>24.3 (3.9) 55.5</td>
</tr>
<tr>
<td>2.5 generation</td>
<td>27.1 (3.7) 74.8</td>
<td>26.2 (4.0) 25.2</td>
</tr>
<tr>
<td>Majority</td>
<td>27.3 (3.5) 83.0</td>
<td>26.9 (3.7) 17.0</td>
</tr>
<tr>
<td>All</td>
<td>27.1 (3.6) 59.8</td>
<td>24.5 (3.8) 40.2</td>
</tr>
</tbody>
</table>

Note: 10% random samples of majority background individuals. For all groups, the two marriage types are significantly different at p<.05 (two sample t-tests). Numbers in parentheses are standard deviations.

The results from gender-pooled discrete-time multinomial models of marrying an individual of majority- or migrant-background relative to remaining unmarried (base category) are presented in Table 3. First, the results in Table 3 show that in both countries individuals belonging to the second and 1.5 generations had a significantly higher chance of marrying in a given year if they partnered another migrant-background person. Net of the other variables included in the equation, in both countries the odds ratio of marrying an immigrant-background spouse relative to remaining unmarried was 2.8 times as high among 1.5-generation immigrants as among majority-background individuals. Among second generation immigrants, the odds ratios of marrying an immigrant-background spouse were 2.7 (Norway) and 2.3 (Sweden) times as high relative to their majority-background counterparts. The results presented in Table 3 further confirm that in Norway, the odds ratio of marrying an immigrant-background spouse relative to remaining unmarried was 12% lower among the 2.5-generation than among majority-background individuals.

The 1.5- and second-generation were less likely to marry a majority-background spouse, as compared to majority-background individuals, net of the other characteristics. As can be seen from Table 3, this reduction in the odds ratio of a first marriage to a majority background spouse amounted to 40% among 1.5 generation immigrant in Norway and 27% among their Swedish counterparts. In both countries, second generation immigrants were around 30% less likely to marry a majority-background spouse relative to not marrying compared with majority-background individuals. In Sweden, 2.5-
generation individuals were 7% less likely to marry a majority background person than majority-background Swedes.

Table 3. Results from discrete-time multinomial models of first marriage with immigrant-background spouse or majority-background spouse versus remaining unmarried. Norwegian and Swedish men and women born 1972 to 1989

