

**How Soon is Now? Age at Arrival and the Fertility and Marriage Patterns among the
Children of Immigrants in Norway**

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VERY PRELIMINARY VERSION - DO NOT CITE OR QUOTE

Immigrants' marriage and fertility patterns have received much attention from a broad spectrum of social scientists in Europe the last decades (Kalmijn and van Tubergen 2006; Sobotka 2008). Part of this interest spawns from the actual and potential role of immigrant populations in transforming relatively low-fertility European countries' populations, denoted by Coleman (2006; 2008a; 2008b; 2009) as a "third demographic transition". Given the increase in immigration into most European countries in recent years and especially in light of the demographic relevance of immigrants and their offspring in below-replacement settings, understanding the mechanisms through which these populations are integrated, excluded, and how they may help modify this mainstream may not only be regarded as a yardstick of current societal conditions, but a measure of the future prospects of social peace and economic progress in European nations.

Among other indicators, the demographic behavior of immigrants and their descendants have been used as measures of said integration into or exclusion from the host society. In particular, inter-marriage is seen as one of the ultimate measures of integration into the host society. However, classical assimilation theory posits structural integration processes as a necessary condition for widespread exogamy {Gordon, 1964 #1} (Safi 2008). As many of these structural processes generally take place on an inter-generational basis {Alba, 2003 #2} and as a large fraction of immigrants arrive after marriage, these issues are particularly relevant for the so-called second generation.

These outcomes may also be relevant for those among the foreign-born who receive a good part of their schooling and socialization in the host country, namely arriving as children, better known as the "1.5th generation" as their experiences are somewhat in-between those of their parents and children of immigrants born in the host country (Rumbaut 1994). In fact, comparing the experiences of the second and the 1.5th generations (according to the age at arrival of the latter) may serve as a quasi-natural experiment to understand the relevance of exposure to the host society during specific stages of one's life course in immigrant adaptation outcomes.

While age at arrival has been generally found to be of relevance for other outcomes (Bohlmark 2009; Myers, Gao, and Emeka 2009; Rumbaut 2004) as it is a cumulative marker of linguistic exposure and other forms of socialization, little work has been devoted to understanding its role in the inter-marriage patterns between the native-born ethnic majority (or better-established groups) and individuals descending from those groups of more recent

arrival in Europe. Moreover, given the prevalence of consensual unions in Scandinavia, where civil marriage (especially among natives) tends to occur several years after a couple first moves together oftentimes after the coming of children {INSREFS}, one also needs to look at common parentage between these groups. In this paper, we contribute to the literature on immigrant demographic behavior and social integration by studying the fertility and marriage behavior among the second and 1.5th generations while considering the role of age of arrival into Norway. We investigate if age at immigration has any bearings on the rate of first birth and first marriage of the descendants of recently-arrived immigrant groups from high-fertility countries and how it varies across immigrant groups. Using population-wide administrative register data, we employ standard demographic event-history methods with family-of-origin fixed effects that allow us to control for unobserved family background factors that may affect inter-marriage rates.

Theoretical Arguments Linking Age at Migration and Fertility and Marriage Rates

Studies of migrants' fertility and family behavior often take as their point of departure the "assimilation hypothesis", that exposure to the new context should be associated with greater assimilation of the norms and values of the host society (Gordon 1964). Broadly speaking, assimilation is the process in which persons and groups acquire the values, norms, and attitudes of other persons or groups and, by sharing their experiences, values and norms, are incorporated with them in a common cultural life. After a period of interaction with the native population, the characteristics of the migrant population should approach the characteristics of the native born population.

The post-arrival fertility behavior of migrants have been examined in a large number of studies from various industrialized countries, including, but not limited to, Australia (Abbasi-Shavazi and McDonald 2000), France {Toulemon, 2004 #3}, Germany (Milewski 2007), Norway (Lappegård 2004), Sweden (Andersson 2004), and the United States (Parrado 2009). The fertility levels of the second generation of immigrants, or rather descendants of immigrants, have also been studied, with the typical conclusion that the fertility levels of descendants of immigrant are markedly close to those of the native population (Garssen and Nicolaas 2008; Mayer and Riphahn 2000; Milewski 2007) {Parrado, 2008 #4}. However, childhood migrants have received less attention in the demographic literature.

