# Mixed Marriages in Germany: A High Risk of Divorce for Immigrant-Native Couples

# Mariages mixtes en Allemagne: un risque de divorce élevé pour les couples immigrant(e) et natif(ve) d'Allemagne

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Received: 15 January 2013/Accepted: 17 June 2013/Published online: 3 September 2013 © Springer Science+Business Media Dordrecht 2013

**Abstract** This study investigates the effect of native/immigrant intermarriage on divorce. We used a rich longitudinal dataset from the German Socio-Economic Panel and applied event-history techniques to examine the risk of divorce among immigrants in Germany. Our analysis of the divorce rates of 5,648 marriages shows that immigrant couples have a lower risk of divorce than do natives. However, marriages between German-born individuals and immigrants have a higher likelihood of separation than marriages between two German-born individuals or between immigrants from the same country, supporting the exogamy hypothesis. This pattern largely persists when controlling for the socio-demographic and human-capital characteristics of the spouses. The divorce risk increases with the cultural distance between the partners and when the spouses demonstrate differences in their social backgrounds, also supporting the heterogamy hypothesis and the selectivity hypothesis. We found no support for the adaptation and convergence hypotheses. Divorce levels for mixed marriages are neither similar to the levels of one of the constituent origin groups, nor do they fall between the levels of the two groups; the divorce levels for native/immigrant marriages are higher than those for endogamous marriages.

**Keywords** Mixed marriage · Divorce · Union dissolution · Immigrant integration · Exogamy effect · Germany

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**Résumé** Cette recherche examine l'effet d'un mariage mixte entre immigrant(e) et partenaire natif(ve) d'Allemagne sur le divorce. Les données longitudinales du panel socio-économique allemand ont été utilisées ainsi que des techniques d'analyse des biographies pour étudier les risques de divorce chez les immigrants en Allemagne. L'analyse des taux de divorce de 5.648 mariages montre que les couples d'immigrants ont un risque moins élevés de divorce que les couples dont les deux partenaires sont nés en Allemagne. Cependant, les mariages entre des hommes et des femmes nés en Allemagne et des immigrant(e)s ont une probabilité de rupture d'union plus élevée que celle observée chez les couples dont les partenaires sont tous deux originaires d'Allemagne ou les couples d'immigrants de même pays d'origine, confortant ainsi l'hypothèse d'exogamie. Ce schéma subsiste après contrôle des capitaux socio-économiques et culturels des époux. Le risque de divorce s'accroît avec l'augmentation de la distance culturelle entre les partenaires et lorsque les époux appartiennent à des milieux sociaux différents, appuyant ainsi les hypothèses d'hétérogamie et de sélection. Les résultats ne permettent pas de confirmer les hypothèses d'adaptation et de convergence. Les niveaux de divortialité des mariages mixtes diffèrent des niveaux observés chez les groupes d'origine de l'un ou l'autre des partenaires et ne se situent pas non plus entre les niveaux de chacun de ces groupes d'origine. Les niveaux de divortialité des mariages entre immigrant(e)s et partenaires originaires du pays sont plus élevés que ceux des mariages endogamiques.

**Mots-clés** Mariage mixte · Divorce · Rupture d'union · Intégration d'immigrant · Effet de l'exogamie · Allemagne

# 1 Introduction

During the last two decades, most European countries have witnessed increased immigration streams and ethnic heterogeneity in their populations (Castles and Miller 2009). Consequently, integration of immigrants and their descendants has become a major issue in European societies and a research topic among social scientists. Various dimensions of immigrant structural and cultural integration have been studied (Musterd 2005; Adsera and Chiswick 2007; Kogan 2007; Kulu and Milewski 2007; Arbaci 2008; Sobotka 2008; Milewski 2010; Rebhun 2010; Rendall et al. 2010), and complementary policy measures have been proposed to foster social cohesion in increasingly heterogeneous European societies (Seifert 1997; Bauböck 2003; Howard 2005). On one hand, many authors see ethnic intermarriage as a means of minority-majority integration and social cohesion. Several recent studies report positive trends in this direction: intermarriage has increased in European countries, even in those countries in which the barriers between ethnic groups have been high (Monden and Smits 2005; van Ham and Tammaru 2011; Lanzieri 2012).

Conversely, studies on marital stability and divorce show that dissimilarity between the partners increases the risk of divorce and separation: the risk of marital dissolution is relatively high when there is a large age gap between the partners, when they have different educational levels and when they come from different religious backgrounds (Bumpass and Sweet 1972; Becker et al. 1977; Tzeng 1992). Although research on the effect of religious heterogamy on marital instability has a long history, particularly on Protestant/Catholic intermarriage (Landis 1949; Burchinal and Chancellor 1963), the effect of the intermarriage of individuals from different ethnic groups or between immigrants and natives has seldom been studied. Earlier studies came from the US and focused on the effect of black/white intermarriage on divorce (Monahan 1970; Rankin and Maneker 1987). Recent studies examined the effect of immigrant/native or interethnic marriages on marital stability (Jones 1994; Kalmijn et al. 2005; Zhang and van Hook 2009).

