The Transition to First Marriage and Partner Choice of Migrant and Majority Populations in Scandinavia

Jennifer A. Holland  
_Netherlands Interdisciplinary Demographic Institute_

Kenneth Aarskaug Wiik  
_Statistics Norway_

Using high-quality administrative register data from Norway (\(N=1,021,491\)) and Sweden (\(N=1,923,870\)), we study the marriage behavior of all migrant- and non-migrant-background individuals born between 1972 and 1989, who were either born in Norway or Sweden or who immigrated prior to age 18 (generation 1.5). The timing of first marriage, relative to patterns of assortative mating, may be informative as to the socio-cultural distance between majority and migrant-background subpopulations. We analyze the differential hazards of marrying an individual of majority- or migrant-background within a competing risk framework. We further differentiate individuals by migrant generation, number of foreign-born parents, and (parental) region of origin. We demonstrate how the individual characteristics of migrant-background individuals (i.e., second generation status and having one majority parent) and the characteristics of one’s partnership (i.e., exogamy) are associated with marital timing patterns that are more similar to the majority populations in both Norway and Sweden. Results provide deeper insight into the family dynamics of migrants and their descendants.
Introduction

Scandinavian populations are becoming evermore diverse. While there is a long history of migration flows between Scandinavian countries, increasingly in the past 50 years, immigrants from Europe and the world constitute a growing share of migrant stocks in Northern Europe. The reasons for migration are diverse. Cyclical or guest worker migration constitutes a declining share of immigration. Today, family reunification is a large and growing reason for migration to Norway and Sweden (Statistics Norway, 2013). These migration motives are associated with a longer time-horizon of residence. Rather than returning home to form families and raise children, a large share of migrant background individuals will remain in their countries of residence and contribute to the social fabric.

Alongside this growing diversity of populations, the past five decades have been a period of increasing diversity in family life in Scandinavia. Sweden and Norway, in particular, are on the leading edge of many aspects of family changes associated with the Second Demographic Transition (Neyer and Andersson 2008, Lesthaeghe 2010). Populations in these countries share similar patterns of family formation, including later ages of union formation, marriage and childbearing, as well as expressed trends toward individualism, secularism, and gender egalitarianism. Moreover, in each country a considerable proportion of the migrant-descent population comes from similar countries of origin.

By focusing on the intersection of these two aspects of diversity, we can better understand the social position of immigrants and their descendants in Scandinavia. Comparisons of family formation behavior across sub-populations within similar family formation regimes are particularly useful for understanding the processes shaping family trajectories. As Neyer and Anderson (2008) have emphasized, it is important that comparative contexts have sufficiently
similar institutional, economic and cultural characteristics. Such studies produce empirical findings that better identify the relationship between aspects of behavior that may be attributed to migrant background, rather than to unobserved differences between contexts.

To better understand family diversity in Scandinavia, in this paper we focus on both the timing and nature of marriage among migrant and majority populations. We build upon prior work to explore variation in the timing and correlates of marriage by migrant generation and country of origin, investigating how patterns of exogamy and endogamy are associated with differential marriage timing. We offer a unique approach to investigating the adaptation and assimilation of migrant-background populations, considering intermarriage and the timing of union formation simultaneously.

This research is technically innovative, linking population register data across country contexts. These high quality all-encompassing data allow for the exploration of family formation dynamics across migrant subpopulations, groups often too small to be captured in nationally representative survey data and often hard-to-reach (Stoop et al. 2010, Barnes 2008). We focus on all first marriages occurring from 1990 to 2007, for all individuals never-married and residing in their respective countries at age 18. We distinguish subpopulations based on country of birth and number of foreign born parents: the 1.5 generation (foreign-born, migrated prior to age 18) and 2nd generation, including both those with one and two foreign-born parents. We contrast these groups with majority-background individuals. We further disaggregate generations 1.5 and 2 by region of origin. We are able to identify all individuals comprising these groups who are legally registered in Norway (N = 1,021,491) and Sweden (N = 1,923,876).
Data and method

Data for these analyses come from Norwegian and Swedish administrative registers. All never married men and women born between 1972 and 1989 and living in Norway and Sweden (respectively) at age 18 were identified. These birth cohorts were selected in order that full information on civil status changes, educational attainment, enrollment and municipality of residence from age 18 could be obtained (the 1972 birth cohort was 18 in 1990 and the 1989 birth cohort was 18 in 2007).\textsuperscript{1} We distinguish individuals based on country of birth and number of foreign born parents: the 1.5 generation (foreign-born, migrated prior to age 18), 2\textsuperscript{nd} generation, including both those Norwegian- or Swedish-born with two foreign-born parents and those Norwegian- or Swedish-born with one foreign-born parent. We excluded a small proportion of the 1.5 generation who were missing information on their year of migration or country of birth. We also excluded those individuals born in Norway or Sweden who were missing information about their parents’ countries of origin. Our samples available for analyses consisted of 1,021,491 individuals for Norway and 1,923,870 individuals for Sweden.