The general idea of acculturation should be equally applicable to childhood immigrants. If someone arrives in the host country very early in life, s/he will have more exposure to the host society than if one arrives at the later life course stages of childhood, adolescence or early adulthood. Thus, *age at migration* becomes an important determinant for the adaptation process as a proxy of various socialization processes, most obviously language acquisition and social mixing by way of the educational system. Learning a language at an early age gives immigrants a longer time to become fully fluent in it and to speak it ‘unaccented’ (that is, to speak with the local accent). In addition, an earlier age at arrival may imply a smoother socialization process into the host society by way of the school system and in neighborhood interaction (depending on school and neighborhood segregation of course), which could prove instrumental in building up access to marriage markets and the eligibility of individuals both within and across culture-specific marriage markets. As this is dependent on the context of reception immigrants may face, it is also important to consider variables that are markers of said context of reception, such as national group and human capital.

Socioeconomic outcomes are given much attention due to their consequential nature. For example, Myers et al (2009) found that in the United States, socioeconomic success was contingent on age at migration but also that there was no discontinuity in the gradient. In effect, there is no “sensitive age” for migration with respect to socioeconomic outcomes. In Sweden, however, it has been shown that there seems to be a non-linear causal effect of age at migration on educational performance (Böhlmark 2008) and labor market outcomes such as earnings (Bohlmark 2009). These latter studies employed sibling fixed effects models to eliminate unobserved factors that are constant over time.

We now turn to the role of age at migration for fertility and family dynamics. It is well known from the general family sociology literature that the fertility and marriage preferences and behavior of young individuals is much affected by that of their families of origin. (Barber 2001; Barber 2000; Rijken and Liefbroer 2009; Steenhof and Liefbroer 2008). An extensive literature shows the importance of intergenerational transmission of family-related attitudes (Starrels and Holm 2000; Thornton and Camburn 1987). Parental socialization is established as a key mechanism through which intergenerational consistency in attitudes and preferences towards family life occurs (Acock and Bengtson 1980; Glass, Bengtson, and Dunham 1986; Thomson, McLanahan, and Curtin 1992).

When the intergenerational transmission of family behaviors is important, parents and other relatives will provide a link to the normative climate of the country of origin. It might therefore be useful to view the influences from the family of origin and exposure to the host society as two separate forces both affecting young migrants' family-building behaviors as implied in transnational life frameworks {INSREF}. The influences from family of origin include not only parents' preferences for children's family-building, but also the family's socioeconomic status and other factors.

If the normative climate of immigrants' childhood matters for their subsequent family-building behaviors the fertility rates of immigrants from high-fertility countries should increase with the migrants' age at arrival in the host country. The reason for this is that immigrants who arrive at lower ages will have less exposure to the host society, which, given its normative climate and context of lower fertility/later marriage, should, through a multitude of channels (such as peer influences in schools, neighborhoods, and social networks) drive fertility/marriage rates down towards what is observed in the native population.

Dutch researchers have shown that in the Netherlands parental timing preferences regarding family-life transitions are strongly associated with the timing preferences of their children (Valk and Liefbroer 2007), but also that family ties and the socio-economic characteristics of the family rather than an ethnic factor are the major influences on their actual living arrangements (de Valk and Billari 2007). This latter finding suggests that there should not be a very strong effect of age at migration on family-building behaviors but that they will also depend on how immigrant parents are selected and adapt to the host society with regards to these behaviors and attitudes as they are not a random subset of their societies of origin nor their views remain unaffected by the migration experience.

On the background drawn up here, we develop two research questions on the role age at migration plays for subsequent family-building behaviors in the generation 1.5. Our first research question is:

- 1) Is there an age-at-migration gradient in first birth and first marriage rates?