If dissimilarity between the partners increases the risk of divorce, then marriages that cross ethnic lines may have a higher likelihood of ending in separation than ethnically endogamous marriages. The *exogamy hypothesis* has been tested and supported by a number of studies (Rankin and Maneker 1987; Jones 1994; Kalmijn et al. 2005). Recent research has also supported the *heterogamy hypothesis*, arguing that the likelihood of divorce is not only high for ethnically exogamous couples but increases with an increase in the "cultural distance" between the partners or when partners have dissimilarities in other socio-cultural traits such as education or religious affiliation (Dribe and Lundh 2012). If this is so, ethnic intermarriage may raise the divorce levels in society, and increased social cohesion may not be achieved—at least not by the contribution of intermarriage.

The picture is, however, not as simple as it looks at first glance. A seminal study by Monahan (1970) showed that in the US, black/white marriages were less stable than white/white marriages, as expected; however, they were more stable than black/black marriages. The results of this and some recent studies have led to a formulation of *the convergence hypothesis*: ethnically mixed marriages exhibit divorce levels that are between the levels of the two constituent origin groups (Jones 1996; Zhang and van Hook 2009). Therefore, migrant/native marriages should not necessarily increase divorce levels in destination societies; if immigrants come from societies in which divorce is less common than in the destination society, which is the case for most European migrants, then the divorce levels in destination societies may even decline because of intermarriage.

Our study investigates the effect of native/immigrant intermarriage on divorce in Germany. We extend previous research in two ways. First, we examine the effect of exogamous marriages on marital stability in the European context. Most studies have been conducted in the US, a country with specific ethnic and racial relations; the US studies have focused on race and ethnicity rather than place of origin and migrant background. There have only been a handful of studies conducted in Northern and Western Europe with a focus on the marriages of post-war immigrants (Kalmijn et al. 2005; Eeckhaut et al. 2011; Dribe and Lundh 2012; Feng et al. 2012). Second, we used a rich longitudinal dataset, the data from the German Socio-Economic Panel (SOEP). The data allowed us to control for many individual and couple characteristics when investigating the effect of migrant/native marriages on divorce, including the individual values. This is critical in reducing the selectivity bias typical of studies on divorce and separation (Lillard et al. 1995; Kulu and Boyle

2010). It is highly likely that individuals who marry across ethnic lines are different in their socio-economic and cultural characteristics from those who marry within the same ethnic group. Most studies have used divorce statistics provided by statistical agencies in the studied countries. The dataset is generally large; however, not all important information on individuals and couples is available.

# **2** Theoretical Framework

Literature on mate selection shows a general preference for a marriage partner who has similar traits with respect to, e.g., education, religious affiliation, ethnic background, language, and social status (e.g., Kalmijn 1998). This preference can mainly be traced back to two mechanisms: first, similarity creates fewer conflicts between the partners and maximizes the individual benefits (Becker 1981); second, the structure of the marriage market, e.g., prospective spouses attending the same educational institution, leads those persons who share socio-cultural characteristics to meet and mate (Kalmijn 1998). Research on incorporation of immigrants has perceived intermarriage as both a means and a result of the integration process: the longer the immigrants live in the country, the more likely they are to interact with and marry natives. Simultaneously, mixed marriages foster exchanges between natives and immigrants and therefore accelerate immigrant integration (Gordon 1964; Lieberson and Waters 1988; Dribe and Lundh 2011).

In an immigration setting, the exogamy hypothesis predicts that partners in mixed marriages between natives and immigrants have a higher likelihood of separation than intra-group marriages of either natives or immigrants. First, natives and immigrants have different socio-cultural backgrounds; they come from different socialization environments and generally belong to different ethnic groups. Therefore, it is likely that their preferences, values, and norms also differ. Dissimilarity in preferences, values, and norms is expected to reduce the time spent on joint activities, increase misunderstandings between the partners and be a constant source of conflict (Kalmijn et al. 2005; Zhang and van Hook 2009). Second, exogamous marriages are expected to receive less support from the social networks of respective spouses than endogamous unions. Marrying outside the ethnic or cultural group means crossing a social boundary in society; this may be tolerated but is generally not welcomed or supported by members of respective groups. Consequently, the couple may feel neglected by significant others in their communities, and this may place a strain on their relationship. Alternatively, the spouses of mixed marriages may lack support during the difficult times that each partnership faces from time to time. Third, partners in mixed marriages have a higher likelihood of attracting open discrimination in their daily lives. They may not only be tacitly excluded from social networks but may also be confronted with overt disdain by the general public expressed in occasional verbal abuse by strangers or similar activities. Studies in the US have shown that such experiences are not uncommon for couples in mixed marriages, particularly for those in which the spouses come from different racial groups (Zhang and van Hook 2009). Constantly negative experiences of exogamous couples may increase marital instability and lead to divorce. The exogamy hypothesis has been investigated and supported by many studies investigating the effect of religious or ethnic intermarriage on marriage stability (Landis 1949; Burchinal and Chancellor 1963; Bumpass and Sweet 1972; Rankin and Maneker 1987; Finnäs 1997; Kalmijn et al. 2005; Dribe and Lundh 2012; Feng et al. 2012).