<table>
<thead>
<tr>
<th></th>
<th>Norway</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Immigrant-background spouse</td>
<td>Majority-background spouse</td>
</tr>
<tr>
<td>Generation (majority=ref)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5 generation</td>
<td>1.04 (0.03) 2.82 –0.51 0.03 0.60</td>
<td>1.02 (0.02) 2.77 –0.32 0.02 0.73</td>
</tr>
<tr>
<td>2nd generation</td>
<td>1.01 (0.03) 2.74 –0.37 0.05 0.69</td>
<td>0.81 (0.02) 2.26 –0.30 0.02 0.74</td>
</tr>
<tr>
<td>2.5 generation</td>
<td>–0.12 (0.03) 0.88 –0.02 0.02 0.98</td>
<td>0.02 (0.02) 1.02 –0.07 0.01 0.93</td>
</tr>
<tr>
<td>Region of origin (Nordic/majority=ref)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Europe a</td>
<td>0.09 (0.03) 1.10 –0.08 0.02 0.92</td>
<td>0.19 (0.02) 1.21 –0.08 0.02 0.92</td>
</tr>
<tr>
<td>Europe, East</td>
<td>0.69 (0.03) 2.00 –0.23 0.04 0.79</td>
<td>0.94 (0.02) 2.57 –0.26 0.02 0.77</td>
</tr>
<tr>
<td>Asia, Oceania</td>
<td>1.11 (0.03) 3.02 –0.57 0.04 0.57</td>
<td>–0.17 (0.03) 0.84 –0.02 0.02 0.98</td>
</tr>
<tr>
<td>MENA</td>
<td>1.09 (0.03) 2.99 –0.46 0.05 0.63</td>
<td>1.18 (0.02) 3.24 –0.63 0.03 0.54</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>0.24 (0.04) 1.27 –0.60 0.06 0.55</td>
<td>0.06 (0.05) 1.06 –1.26 0.08 0.28</td>
</tr>
<tr>
<td>South-America</td>
<td>–0.01 (0.05) 1.00 –0.13 0.05 0.88</td>
<td>0.01 (0.03) 1.01 –0.28 0.03 0.76</td>
</tr>
<tr>
<td>Age</td>
<td>0.54 (0.02) 1.72 1.40 0.02 4.05</td>
<td>0.45 (0.02) 1.57 1.14 0.02 3.14</td>
</tr>
<tr>
<td>Age^2</td>
<td>–0.01 (0.01) 0.99 –0.02 0.01 0.98</td>
<td>–0.01 (0.00) 0.99 –0.02 0.00 0.98</td>
</tr>
<tr>
<td>Woman</td>
<td>0.57 (0.01) 1.76 0.25 0.01 1.28</td>
<td>0.06 (0.01) 1.82 0.47 0.01 1.60</td>
</tr>
<tr>
<td>Any children</td>
<td>–0.04 (0.02) 0.96 0.98 0.01 2.67</td>
<td>0.26 (0.02) 1.30 0.83 0.01 2.29</td>
</tr>
<tr>
<td>Education (primary=ref)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>0.06 (0.01) 1.06 0.42 0.02 1.52</td>
<td>–0.10 (0.01) 0.90 0.16 0.01 1.17</td>
</tr>
<tr>
<td>Tertiary</td>
<td>0.26 (0.02) 1.29 0.91 0.02 2.49</td>
<td>0.23 (0.02) 1.26 0.77 0.01 2.17</td>
</tr>
<tr>
<td>Missing</td>
<td>–0.39 (0.03) 0.68 –0.85 0.06 0.43</td>
<td>0.08 (0.03) 1.08 –0.92 0.08 0.40</td>
</tr>
<tr>
<td>In school</td>
<td>–0.55 (0.02) 0.57 –0.34 0.02 0.71</td>
<td>–0.53 (0.01) 0.59 –0.55 0.01 0.58</td>
</tr>
<tr>
<td>Urban</td>
<td>0.14 (0.01) 1.15 –0.10 0.01 0.90</td>
<td>0.05 (0.01) 1.05 –0.21 0.01 0.81</td>
</tr>
<tr>
<td>Constant</td>
<td>–12.5 (0.22) 24.8 0.26 –12.4 0.21 –21.3 0.21</td>
<td></td>
</tr>
<tr>
<td>N Events</td>
<td>27,288</td>
<td>34,359</td>
</tr>
</tbody>
</table>

| N Person-years | 2,309,398 | 4,794,889 |

Note: 10% random samples of majority background individuals. Estimates in bold are significant at p<0.05.

*a This category comprises countries in Europe (excluding Eastern Europe) as well as the United States, Canada, Australia, and New Zealand.

Regarding region of origin, the results in Table 3 confirm that in Norway individuals who themselves or whose parents had immigrated from all regions other than countries in South and Middle America were significantly more likely to marry another immigrant-background individual than majority-background Swedes.
background individuals and those originating from other Nordic countries. Notably, immigrants and descendants of immigrants from Asia and MENA were three times as likely to marry another immigrant-background person relative to remaining unmarried as compared with non-migrants and those originating in another Nordic country. A similar relationship between region of origin and marriage to an immigrant-background spouse was found in Sweden, though immigrant-background individuals of Asian origin were significantly less likely to marry endogamously compared with their counterparts of Nordic origin and majority-background individuals. In both countries, however, individuals originating from non-Nordic countries were less likely to marry a majority-background spouse relative to remaining unmarried compared with majority-background individuals and Nordic immigrants and their descendants.

The coefficients for age and age squared in Table 3 show that over the age range 18-36 the likelihood of first marriage increased and then decreased at later ages. Not surprisingly, women enter their first marital unions at younger ages than men. Also, having children born prior to a first marriage was positively related to marrying a majority-background spouse in Norway and Sweden, but increased the odds of marrying an immigrant background spouse in Sweden only. The results presented in Table 3 further confirm that education was positively associated with marriage, whereas school enrolment was associated with a significantly lower likelihood of marriage, regardless of type of marriage. Individuals with missing education, on the other hand, were significantly less likely to marry relative to remaining unmarried than the primary educated, excepting a slightly positive association with marriage to an immigrant-background spouse in Sweden, as compared with the lower educated. Those living in urban areas were significantly more likely to marry an immigrant-background spouse, and less likely to marry a majority-background spouse, compared with those living elsewhere in Norway and Sweden.