If a gradient by age at migration emerges, that would support the idea that exposure to the host country affects individual immigrants' fertility rates. As argued above, this acculturation process might go through many channels. There are also other influences on fertility, of course, of which parental socialization is one mechanism. However, if one can disentangle

family-of-origin effects on demographic behavior from the effect of exposure to the host society, one would come closer to an answer to the question of which of these channels are of the highest importance, exposure to the host society itself or socialization within the parental household. Thus, our second research question is this:

- 2) Does the age-at-migration gradient in these rates, if any, change when the complete set of family influences are controlled for?

After controlling for the complete set of family-of-origin factors, any gradient that shows up will represent the effect of age at migration on family behaviors that do not in any way involve the parental socialization mechanism (assuming that these influences are constant over time and identical for all siblings). If the gradient is similar to any gradient from analyses without family-of-origin controls, then it seems that the exposure to the host country is a measureable influence on demographic behavior of young migrants. Conversely, if the gradient is qualitatively different from the one previously obtained, one might want to conclude that the parental socialization mechanism has primacy over mere exposure to the host society.

- 3) Is there an age-at-migration gradient in inter-ethnic marriage and parentage?

As mentioned in the outset, the adaptation of immigrants and their descendants is oftentimes expressed through inter-mixing with the mainstream group. Thus, we compare the inter-marriage and inter-ethnic parentage between members of the 1.5th and second generations of the major non-European groups with native-born ethnic Norwegians according to age at arrival/generation while controlling for family background, human capital, and other aspects aimed to measure context of reception.

Data and Methods

Data

Our data are taken from Norwegian administrative registers (for more information about this kind of data, see Røed and Raaum 2003). The register system allows linkages of records from different registers, using a system of unique personal ID numbers. The data available to us cover all individuals in Norway born after 1954. A wide range of variables are measured included in the data set. For each individual, we know the complete fertility and marital status histories of that individual. We also have annual measurements of her/his labor income and

educational attainment for the years the individual is registered as a resident in the country. Identification of siblings is facilitated by the system of ID numbers, as individuals are registered with the ID number of both their parents.

Methods

The two outcomes we study are both duration variables. The timing of parenthood and marriage always greater than zero and are drawn from censored distributions. Consequently, we employ hazard regression models as our statistical tool. For parsimony reasons, Cox proportional hazard models. Two sets of models are estimated: Simple models, which are standard Cox proportional hazard models, and a set of more complex models, where we attempt to control for unobserved family-of-origin factors.

In all models, we include a set of covariates that capture the current status of the individual and in the simpler models we also include country dummy variables. Educational attainment, enrollment status and income are well-known predictors of family demographic behavior, and will also be related to age at migration (Bohlmark 2009; Böhlmark 2008).

We want to use the available information about siblings to purge the influences of unobserved characteristics of the siblings' families from our results, and then compare the age-at-migration gradients in fertility and marriage rates from models with and without this extension. These unobserved characteristics include such factors such as the parents' migration history, their socioeconomic status, and at least in principle everything else related to the family of origin that is *constant over time*. By including fixed effects specific to each sibship, we hope to see if there is any gradient in age at migration "left". A correlation between age at migration and unobserved family characteristics might arise, for example, because of parents' strategic choices of when to migrate.

Following Allison (2005), we use the standard Cox regression procedures in SAS. For the analysis with fixed effects we also stratify the baseline hazard by sibship, identified by the ID numbers of both parents. An alternative approach would be to add dummy variables representing each sibship. However, the dummy variable approach has two problems associated with it. One is the computational difficulties related to estimating a model with thousands of parameters, and another is that, with thousands of "incidental parameters", the

parameter estimates for the other variables in the model will be inflated (Allison 2002; Allison 2005).

Analytical sample

Our analytical sample is composed of all childhood immigrants from a specific set of countries, as well as a native comparison group. The first criterion for inclusion in the country group is that the country's population should have a family and fertility behavior that, at the time of migration, was markedly different from that of Norway. The reason for this is that any parental socialization effects would be similar to those in the native group. The second criterion was that the group of "generation 1.5" immigrants consists of a large enough group for any statistical analysis and they must have lived in Norway for a long enough time to allow for studying their marriage and fertility behavior. This requirement severely limits the number of country backgrounds we can include. Individuals belonging to the cohorts 1955-1984 were considered. Individuals who immigrated to Norway after age 16 or were born in Norway were excluded.