The *cultural dissimilarity or heterogamy hypothesis* can be perceived as an extension of the exogamy hypothesis; the heterogamy hypothesis also specifies expected effects of a mixed marriage on divorce. It predicts that for native/migrant couples, the likelihood of divorce increases with an increase in the "cultural distance" between the spouses or when certain socio-demographic traits are different (Kalmijn et al. 2005; Dribe and Lundh 2012). The concept of cultural dissimilarity has been used to explain differences between immigrant groups regarding the likelihood of intermarriage and separation (Dribe and Lundh 2011). Cultural dissimilarity refers mainly to the dimensions of language, religion, and values. Whereas knowledge of the host-country's language enhances immigrant integration and therefore communication with members of the host society, shared values and beliefs appear to be crucial for a stable marriage. According to Inglehart (1997), the importance of religion coincides on a societal level with "traditional" family values such as intergenerational ties, the rejection of divorce, and a clear task division between men and women. By contrast, in societies in which religion is less important, gender equality receives more support, individual wellbeing is regarded as more important than collective attitudes, and divorce is not neglected. This is consistent with Reher's (1998) typology of family systems in Europe in which he distinguishes between those countries with a tradition of stem families (Mediterranean countries give familism great value) and the northern countries in which this is less the case.

If persons from two cultural backgrounds marry, their risk of divorce is assumed to be elevated. The reasons are the same as for the exogamy hypothesis. First, dissimilarity in values and norms is expected to be greater for spouses from divergent cultures or social strata than for partners who have similar cultural or social backgrounds. This renders the former marriages more prone to conflicts and more fragile than the latter ones. Second, it is expected that marriages in which social/cultural dissimilarity between the partners is great will receive less support from the social networks of respective spouses than will marriages with culturally similar spouses. Third, the marriages with culturally dissimilar spouses are also more likely to experience discrimination in society. The *heterogamy hypothesis* thus predicts a high likelihood of divorce for native/migrant marriages with spouses coming from different cultures; however, exogamous marriages of partners with similar cultural backgrounds should not necessarily have a higher likelihood of divorce than homogamous marriages. The cultural dissimilarity/heterogamy hypothesis has been tested and supported by two recent studies on mixed marriages in European countries (Kalmijn et al. 2005; Dribe and Lundh 2012).

The *selectivity hypothesis* has never been explicitly formulated and tested; however, it has been discussed in many studies examining the exogamy hypothesis (Burchinal and Chancellor 1963; Bumpass and Sweet 1972; Kalmijn et al. 2005; Feng et al. 2012). It argues that exogamous marriages have a higher risk of divorce than

endogamous marriages because spouses in mixed marriages have (compositional) traits that render their marriages unstable. First, couples in mixed marriages may differ from spouses in endogamous unions by their demographic or socio-economic characteristics; they may have married at younger ages; there may be more people from specific social strata among them, e.g., unemployed individuals or people with a high income; and these traits are conducive to an increased risk of divorce. Second, it is likely that individuals who intermarry have more liberal values and may thus be less committed to the norms of their respective groups (Bumpass and Sweet 1972). Third, consistent with the line of argument in the heterogamy hypothesis, the partner selection itself may have resulted in marriages with further dissimilarity between the spouses, which potentially increases marital instability; e.g., there may be a large age gap between the spouses in mixed marriages or the partners may have different educational levels. Therefore, if we were able to control for important traits of spouses in mixed marriages and those of mixed marriages, native/immigrant marriages should not necessarily be more likely to end in divorce and separation than intra-group marriages of natives and immigrants.

The convergence hypothesis is the main competitor to the views presented above. It predicts that native/migrant marriages exhibit the divorce levels that are between the levels experienced by endogamous marriages of natives and migrant groups (Jones 1996; Zhang and van Hook 2009). The underlying mechanism is a convergence of different (or opposite) values by the process of mutual adaptation. As for the exogamy hypothesis, the patterns may vary across native/migrant couples; migrants from societies (or groups) with low divorce levels are expected to experience lower marital instability if married to natives than migrants who come from societies with high separation levels. The original idea of behavioral convergence is attributed to a study by Monahan (1970), which showed that black/white marriages experienced divorce levels that were between the levels of white/white and black/black marriages; the author himself, however, mostly discussed the role of possible selection effects. From recent literature, we can identify several studies supporting the convergence hypothesis for native/migrant marriages in various countries (Jones 1994; Jones 1996; Zhang and van Hook 2009).

The similar logic also applies when the convergence hypothesis appears to be valid at first glance. The observed divorce patterns may be the result of selection or compositional effects. Controlling for compositional differences and selection, mixed marriages may have divorce levels similar to the levels of one of the two groups. This would generally suggest adaptation to the behavior of the majority group rather than an emergence of a new group with a specific (or "average") behavioral pattern. The *adaptation hypothesis* can thus be added to the list of hypotheses on divorce in native/migrant marriages.