To further assess differences across migrant generations in the relation between timing of first marriage and partner choice, we included terms representing the interactions between age and age squared and migrant generation in separate models for men and women. In Figures 1 and 2 the results from these interaction models are presented as predicted probabilities of marriage to an immigrant-or majority-background spouse, relative to remaining unmarried.

As illustrated in Figure 1, endogamous (i.e. marriages to immigrant-background individuals) marriages were most prevalent among the second generation (green lines) and 1.5 generation (red lines), and least common among the 2.5 generation (orange lines). Next, there were notable differences
across generations in the marital timing patterns among those who married an immigrant-background spouse. More precisely, among the second and 1.5 generations, such endogamous marriages were most likely to occur in the early-to-mid-20s for women and the mid-to-late 20s for men. Conversely, among the 2.5 generation and majority-background individuals, these marriages were more common in the early 30s for men and late 20s for women.

Figure 1. Interactions between age and migrant generation. Marriage to migrant-background spouse. Predicted probabilities with 95% confidence intervals. Women and men.

Note: 10% random samples of majority background individuals. The control variables were set at the following fixed values: Immigrant-background individuals originating in Western Europe, without children, secondary educated, not-enrolled in education, living in large city.

Exogamous marriages, whereby immigrant-background individuals partnered with majority spouses, on the other hand, tended to occur at later ages, and the sex-specific age pattern of marriage was quite similar, when compared with that of majority individuals partnered with majority spouses (see Figure 2). An exception to this pattern, however, were the exogamous marriages of the second and 1.5-generations in Norway; these marriages occurred on average later, compared with 2.5 and majority-background groups. Taken together, these findings confirmed hypothesis 1 suggesting that endogamous marriages occur at younger ages than exogamous marriages.
We further expected to find that second generation immigrants would be more likely to intermarry than their 1.5-generation counterparts, particularly so among those deferring first marriage (H2). In line with this assumption, Figure 2 shows that men belonging to the second generation who married exogamously tended to fall in between their 2.5 and 1.5-generation counterparts, although differences were not statistically significant at every age. A similar pattern was found among second generation women in Norway, but judging from the overlapping confidence intervals, this difference between 1.5 and second generation women was not statistically significant ($p<0.05$). Notably, the marital timing and propensities of the 2.5-generation who married a majority-background spouse was statistically indistinguishable from patterns observed for endogamously marrying majority-populations, excepting only men under the age of 30 in Sweden (see Figure 2). Still, the striking uniformity in the age pattern of marriage where there was at least one majority spouse suggests that the Scandinavian pattern of late marriage tends to dominate, even where the immigrant-background composition of the couple is mixed.

Comparing men and women in each country, we find evidence in support for our third hypothesis that those immigrant-background women who partnered endogamously would marry at younger ages. As
shown in Figure 1, although there was a clear distinction between the 1.5 and the second generation, on the one hand, and the 2.5-generation and majority-background individuals, on the other, in the timing of marriages to immigrant-background spouses for men and women alike, there was greater generational variation among women.

5 Discussion
European populations are becoming ever more diverse and migrants and their descendants are important parts of the social fabric of their countries of residence. To better understand the adaptation of migrant-background populations, the current study addressed how patterns of exogamy and endogamy were associated with differential marriage timing across migrant generations, a topic that has received little study so far (Kulu and González-Ferrer, 2014). We made use of Norwegian and Swedish longitudinal register data on all individuals born 1972 to 1989 who were either native-born or who immigrated prior to age 18. Register data are promising source of data for studies of immigrant-background populations, a hard-to-reach group that is often too small to be captured in nationally representative survey data. Moreover, using these data we were able to give particular attention to the children of immigrants, who are now just entering family formation ages, as well as highlighting the unique position of the 2.5-generation, the children of one immigrant and one majority-background parent. The context of late marriage in Scandinavia provided an ideal setting to investigate processes of adaptation, not only with respect to partner choice but also in the timing of marriage.