Finally, in order to have balanced samples across categories of immigrant and majority background, to conduct multivariate regression analyses we take a 10\% random sample of majority-background individuals from Norway and Sweden, respectively. Our multivariate analysis sample, then, consisted of 208,401 individuals living in Norway and 592,766 individuals living in Sweden.

Because the data are stored on secure servers maintained at the Norwegian and Swedish statistical offices, it was not possible to conduct analyses on a pooled sample of individuals living

\textsuperscript{1} Although data for Norway are available through 2012, we limit the analysis to the period 1990 to 2007 in order that the results be comparable for Sweden and Norway.
in Norway and Sweden. As a result all analyses are conducted separately for each country of residence.

We model the transition to marriage in discrete time using a competing-risk framework (multinomial logistic regression). The model takes the form

\[
\ln \frac{\hat{\pi}_{ij|c}}{\hat{\pi}_{ij}} = a_{ij} + \mathbf{x}_{ij} \beta_{ij}
\]  

(2)

where \( a \) is a constant and \( \mathbf{x}_{ij} \) is a vector of regression odds ratios on covariates \( \beta_{ij} \) for individuals living in country \( c \) (Norway or Sweden). The error term is suppressed for simplicity. The dependent variable is the log of the odds of categories of marriage, with \( j \) corresponding to one of two categories of marital partnerships relative to continuing to be unmarried: (1) married to an individual of immigrant-background, defined as a spouse born abroad or with at least one parent born abroad; or (2) married to an individual of majority background (Norwegian or Swedish, respectively), defined as a spouse born in Sweden to Swedish born parents. Because of small cell sizes, we were not able to investigate more detailed subcategories of marriage to individuals of immigrant background (such as by (parents’) region of origin, immigration experience or generation). Because all individuals born in Norway and Sweden are given person numbers and are included in the population registers, we conclude that these marriages are to individuals not born in Norway and Sweden, respectively. Consequently we classify these marriages as occurring to individuals of immigrant-background.

The primary duration dependence (“clock”) of interest is age in years, which is specified with linear and second-degree polynomial terms, and spells consist of unmarried periods after age 18. Individuals are censored if they experience a registered partnership with someone of the same sex, out-migrate, or die, or in December 2007. A small proportion of marriages occur to
spouses for whom information about country of (parents’) origin was missing and, therefore, we were unable to classify if the marriage is to an individual of immigrant or majority background (< 2% of marriages). Individuals experiencing these types of marriages are included in the analysis, but are censored at marriage.

The key independent covariates of interest capture immigrant background and number of foreign born parents, and country of respondent or parents’ birth. Additionally we standardize for a host of additional characteristics: Birth cohort, educational attainment, school enrollment, employment status, and urban residence. In order to allow for differences between men and women in the underlying risk of marriage and the relationship between independent covariates and the risk of marriage, all analyses are conducted separately by sex.

Descriptive Results

Among all individuals born between 1972 and 1989, living in Sweden and Norway at age 18, approximately 23% (Sweden) and 12% (Norway) migrated to the country prior to age 18 (1.5 generation) or have at least one parent with a migration experience (2nd generation). While absolute numbers are different, the relative shares of 1.5 and 2nd generation migrants in the two countries are similar: about one-third of the migrant populations migrated prior to age 18 and two-thirds have at least one migrant parent (2nd generation). There are notable differences, however, when we further disaggregate the 2nd generation by number of foreign born parents. In Sweden nearly two-thirds of the 2nd generation has one foreign born parent; this share is about 8-in-10 in Norway.

With respect to migrants who arrived as children and teenagers in Sweden, the largest sending region is Asia (42%), followed by non-EU Eastern European countries (16%) and South and
Middle America (13.8%). Slightly less than 10% of these migrants arrived from other Nordic countries and from Europe (excluding Eastern Europe), North America and Oceania, respectively. Only 6% of generation 1.5 originated in non-EU Eastern-European countries. Finally, approximately 6% of 1.5 generation migrants were born in African countries.

The distributions of these sending regions for migrants arriving prior to age 16 are quite similar in Norway. As with Sweden, the largest share of generation 1.5 arrived from Asia (48%) and non-EU Eastern European countries (17%). South- and Middle-American-origin 1.5 generation migrants and those with origins in EU, North America and Oceania constitute a smaller share in Norway than in Sweden (South- and Middle-America: 6% vs. 14%, respectively; EU, North America and Oceania: 6% vs. 9%, respectively). But, similar shares of the 1.5 generation in Norway arrived from other Nordic countries (8%). Only 4% of this group originated in Eastern European EU member states. Finally, almost twice as many (12%) migrants arriving as children or teenagers in Norway (versus Sweden) originated in Africa.