We tested these hypotheses in Germany, which has, until recently, been one of the leading destination countries for immigrants in Western Europe. The immigrant population consists of three major groups: migrant workers from Mediterranean countries, ethnic Germans from Eastern Europe, and refugees and asylum seekers. Whereas the German-born population is declining because of persistent low fertility levels, the percentage of the population with an immigrant background has been rising continuously. Today, approximately 20 % of the nearly 82 million inhabitants

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of Germany are either themselves migrants from abroad or were born to one or both parents born abroad (Swiazny and Milewski 2012). Ethnic Germans from Eastern Europe are a specific immigrant group in Germany. Although they claim German ethnicity by ancestry, they are treated in this paper as immigrants because they have moved from one societal context to another.

The ratio of mixed marriages varies between women and men and by their respective countries of origin. Whereas approximately 96 % of German-born women and men were endogamously married in 2009, relatively low rates of endogamous marriages were observed for Eastern Europeans: 59 % of the women and 73 % of the men had a partner from the same country of origin. By contrast, the highest endogamy rates among immigrants were observed for women (95 %) and men (87 %) from Turkey, one of the largest migrant groups living in Germany. Persons from other labor-migration countries such as Italy or from African countries with high rates of refugees show endogamy rates between approximately 40 and 70 %. If the spouse of an immigrant comes from another country, then it is more likely Germany than a third country (SVR 2010). In general, intermarriage rates are higher among the descendants of migrants than among immigrants. These patterns are consistent with findings in other western European countries (Kalmijn and van Tubergen 2007; Lucassen and Laarman 2009; Lanzieri 2012).

In this study we investigated the effect of native-immigrant intermarriage on divorce in Germany. We focused on marriages between German-born persons (natives) and foreign-born individuals (immigrants) from the main post-war migrant groups living in Germany: Italy, Spain, Greece, the former Yugoslavia, Portugal, and Turkey (for an overview of post-war labor migration to West Germany, see Milewski 2010; Seifert 1997). We compare these migrant groups to the German-born population and a smaller group of immigrants from other countries. The hypotheses on the expected results in the German context can be summarized as follows:

The *exogamy hypothesis*: Marriages between German-born individuals and immigrants have a higher likelihood of divorce than marriages between two German-born individuals or between two immigrants from the same country.

The *heterogamy hypothesis*: Heterogamous marriages have a higher likelihood of dissolution than homogamous marriages.

The *selectivity/composition hypothesis*: The differences in divorce levels between heterogamous and homogamous marriages are attributed to the different composition of the respective marriages by spouses' socio-economic and cultural characteristics.

The *convergence hypothesis*: Marriages between German-born individuals and immigrants exhibit divorce levels that are between the levels experienced by intra-group marriages for natives and immigrants.

The *adaptation hypothesis*: Native-migrant marriages are expected to exhibit divorce levels similar to the levels of the native group, e.g., the risk of separation for German/Turkish couples is similar to the risk for German/German couples.

Our analysis may simultaneously support two or more hypotheses. We may observe selection effects; however, the divorce levels between exogamous and endogamous

marriages may nevertheless differ after controlling for selectivity or composition. The most interesting question, however, is whether, after controlling for selection or composition, mixed marriages have a higher risk of divorce than intra-group marriages. Does dissimilarity between the spouses increase marital instability or do we observe convergence or adaptation in the behavior of spouses of exogamous marriages? This will provide an answer to a wider question of whether and how ethnic intermarriage can serve as a means of integration and social cohesion in heterogeneous societies.

### 3 Methods

# 3.1 Data

We used data from the German SOEP; this is a panel study that began in 1984 as a random sample representative of private households in West Germany. One of the samples, the so-called "guest worker" sample, comprised immigrants who came from Mediterranean countries, mainly from Turkey, Greece, the former Yugoslavia, Italy, and Spain, mainly for labor migration. A sample from East Germany was added in 1990 and an additional sample of new immigrant groups in 1994/1995 (Wagner et al. 2007). Five sub-samples were added to account for panel attrition and to oversample people with higher incomes. In 2010, the total number of interviewed persons was 19,127 (TNS Infratest 2010). We used all currently available waves, from 1984 to 2010.

The SOEP contains retrospective data on the marital history of each individual, updated on a yearly basis. Monthly information is gathered on the respondents beginning in the year prior to their entry into the panel. The earliest year for which monthly information is available is 1983 because the first wave of the survey was in 1984. From this year on or since the entry into the panel for those who entered later than 1984, the SOEP provides information on each member of the household. Therefore, we were able to construct data for couples from 1983 onwards or from their panel entry. In those cases in which a marriage was dissolved before either of the partners entered the SOEP survey, the information on the spouse was missing. To construct the information for both partners, we restricted our sample to the marriage cohorts from 1980 to 2009. We included first marriages of women who were born between 1945 and 1992 and who married when they were younger than 41 years. Using these criteria, we constructed marital histories for 6,099 marriages in total. However, the final analysis relied on 5,648 marriages, as the information on the spouse was missing in 451 cases (7%) because the marriage was dissolved before the woman entered the panel study. The SOEP data include information on marital histories of the respondents; however, characteristics of the partners are available only for marriages that were formed after 1983 or existed when the panel study began. For our study, we thus excluded marriages that were formed between 1980 and 1984 or dissolved during that same time period. For the same reason, individuals were excluded who entered the panel at a later point in time but whose first marriage was dissolved before panel entry. Further analysis showed that the exclusion of these cases did not have a significant effect on the results.