In the analyses presented here, immigrants from the following countries are included: Chile, India, Iran, Iraq, Morocco, Pakistan, Somalia, Sri Lanka, Turkey, and Vietnam. Descriptive statistics by country of origin are listed in Table 1. There is much variation in the immigration history of the individuals included. Not only do the immigrants have different receptions to Norwegian society, but their countries of origin are also very different with respect to fertility and family formation patterns. For example, the Vietnamese in Norway arrived mostly as boat refugees following the end of the war in Vietnam. The Chilean families that migrated to Norway were political refugees from the Pinochet dictatorship. Immigrants of Indian, Pakistani, and Turkish descent, on the other hand, were mostly labor migrants in the late 1960s and early 1970s. A major immigrant group that with these restrictions is excluded is Polish immigrants, which for the most part arrived in recent years.

In the fixed effects analyses, we exclude the native group and use only the cases where the individual has at least one sibling that is also in the analytic sample. This means that some individuals will be excluded despite having siblings living in Norway for which data theoretically could be available for analysis. Experiments show that there is no major difference in results between the full sample and the reduced siblings-sample. Further

experiments with a linear age-at-migration variable were done, and the gradient shows the same pattern across models as the results with the set of dummy variables.

TABLE 1 ABOUT HERE

Variable definitions

The outcome variables, timing of first birth and timing of first marriage, are defined as the waiting time from age 16 to these events take place, if they do. If the event does not take place, the observation is censored at the beginning of 2009. *Age at immigration* is defined as a set of dummy variables indicating at which age the individual arrived in Norway. *Country background* is a set of dummy variables indicating which country the individual was born in. *Education level* is a three-level categorical variable corresponding to the compulsory, secondary and tertiary levels of the Norwegian educational system. *Annual labor income* is included with a logarithmic transformation, and a dummy variable indicating that the individual is *female* is also included in the models.

Results and Discussion

Age-at-migration effects on the transition to first birth among immigrants to Norway

Table 2 shows the results from the Cox regressions for the transition to first birth. The results that are of the most interest to us are the coefficients for the individual's age at migration. We cannot compare the magnitude of the coefficients as they only measure the relative changes in rates of first birth and marriage, but may study consider qualities of any gradients in the rates by age at migration that emerge.

The pattern that emerges from the regression coefficients for age at migration in table 2, is not crystal clear, but there seems to be a linear trend in the coefficients: The rate of first birth increases with higher ages at migration, meaning that birth rate for those who arrived early in life is lower than the birth rate of this who arrived later in childhood or early adolescence. The maximum difference is between the reference group, who arrived at 0-2 years, and those who arrived at age 16. For these groups the hazard ratio is estimated at 1.42

[1.25-1.62]. This picture is supported by the fact the coefficients for higher ages at migration generally are statistically significant, while those at lower ages generally are not.

TABLE 2 ABOUT HERE

When family-of-origin fixed effects are included, the picture looks quite different. There is no gradient apparent in the coefficients for age at migration. The associated standard errors are also very large, with only a few significant coefficients.

The control variables included mostly behave as expected, with lower rates at first birth for those with higher education levels and the currently enrolled, and for later cohorts. There is a positive effect of labor market earnings on the first birth rate. Women have, expectedly, a higher rate of first births than man (i.e., they experience their first birth at younger ages). The estimates for control variables change somewhat, but not much from the simple model to the fixed effects model.

Taken together this suggests that, on the surface, exposure to the host country does matter for first birth rates. However, when we compare siblings from the same family, their age at migration does not play an important role for the transition to parenthood.

Age-at-migration effects on the transition to first marriage among immigrants to Norway

Table 3 shows the results from the Cox regressions for the transition to first marriage. The sequence of regression models is identical to that for the transition to first marriage.

TABLE 3 ABOUT HERE

The simple model for first marriage show results quite similar to those obtained for first birth. The largest hazard ratio was estimated to 1.63 [1.43 – 1.86] and found for those who immigrated at age 16, as was the case for first birth. There seems to be a linear gradient in the age at migration on the rate of first marriage.