We demonstrated that endogamy among immigrant-background individuals is associated with younger ages at marriage, while exogamy tends to occur at older ages, consistent with late marriage regimes in both Sweden and Norway. Moreover, 1.5-generation immigrants were less likely to partner exogamously, as compared to the second- and 2.5-generation. This finding is consistent with theories of adaptation and socialization, which emphasize the importance of duration of residence, as well as the role of majority-background parents and third parties for processes of adaptation. Although this generational gradient was identified in the propensity to intermarry, it was not evident with respect to the age at marriage among exogamously partnered immigrant-background individuals. That is, in both countries the marital timing patterns of migrant-background individuals who married exogamously were more similar to the majority populations than among those who married another migrant-background individual. In line with previous research, this finding supports the assumption that intermarriage is boundary crossing behavior (Alba, 2005).
When intermarriage is taken as a measure of social distance, it is assumed that boundaries between majority and minority groups remain when immigrant-background individuals partner endogamously. However, as adaptation is better conceived of as a process, occurring over time and across migrant generations, such a dichotomous assumption potentially ignores a wider range of family life behaviors and lived experiences which may be indicative of adaptation. Our results confirm that considering partner choice and marriage timing simultaneously provide further insights into processes of social change. Correspondingly, we found some evidence of delayed first marriage across generations among immigrant-background individuals who partnered endogamously. Whereas the age pattern of marriage among 2.5-generation individuals partnering with other immigrant-background spouses did tend to follow the dominant age pattern of marriage in Sweden and Norway, there was a small gradient in marriage timing when comparing women of the 1.5 and second generations.

On the one hand, this shift in marriage timing across generations could be indicative of “boundary blurring” between majority and minority groups, whereby the social profile of marital behavior becomes less distinct, particularly among the second generation (and in future years among the third generation) (Alba, 2005). However, the differences in the marital timing of the 1.5 and second generation, on the one hand, and the 2.5-generation, individuals with one majority parent, on the other, suggest that socialization may be the key pathway for determining marriage timing. Still, in order to more fully understand the shifting age gradient of marriage across generation, it may be important to also consider the experience of first-generation immigrants arriving after age 17. While we chose to exclude these individuals from our analysis due to concerns that migration and family formation may be endogenous processes (Andersson, 2004), this may be a fruitful avenue for future research.

The relation between partner choice and marital timing was particularly strong among 1.5 and second generation women. Women comprising these groups who married endogamously were most likely to marry in the first half of their 20s. One reason could be that immigrant background women are more susceptible to a social pressure to marry within their group at prescribed ages than their male counterparts (van Zantvliet et al., 2014).

Although Norway and Sweden are similar contexts, they represent two different immigrant flow destination types and there are compositional differences in the immigrant-background populations in the two countries. Most importantly, while both countries have sizable Nordic and Eastern European (e.g. Poland) populations, the largest non-European migrant groups in Norway originate from South and Southeast Asia (e.g. Pakistan, Vietnam), Sweden has a larger share of immigrants from the Middle
East (e.g. Iraq and Iran). Net of these compositional and historical differences, we nonetheless found remarkable similarities in the patterns of partner choice and marriage timing across the two countries.

Regrettably, due to the nature of our data, we had to aggregate countries of origin into global regions for purpose of comparison. As found in prior Swedish research on intermarriage among first generation immigrants (Dribe and Lundh, 2008, 2011) and the childbearing behavior of children of immigrants (Scott and Stanfors, 2011), however, there are important differences by countries of origin. These studies confirmed that immigrant-background individuals from countries that are socio-culturally dissimilar to Sweden were less likely to conform to the dominant family formation pattern than those from more similar contexts. Future research on partner choice and marriage timing should investigate differences by countries of (parents’) origin, as well as by other unobserved individual characteristics, such as attitudes and values, information not available in the register data we have used.

Despite these limitations, our results suggest some uniformity in changing patterns of union formation for men and women across migrant generations in the two countries. Moreover, these results demonstrate that we can draw richer insights about processes of adaptation by drawing in information about the timing of partnerships, in addition to the characteristics of partners. The composition of immigrant background subgroups entering marital ages will change in the years to come, and more children of immigrants will enter family formation ages. The results from the current study are an important starting point for new insights into adaptation drawn from investigations into the family life courses of immigrants and their descendants in Europe.
Notes

1. We also excluded those born in Sweden who were missing information about their parents’
countries of origin ($n = 8,559$), as well as Swedish 1.5 generation immigrants who were missing
information on their year of migration or country of birth ($n = 550$).

2. In Sweden, information about spouse’s immigrant status was missing for $2,763$ individuals (0.5%
of individuals, 3% of marriages). These individuals were included in the analyses, but censored
upon marriage.

3. For the second generation with two foreign-born parents information on both parents was used. If
parents were not from the same country, we used information on mother’s country of birth,
consistent with the convention of statistical bureaus in Europe.
References