# 3.2 Variables

The immigrant status of the spouses was constructed using information on their countries of birth, their nationalities, and the type of sub-samples to which they belonged such as those made up of immigrants or descendants of immigrants (Milewski 2007; Scheller 2011). If any of these variables indicated a foreign nationality or place of birth, the person was defined as a migrant in this study. In our sample, 24 % of the women were first-generation immigrants or their descendants in the second generation, and 76 % were non-migrant Germans. We included descendants of immigrants among migrants because the study focused on the effect of ethnic intermarriage on divorce. The distinction between immigrants and their descendants was not possible because of the small sample size.

The countries of origin for immigrants and their descendants were grouped into three categories: Turkey (7 % of the women in the entire sample); southern and southeastern European countries (SSEE), primarily the former Yugoslavia, Greece, Italy, and Spain (6 % of the sample); and "other countries" (11 %). The cases in the latter category were quite heterogeneous; however, further distinction was not possible because of the sample size.

We defined a mixed marriage as a marriage in which the spouses came from different countries of origin. In our sample, 12.5 % were mixed marriages, and 87.5 % were endogamous unions. Among non-migrants, we observed approximately 93 % of the women endogamously married, which corresponded closely to the estimate of 96 % in the report by the SVR (2010). In the sample, 96 % of the Turkish women and 78 % of the women from Mediterranean countries in our SOEP sample were married to men from the same country (95 and 73 % in the SVR 2010).

To further differentiate the backgrounds of the spouses, we used a variable that accounted for the groups of countries of origin; there were three groups of endogamous marriages: 6 % Turkish, 4 % from SSEE countries, and 71 % marriages of German non-migrants. Marriages between a German non-migrant and an immigrant partner formed 11 % of marriages, and marriages of migrants from "other" countries, either exogamous or endogamous (this choice was again driven by the small sample size), formed 8 %. Table 1 provides information on the time "at risk" and the number of divorces by type of marriage and control variables. The additional control variables used are standard in the analysis of divorce or union dissolution.

The calendar period was constructed as a time-varying covariate, which was categorized into the 1980s, 1990s, and the first 9 years of the 2000s. We assumed that the risk of divorce increases over time (Chan and Halpin 2003; Gonzáles and Viitanen 2009).

To consider the migration history of the couples, we used a dummy variable that indicated whether the marriage occurred before the immigration of either or both of the spouses. This applied to 11 % of all marriages. We assumed that spouses that immigrated together and married migrants had lower risks of divorce than those

Covariates	Exposure time (person months)	%	Number of events
Marriage type			
Mixed marriage			
No	847,753	90.0	534
Yes	93,858	10.0	102
Marriage type by sex and migrant status <sup>a</sup>			
Endogamous: she non-migrant and he non-migrant	696,256	73.9	484
She migrant and he migrant	160,833	17.1	57
Exogamous: she non-migrant and he migrant	41,265	4.4	54
Exogamous: she migrant and he non-migrant	43,257	4.6	41
Marriage type by country of origin <sup>b</sup>			
Endogamous: non-migrants	696,256	73.9	484
Endogamous: Turkish	54,901	5.8	17
Endogamous: SSEE	33,158	3.5	16
Exogamous: non-migrant and SSEE migrant	20,898	2.2	32
Exogamous: non-migrant and Turkish or other migrant	63,624	6.8	63
Migrants: other countries	72,774	7.7	24
Calendar period (time-varying)			
1980s	158,818	16.9	35
1990s	385,016	40.9	221
2000s	397,777	42.2	380
Characteristics of marriage			
Marriage before migration or in the same year			
No	830,467	88.2	599
Yes	111,144	11.8	37
Premarital cohabitation			
Yes	64,348	6.8	79
No (incl. mv)	877,263	93.2	557
Children under age 16 in household (time-varying)			
No child	204,517	21.7	165
Children in household	531,051	56.4	183
Children out of household	206,043	21.9	288
Characteristics of woman			
Woman's age at marriage (years)			
≤20	175,385	18.6	134
21–25	416,816	44.3	304
26–30	242,858	25.8	150
31-40	106,552	11.3	48
Woman's school education			
No degree/compulsory/other (Hauptschule)	295,672	31.4	190
Lower secondary (Realschule)	387,919	41.2	293

Table 1 Descriptive overview of the sample (exposure time and occurrences)