When unobserved family-of-origin factors are controlled for the qualitative shape of the gradient closely resembles the pattern obtained from the simpler model. Most coefficients are not statistically significant. If one considers only the regression coefficients, the overall picture is that the family-of-origin controls did not matter for the age at migration effects.

Limitations of the study

Evidently, the external validity of the study will be limited, as we only include people with certain country backgrounds and further restrict the sample to those who have at least one sibling in the final data set.

When studying immigrants' demographic behavior in the destination country, one should have data for a rather long period subsequent to the time of immigration. For several of the immigrant groups studied here, the period of exposure to the family events in question is very limited. In contemporary Norway, for women, the mean age at first birth is 30.3 years and the mean age at first marriage is 31. Considering the proportions of women who so far have had a first birth and entered a first marriage, it is clear that right-censoring is pervasive. A related problem is the lack of data on cohabitation. A childhood immigrant that has to the fullest extent taken up Norwegian family behaviors will not get married early, but rather cohabit. The results for first marriage rates might be severely affected by this problem.

Gender obviously affects family-building behaviors to a large degree. Marriage and first-birth rates have different age profiles for men and women. This is not handled very well with the current analysis setup. Sex is merely added as a covariate to the Cox models, and it is likely that this violates the assumption of proportional hazards.

Whether these limitation and problems related to censoring and the proportionality assumption will seriously bias the results for age at migration, however, is not clear.

Conclusion

What answer can be given to the research questions asked above, from the results of this study? The data on immigrants comprised individuals with siblings from countries that, at least at the time of migration to Norway, were characterized by a relatively high fertility and

relatively early marriage. Our first question regarded the possible existence of an effect of age at migration on first birth and first marriage rates, when country background and a set of individual-level predictors were controlled. The answer to this question is unambiguously positive. There is indeed a gradient in both first birth rates and first marriage rates by the age at which migrants arrived in Norway. The gradient seems to increase the rate of first birth and first marriage monotonically with age.

When we control for unobserved factors are the family of origin, however, the gradient for first birth rates disappears. The effects of age at migration on first marriage are generally non-significant, but the gradient shows the same slope and magnitude as the model without fixed effects. What is the reason for this finding? It is possible that it is an artifact of lack of “statistical power”, and that the true effect is just very poorly estimated in this model. However, if that is not the case, then the within-family effect of age at migration is unimportant for these two transitions among the immigrants groups studied here.

References

- Abbasi-Shavazi, M. J. and P. McDonald. 2000. "Fertility and multiculturalism: Immigrant fertility in Australia, 1977-1991." Pp. 215-242.
- Acock, A. C. and V. L. Bengtson. 1980. "SOCIALIZATION AND ATTRIBUTION PROCESSES - ACTUAL VERSUS PERCEIVED SIMILARITY AMONG PARENTS AND YOUTH." *Journal of Marriage and the Family* 42:501-515.
- Allison, Paul D. 2002. "Bias in Fixed-Effect Cox Regression with Dummy Variables." in *unpublished paper, Department of Sociology, University of Pennsylvania*.
- . 2005. *Fixed Effects Regression Methods for Longitudinal Data*. Cary, NC: The SAS System.
- Andersson, Gunnar. 2004. "Childbearing after Migration: Fertility Patterns of Foreign-born Women in Sweden¹." *International Migration Review* 38:747-774.
- Barber, J. S. 2001. "The intergenerational transmission of age at first birth among married and unmarried men and women." *Social Science Research* 30:219-247.
- Barber, Jennifer S. 2000. "Intergenerational Influences on the Entry into Parenthood: Mothers' Preferences for Family and Nonfamily Behavior." *Social Forces* 79:319-348.
- Bohlmarm, A. 2009. "Integration of Childhood Immigrants in the Short and Long Run - Swedish Evidence." *International Migration Review* 43:387-409.