There are notable differences between the parental origins of 2nd generation populations within and across our country contexts, with the key delimiter being whether 2nd generation individuals have one or two foreign-born parents. Among the 2nd generation with one foreign-born parent, the shares of parental origin are quite similar between Sweden and Norway. Nearly three-quarters and two-thirds of these individuals living in Sweden and Norway, respectively, had one foreign born parent that was born in another Nordic country or in the EU, North America and Oceania. However, 2nd generation individuals with two foreign born parents are quite different in the two countries. In Sweden, still fully half of the 2nd generation with two foreign born parents have parental origins in either another Scandinavian country or in the EU, North America and Oceania. In Norway, however, this group comes from largely Asian origins (68 %), most commonly from Pakistan, Turkey, Vietnam and India. In Sweden, about 23% of the 2nd generation with two
foreign-born parents come from Asia, although this group most commonly comes from the Middle East and Turkey in Sweden.

*Time to First Marriage*

In both countries, a larger share of women than men have transitioned to a first marriage by the end of the observation period (2007); this is unsurprising since women tend to marry at younger ages than men. In Sweden, women that migrated prior to age 18 are the most likely to have experienced a marriage (24 %), followed by those of the 2nd generation with two foreign-born parents (21 %), non-migrant Swedes (18 %) and finally those of the 2nd generation with one foreign-born parent (16 %). While fewer men over all transition to a first marriage and differences across the groups are smaller than those found among women, the pattern by migrant-background status is largely the same, although non-migrant Swedish men are slightly more likely to marry over the period than 2nd generation men with two foreign-born parents.

Unlike in Sweden, where we can distinguish differences in each of the four migrant- and non-migrant-background groups, in Norway women’s and men’s marital behavior cluster into three distinct groups. Men and women who arrived in Norway prior to age 18 and those of the 2nd generation with two foreign-born parents tend to behave similarly with respect to marriage behavior; among these two populations subgroups around 27% of women and 18% of men transition to marriage in the observation period. Those 2nd generation individuals with one foreign-born parent are the least likely to transition to a first marriage. Norwegian women and men without a migration background fall between these two groups.

These cross-country and within-country (by migrant background status) differences are also clearly evident with respect the pace of the transition to first marriage. Nonparametric maximum likelihood (Kaplan-Meier) estimates of the survival function for remaining unmarried for women
and men of migrant- and non-migrant background in Sweden and Norway are shown in Figures 2 and 3. In Sweden, generation 1.5 makes the fastest transition to marriage, followed by those of the 2nd generation with two foreign-born parents. In early periods of the life course, non-migrant and those 2nd generation individuals with one foreign-born parent are similar in their transitions to marriage. However, later in life, differentials between the two groups emerge and the transition of non-migrants accelerates. Interestingly, differences across migrant- and non-migrant-background groups are much more pronounced for women than men.

In Norway, we observe much larger differences across migrant- and non-migrant-background subpopulations; still, the patterns observed for women and men in Norway are quite similar to those observed for women and men in Sweden. Like in Sweden, the 1.5 generation and those 2nd generation individuals with two foreign-born parents make a faster transition to marriage. Unlike in the Swedish context, however, it is the two foreign-born parent 2nd generation groups that transition the fastest. As in Sweden, those with no migration background and those of the 2nd generation with one foreign-born parent are similar in their transitions to a first marriage early in life; however, as these subpopulations age, the pace of the transition accelerates for non-migrant-background Norwegians.

**Multivariate Results**

Results from the multivariate analysis are presented in Figures 4 and 5. These figures show predicted probabilities from discrete-time event-history analysis of marriage to majority-background (Figure 4) versus immigrant-background individual (Figure 5), relative to remaining unmarried in a given year, by age and migrant generation. All models were controlled for education (level and enrollment), region of origin, children, and place of residence.
Figure 1. Share of married individuals married to a majority-background individual. By migrant generation and region of origin. Sweden (upper panel) Norway.
**Figure 2.** Transition to first marriage by migrant-background status. Marriage to majority-background. Norway (upper panel) and Sweden (bottom panel)
Figure 3. Transition to first marriage by migrant-background status. Marriage to immigrant-background. Norway (upper panel) and Sweden (bottom panel)
Figure 4. Predicted probabilities from multinominal discrete-time event-history analysis of marriage to majority-background versus immigrant-background individual (base=still unmarried). Norway (upper panel) and Sweden (bottom panel).
Figure 5. Predicted probabilities from multinomial discrete-time event-history analysis of marriage to immigrant-background versus majority-background individual (base=still unmarried). Norway (upper panel) and Sweden (bottom panel).
References