# Mixed Marriages in Germany

### Table 1 continued

Covariates	Exposure time (person months)	%	Number of events
Upper secondary (Abitur)	251,250	26.7	148
Mv	6,770	0.7	5
Woman's labor force participation (time-varying)			
Full-time	264,008	28.0	246
Part-time	267,934	28.5	155
Marginal	73,862	7.8	44
Not employed (incl. mv)	335,807	35.7	191
Place where woman lived at age 15			
Large city	192,241	20.4	155
Medium/small city	374,774	39.8	263
Rural area	337,142	35.8	173
Mv	37,454	4.0	45
Woman's religious affiliation			
Catholic	251,512	26.7	173
Protestant	242,846	25.8	181
Greek/other Christian	23,455	2.5	22
Other religion	54,300	5.8	24
No affiliation	175,978	18.7	187
Mv	193,520	20.6	49
Importance of religion			
Important	185,739	19.7	135
Not important	258,828	27.5	324
Mv	497,044	52.8	177
Woman's willingness to take risks			
High (7–10)	54,106	5.7	47
None, low (0-6; incl. mv)	887,505	94.3	589
Woman's satisfaction with household work (time-value)	arying)		
High (7–10)	481,619	51.1	291
Medium (4–6)	287,144	30.5	204
Low (0-3)	57,773	6.1	42
Mv	115,075	12.2	99
Characteristics of husband			
Subsequent marriage of the man			
No	843,321	89.6	527
Yes	98,290	10.4	109
Age difference between partners			
Man 1 year younger/≤4 years older than wife	605,859	64.3	355
Man 2+ years younger than wife	75,761	8.0	99
Man 5+ years older than wife	259,991	27.6	182

Covariates	Exposure time (person months)	%	Number of events
Comparative school education			
Same education	552,892	58.7	328
Man more education	173,610	18.4	119
Man less education	203,118	21.6	173
Mv	11,991	1.3	16
Comparative religion			
Same religion	516,323	54.8	301
Different religion	201,834	21.4	192
Mv	223,454	23.7	143
Man's willingness to take risks			
High (7–10)	123,402	13.1	80
None, low (0-6; incl. mv)	818,209	86.9	556
Total	941,611	100	636

#### Table 1 continued

Source Calculations based on SOEP 1984–2010. N = 5,648, mv missing values

<sup>a</sup> The number of divorces of non-mixed marriages in total (534) does not equal the number of divorces in the categories "endogamous: she non-migrant and he non-migrant" (484) and "she migrant and he migrant" (57) because the latter group includes mixed marriages (7) and endogamous marriages among migrant couples (50 divorces)

<sup>b</sup> The number of divorces of mixed marriages in total (102) does not equal the number of divorces in the categories "exogamous: non-migrant and SSEE migrant" (32), "exogamous: non-migrant and Turkish or other migrant" (63) and "migrants: other countries" (24) because the latter group includes mixed marriages (7) and endogamous marriages (17 divorces)

who married after migration. A dummy variable indicated whether the spouses had had a premarital cohabitation (although we must note that we only have information on the time in which the respondents participated in the survey; hence, there is no information for immigrant couples who moved together whether they had lived together prior to their marriage). We assumed that marriages with prior cohabitation had higher risks of divorce (Kulu and Boyle 2010).

Children under age 16 living in the household was another time-varying covariate. It captured the time period when a couple did not or did not yet have children, the period when they had children in their household, and the time after each child had left the household. We assumed that divorce risks are lowest when children live in the household (Erlangsen and Andersson 2001).

A group of covariates captured the characteristics of the women: We assumed that divorce risks are higher among those women who married at younger ages (Tzeng and Mare 1995; Kulu and Boyle 2010; Feng et al. 2012). In our sample, 17 % married before age 21, 41 % between 21 and 25, 28 % between 26 and 30, and 15 % between 30 and 40. Educational level was measured in three categories of schooling: 31 % left school without a degree or obtained a primary degree, 40 % completed lower secondary education, and 28 % finished upper secondary school with a certificate (approximately 1 % were missing values because of missing

answers or an extremely small number of persons enrolled; here, we used school education only, which corresponds to 12 or 13 years when completing an upper secondary degree. Because the total number of women who obtained an upper secondary degree was approximately 28 %, and the number was rather small among immigrant women (15 %), we considered school education sufficient (the results are close to numbers issued by the federal statistical office, which places the percentage of foreigners (using nationality) completing secondary education at approximately 11 % in 2008—SVR 2010). We expected women with higher levels of school education to have lower divorce risks than women with only compulsory educational qualifications (Hoem 1997).

To consider labor market participation, we used a time-varying indicator for the current employment status of the women, which has the categories fulltime, part time, and marginal employment as well as non-employment. The latter category also includes the small fraction of missing values. Because this variable measures employment status during the entire duration of the union, it is not highly correlated with the variable of children in the household because mothers' employment and the number of children are highly correlated mainly when the children are quite young (Brewster and Rindfuss 2000; Rendall et al. 2010).

Three variables referred to the socio-cultural background of the women: the type of place in which she lived at age 15, her religious affiliation and the importance of religion in her life. We expected women from urban areas (61 % of the sample) to have a greater likelihood of experiencing a divorce than those from rural areas (33 %; missing values: 6 %). We also expected that divorce risks would be higher among women without religious affiliations (17 %) than among those who belonged to a Christian church or to another denomination (not specified in the survey, but most likely Muslim). In addition, we expected individuals who considered religion important (18 %) to have lower divorce rates than those who considered religion unimportant (Lehrer and Chiswick 1993; Kulu and Boyle 2010).