- Böhlmark, Anders. 2008. "Age at immigration and school performance: A siblings analysis using swedish register data." *Labour Economics* 15:1366-1387.
- Coleman, D. 2006. "Immigration and ethnic change in low-fertility countries: A third demographic transition." *Population and Development Review* 32:401-+.
- . 2008a. "The demographic effects of international migration in Europe." *Oxford Review of Economic Policy* 24:453-477.
- . 2008b. "New Europe, new diversity." *Population Studies-a Journal of Demography* 62:113-120.
- . 2009. "Divergent Patterns in the Ethnic Transformation of Societies." *Population and Development Review* 35:449-+.
- de Valk, H. A. G. and F. C. Billari. 2007. "Living arrangements of migrant and Dutch young adults: The family influence disentangled." *Population Studies-a Journal of Demography* 61:201-217.
- Garssen, J. and H. Nicolaas. 2008. "Fertility of Turkish and Moroccan women in the Netherlands: Adjustment to native level within one generation." *Demographic Research* 19:1249-1280.
- Glass, J., V. L. Bengtson, and C. C. Dunham. 1986. "ATTITUDE SIMILARITY IN 3-GENERATION FAMILIES - SOCIALIZATION, STATUS INHERITANCE, OR RECIPROCAL INFLUENCE." *American Sociological Review* 51:685-698.
- Gordon, M. M. 1964. *Assimilation in American Life: The Role of Race, Religion and National Origins*. New York: Oxford University Press. . New York: Oxford University Press.
- Kalmijn, M. and F. van Tubergen. 2006. "Ethnic intermarriage in the Netherlands: confirmations and refutations of accepted insights." *European Journal of Population- Revue Europeenne De Demographie* 22:371-397.
- Lappegård, Trude. 2004. "Valg av av livsløp i det flerkulturelle Norge. Forløpsanalyser av giftermål og barnefødsler blant kvinner med innvandrerbakgrunn." Statistics Norway, Oslo-Kongsvinger.
- Mayer, Jochen and Regina T. Riphahn. 2000. "Fertility assimilation of immigrants: Evidence from count data models." *Journal of Population Economics* 13:241-261.
- Milewski, N. 2007. "First child of immigrant workers and their descendants in West Germany: Interrelation of events, disruption, or adaptation?" *Demographic Research* 17:859-895.

- Myers, Dowell, Xin Gao, and Amon Emeka. 2009. "The Gradient of Immigrant Age-at-Arrival Effects on Socioeconomic Outcomes in the U.S." *International Migration Review* 43:205-229.
- Rijken, A. and A. Liefbroer. 2009. "Influences of the family of origin on the timing and quantum of fertility in the Netherlands." *Population Studies-a Journal of Demography* 63:71-85.
- Rumbaut, R. G. 1994. "THE CRUCIBLE WITHIN - ETHNIC-IDENTITY, SELF-ESTEEM, AND SEGMENTED ASSIMILATION AMONG CHILDREN OF IMMIGRANTS." *International Migration Review* 28:748-794.
- Safi, M. 2008. "Intermarriage and assimilation: Disparities in levels of exogamy among immigrants in France." *Population* 63:267-298.
- Schoenmaeckers, R. C., E. Lodewijckx, and S. Gadeyne. 1999. "Marriages and fertility among turkish and Moroccan women in Belgium: Results from census data." Pp. 901-928.
- Sobotka, T. 2008. "The rising importance of migrants for childbearing in Europe." *Demographic Research* 19:225-247.
- Song, M. 2009. "Is Intermarriage a Good Indicator of Integration?" *Journal of Ethnic and Migration Studies* 35:331-348.
- Starrels, M. E. and K. E. Holm. 2000. "Adolescents' plans for family formation: Is parental socialization important?" *Journal of Marriage and the Family* 62:416-429.
- Steenhof, L. and A. C. Liefbroer. 2008. "Intergenerational transmission of age at first birth in the Netherlands for birth cohorts born between 1935 and 1984: Evidence from municipal registers." *Population Studies-a Journal of Demography* 62:69-84.
- Thomson, E., S. S. McLanahan, and R. B. Curtin. 1992. "FAMILY-STRUCTURE, GENDER, AND PARENTAL SOCIALIZATION." *Journal of Marriage and the Family* 54:368-378.
- Thornton, A. and D. Camburn. 1987. "THE INFLUENCE OF THE FAMILY ON PREMARITAL SEXUAL ATTITUDES AND BEHAVIOR." *Demography* 24:323-340.
- Valk, Helga A. G. de and Aart C. Liefbroer. 2007. "Timing Preferences for Women's Family-Life Transitions: Intergenerational Transmission Among Migrants and Dutch." *Journal of Marriage and Family* 69:190-206.

TABLES

Table 1 Descriptive statistics by country of origin

Country of origin	Code	N	Mean age at migration	Median year at migration	First marriage	First birth	TFR in country ^a
Chile	725	936	8.9	1986	37	58	2,8
India	444	940	5.3	1982	42	47	4,8
Iran	456	828	9.5	1989	28	25	5,6
Iraq	452	272	12.3	1993	47	47	5,0
Morocco	303	373	8.3	1983	71	70	5.4
Pakistan	534	2278	6.7	1983	76	67	6,3
Somalia	346	443	12.2	1993	23	45	7,3
Sri Lanka	424	403	9.0	1989	54	45	2,8
Turkey	143	1079	9,1	1985	77	70	4,2
Vietnam	575	1989	9.1	1985	51	56	5,0

^aThe total fertility rate for that origin country at the mean year of migration to Norway, estimated from the UN Common Database (<http://data.un.org/>).

Table 2. Results for hazard models of the transition to first birth among childhood immigrants without (Model 1) and with (Model 2) family-of-origin fixed effects.

Variable	Model 1					Model 2				
	Estimate	S.E.	p	HR	95% C.I.	Estimate	S.E.	p	HR	95% C.I.
Age at migration (0-2)	0,00					0,00				
3	0,07	0,07	0,07	0,27	1,08	0,94	0,22	0,98	1,01	0,65
4	-0,04	0,07	0,07	0,59	0,96	0,83	0,25	0,42	0,82	0,51
5	0,06	0,07	0,07	0,43	1,06	0,92	0,23	0,33	1,25	0,80
6	0,17	0,07	0,07	0,01	1,19	1,04	0,23	0,44	1,19	0,76
7	0,08	0,07	0,07	0,26	1,08	0,94	0,24	0,55	1,16	0,72
8	0,18	0,07	0,07	0,01	1,20	1,05	0,25	0,77	1,08	0,65
9	0,16	0,07	0,07	0,02	1,18	1,02	0,26	0,57	0,86	0,52
10	0,24	0,07	0,07	0,00	1,27	1,11	0,28	0,77	1,09	0,63
11	0,09	0,07	0,07	0,22	1,09	0,95	0,30	0,72	1,11	0,62
12	0,27	0,07	0,07	<,0001	1,32	1,15	0,31	0,94	0,98	0,53
13	0,41	0,07	0,07	<,0001	1,51	1,33	0,33	0,95	1,02	0,54
14	0,24	0,07	0,07	0,00	1,27	1,10	0,35	0,81	0,92	0,46
15	0,28	0,07	0,07	<,0001	1,33	1,16	0,38	0,77	1,12	0,53
16	0,35	0,07	0,07	<,0001	1,42	1,25	0,39	0,71	0,87	0,41
Cohort	-0,04	0,00	0,00	<,0001	0,97	0,96	0,03	0,00	0,91	0,87
Country of origin (Turkey)	0,00									
Morocco	-0,08	0,07	0,07	0,29	0,93	0,80				
Somalia	-0,40	0,09	0,09	<,0001	0,67	0,57				
Sri Lanka	-0,54	0,09	0,09	<,0001	0,58	0,49				
India	-0,66	0,06	0,06	<,0001	0,52	0,46				
Iraq	-0,30	0,10	0,10	0,00	0,74	0,61				