In addition, we included in the analysis two variables to measure personal attitudes because the SOEP information on an individual's attitudes is collected annually. The personal willingness to take risks is measured on a 10-point scale in which 0 corresponds to "none" and 10 to "extremely high". Because the within-person variation by calendar year is not large, we used the mean over the observation period. Persons with 7–10 points were categorized as high risk takers (Schmitt 2012).

The importance of individual wellbeing is one of the dimensions that distinguish between different cultural regimes; the other is the division of work between men and women. To measure the latter, we used the variable of satisfaction with household work. We believed that it is the satisfaction that matters rather than the actual division of labor. Divorce levels were expected to be elevated when the satisfaction level was low (Yodanis 2005).

Finally, a group of covariates measured characteristics of the husband relative to the wife's characteristics. We expected the homogamy or heterogamy of the partners' traits to be more important than just the characteristics of the husband. The age difference of the partners fell into three categories: in 62 % of the cases the spouses were nearly the same age, i.e., the husband was no more than 1 year younger or 4 years older than his wife; in 29 % of the cases, the husband was 5 or more years

older; and 9 % of the husbands were 2 years or more younger than the wife. Previous literature shows that couples in which the wife is older have higher divorce rates than couples in which she is younger or in which there are hardly any age differences (Chan and Halpin 2003). Comparative education included homogamous cases, accounting for 56 %, heterogamous cases in which the husband had more education than the wife (18 %), or cases in which the husband had less education than the wife (23 %; missing values: 2 %). Again, homogamy was associated with lower divorce risks than educational heterogamy (Kulu and Boyle 2010). A similar logic applies to religious homogamy (47 % of the couples belonged to the same religious affiliation, 21 % to different denominations; 32 % missing values). The last variable considered whether the husband has had a prior marriage, assuming that subsequent marriages are more likely to end in divorce than first marriages (Hoem and Hoem 1992). In our sample, 11 % of the husbands had been married before. Similar to the women, a variable measured the high willingness to take risks.

In preliminary analyses, we conducted bivariate tests showing significant differences between mixed and endogamous marriages: women in mixed unions married at older ages than women in endogamous marriages, they came from urban areas, they were more likely to have a younger or a much older husband, to have a husband who was married prior to current marriage and had a different religion or a different school degree. These findings are consistent with previous literature on mixed marriages (e.g., Kalmijn 1993; van Ham and Tammaru 2011).

## 3.3 Modeling Strategy

We analyzed the hazard of marital dissolution using continuous-time event-history techniques. A series of piecewise-constant hazard regression models were fitted to investigate the risk of divorce (Hoem 1987, 1993; Blossfeld and Rohwer 1995).

The model can be formalized as follows:

$$\ln h_i(t) = \ln h_0(t) + \sum_l \alpha_l x_{il} + \sum_m \beta_m w_{im}(t)$$

in which  $h_i$  (*t*) denotes the risk of divorce for individual *i* at time *t*, and  $\ln h_0$  (*t*) represents the baseline log-hazard, which is specified as piecewise constant. The process time is the duration of the marriage, measured in months. The end of the respective process time is either at the divorce, at the last interview or at the death of either spouse (censoring). The term  $w_{im}$  (*t*) represents the effect of a time-varying variable (calendar period, children living in the household). The term  $x_{il}$  denotes the effect of a time-constant covariate (such as the woman's age at marriage and the age difference between the spouses).

We present our model in steps (analysis part A, see Table 2): First, we distinguished between mixed and endogamous marriages and controlled for calendar period (A0); we also included in the analysis characteristics of the marriage: premarital cohabitation, whether the marriage occurred prior to immigration, calendar period and the presence of children under age 16 in the household (A1). To test the hypothesis of composition/selectivity, Model A2 additionally included characteristics of the women: The test of heterogamy and cultural differences was conducted in Model A3:

we included the indicators of the husband's background as compared to the woman's (see Table 2).

The next step was to further disaggregate the type of the marriages to investigate the heterogamy hypothesis. We used a variable that combines the type of marriage and sex (part B, see Table 3). We distinguished between endogamous marriages of two non-migrants and of two immigrants, respectively, between exogamous marriages of a native woman and an immigrant husband as well as marriages between a native man and an immigrant woman. We assumed that mixed marriages with a German partner were more likely to end in divorce than both types of endogamous marriages. Furthermore, we tested the gender difference hypothesis by Dribe and Lundh (2012), assuming that divorce risks are higher for non-migrant women married to immigrant men. The literature supports this assumption because women are more likely to initiate divorce than men. Gender roles and family models vary broadly between western European immigration countries and the immigrants' countries of origin, and a separation would create more problems for an immigrant woman than for an immigrant man (Dribe and Lundh 2012). We conducted identical steps of the analysis as in previous models in part A with the exception of a new indicator for the type of marriage. However, we present only the results for the marriage type because the effects of the control variables are similar to those presented in Table 2.