Iran	-1,24	0,08	<,0001	0,29	0,25	0,34														
Pakistan	-0,05	0,05	0,32	0,96	0,88	1,04														
Vietnam	-0,61	0,05	<,0001	0,55	0,50	0,60														
Chile	-0,33	0,06	<,0001	0,72	0,64	0,81														
Education level (Comp.)	0,00						0,00													
Secondary	-0,01	0,03	0,83	0,99	0,93	1,06	-0,30	0,09	0,00	0,74	0,62	0,89								
Tertiary	-0,09	0,05	0,04	0,91	0,84	1,00	-0,49	0,15	0,00	0,61	0,45	0,83								
Currently enrolled	-0,53	0,03	<,0001	0,59	0,55	0,63	-0,44	0,09	<,0001	0,64	0,54	0,77								
Log Income	0,06	0,00	<,0001	1,06	1,05	1,07	0,02	0,01	0,01	1,02	1,00	1,04								
In Likelihood	66190.2												7789.2							
N	10108												6965							
Censored	46 %												42,1 %							

Table 3. Results for hazard models of the transition to first marriage among childhood immigrants without (Model 1) and with (Model 2) family-of-origin fixed effects.

Variable	Model 1						Model 2					
	Estimate	S.E.	p	HR	95% C.I.	Estimate	S.E.	p	HR	95% C.I.		
Age at migration (0-2)	0,00					0,00						
3	0,12	0,07	0,08	1,12	0,99	1,28	0,22	0,67	1,10	0,71		
4	0,19	0,07	0,01	1,21	1,05	1,39	0,24	0,33	1,27	0,79		
5	0,12	0,07	0,09	1,13	0,98	1,30	0,22	0,16	1,37	0,89		
6	0,24	0,07	0,00	1,27	1,10	1,45	0,22	0,02	1,73	1,11		
7	0,16	0,07	0,03	1,17	1,02	1,35	0,24	0,40	1,22	0,77		
8	0,18	0,07	0,01	1,19	1,04	1,37	0,25	0,26	1,33	0,81		
9	0,21	0,07	0,00	1,23	1,07	1,41	0,26	0,80	1,07	0,64		
10	0,31	0,07	<,0001	1,36	1,18	1,57	0,28	0,01	2,01	1,17		
11	0,29	0,07	<,0001	1,34	1,17	1,53	0,29	0,04	1,85	1,04		
12	0,41	0,07	<,0001	1,51	1,32	1,73	0,31	0,12	1,63	0,89		
13	0,56	0,07	<,0001	1,76	1,54	2,01	0,33	0,06	1,88	0,99		
14	0,40	0,07	<,0001	1,49	1,29	1,71	0,35	0,11	1,75	0,88		
15	0,41	0,07	<,0001	1,50	1,30	1,73	0,38	0,09	1,91	0,91		
16	0,49	0,07	<,0001	1,63	1,43	1,86	0,38	0,09	1,93	0,91		
Cohort	-0,03	0,00	<,0001	0,97	0,96	0,97	0,03	0,06	0,95	0,90		
Country of origin (Turkey)	0,00											
Morocco	-0,38	0,07	<,0001	0,69	0,60	0,79						
Somalia	-1,58	0,11	<,0001	0,21	0,17	0,26						
Sri Lanka	-0,68	0,08	<,0001	0,51	0,44	0,59						

India	-1,17	0,06	<,0001	0,31	0,27	0,35
Iraq	-0,62	0,10	<,0001	0,54	0,44	0,65
Iran	-1,48	0,08	<,0001	0,23	0,20	0,26
Pakistan	-0,07	0,04	0,12	0,94	0,86	1,02
Vietnam	-1,20	0,05	<,0001	0,30	0,27	0,33
Chile	-1,40	0,07	<,0001	0,25	0,22	0,28
Education level (Comp.)	0,00			0,00		
Secondary	-0,05	0,03	0,12	0,95	0,89	1,01
Tertiary	-0,01	0,05	0,87	0,99	0,91	1,09
Currently enrolled	-0,29	0,03	<,0001	0,75	0,70	0,79
Log Income	0,12	0,00	<,0001	1,13	1,12	1,14
In Likelihood	91910,8			7770,0		
N	10108			6965		
Censored	46.2 %			42,9 %		