Following the same logic, we divided the type of marriage by country of origin: For mixed marriages of non-migrants, we distinguished the country of origin of the migrant partner to test the hypothesis of heterogamy/cultural dissimilarity (part C, Table 3). Because of the small size of the sample and the respective origin groups, we could only distinguish Turkey and southern and southeastern European countries as origins. We believe, however, that they served as a good test for the heterogamy hypothesis. As mentioned, the most important indicators of culture are religion, values, and language. None of these groups shows linguistic similarity to German, which belongs to a different language group than Turkish or the Latin-based languages from the south. Cultural similarity via language similarity or an easier starting point from which to learn German cannot be expected for either group. Accordingly, marriages between German- and Turkish-born individuals may have a higher risk of separation than marriages between German-born persons and individuals who come from a southern European country. When religious affiliations and the importance of religion—very different for persons from Turkey, the southern European countries and Germany—are controlled for, the remaining effect of cultural dissimilarity should be negligible.

We also explored the effect of different specifications of our control variables on our results: we included the age of the woman in the model (instead of her age at marriage), birth cohort and marriage cohort (instead of calendar year). The main results were similar across the models with different specifications. Finally, we excluded all marriages that were subsequent marriages for the man. The results of the first-marriages-only sample were quite similar to that of the original sample.

# 4 Results

# 4.1 The Divorce Levels for Exogamous and Endogamous Marriages

In Model A0, we controlled only for marriage duration and calendar period. We see that individuals in mixed marriages are 64 % more likely to experience marital separation than those in endogamous marriages (Table 2). The results persisted when we controlled for the characteristics of marriages (Model A1) and characteristics of the women (Model A2): the risk of divorce for mixed marriages remained high. In Model A3, we also controlled for the characteristics of the husband, including the measures for age, educational and religious differences between the partners. The differences in divorce levels between exogamous and endogamous marriages decreased; however, individuals in mixed marriages nevertheless had a 36 % higher likelihood of experiencing divorce than those in endogamous marriages. We should note, however, that much of the decrease in the differences is attributed to the inclusion of the variable of comparative religion, which shows a strong correlation with the type of marriage. Because of a significant overlap between the two variables, our last model may underestimate the real differences in the risk of divorce between the two types of marriages.

Next, we repeated the analysis by including sex and using more detailed measures of the type of marriage. The results are presented in Table 3. Marriages between immigrants from the same country are only half as likely to experience a separation than endogamous marriages between natives (Models B0 and B1). Exogamous marriages exhibit a higher risk of divorce than endogamous partnerships between natives with the highest divorce risk for couples in which he is a migrant and she is not. The differences between the groups decline once we control for marriage traits and the individual characteristics of the woman; however, mixed marriages, particularly those with a migrant man, nevertheless exhibit a higher risk of divorce than (most) endogamous marriages (Models B1 and B2). When we control for heterogamy between the partners, particularly religious heterogamy, the differences between exogamous and endogamous marriages further decrease (Model B3). Although partners in exogamous marriages have a significantly higher likelihood of experiencing divorce than partners in endogamous marriages between migrants, exogamous marriages only show a somewhat higher risk in comparison to endogamous marriages between natives.

Finally, we distinguished between exogamous marriages between non-migrants and migrants from southern and southeastern European countries and marriages between non-migrants and migrants from other countries (including Turkey). Because of the small sizes of the groups, a further disaggregation of the latter group was not possible (migrants from Turkey compared to other countries). The results are displayed in Models C0–C3 (see Table 3). First, we see that exogamous marriages have a higher risk of divorce than endogamous marriages; immigrants from southern and southeastern Europe who were in exogamous marriages were more likely to separate than those from Turkey or other countries. This remains true when controlling for marriage variables. Second, once we controlled for the woman's background (Model C2) and heterogamy in the marriage regarding religious

# Table 2 Relative risks of divorce in mixed marriages

Covariates	Model A0	Model A1	Model A2	Model A3
Characteristics of marriage				
Mixed marriage				
No	1	1	1	1
Yes	1.64***	1.63***	1.66***	1.36**
Calendar period (time-varying)				
1980s	1	1	1	1
1990s	2.27***	1.76**	2.03***	1.84**
2000s	3.90***	2.15***	3.48***	3.12***
Marriage before migration or in the same year				
No		1	1	1
Yes		0.47***	0.52***	0.48***
Premarital cohabitation				
Yes		1.09	0.84	0.99
No (incl. mv)		1	1	1
Children under age 16 in household				
No child		1	1	1
Children in household		0.44***	0.44***	0.44***
Children out of household		1.62***	1.28*	$1.20^{\circ}$
Characteristics of woman				
Woman's age at marriage (years)				
≤20			1	1
21–25			0.80*	0.74**
26–30			0.61***	0.45***
31–40			0.41***	0.24***
Woman's school education				
No degree/compulsory/other (Hauptschule)			1.23*	1.33**
Lower secondary (Realschule)			1	1
Upper secondary (Abitur)			0.90	0.94
Mv			0.93	0.49
Woman's labor force participation				
Full-time			1	1
Part-time			0.71**	0.70**
Marginal			0.65**	0.62**
Not employed (incl. mv)			0.69***	0.67***
Place where woman lived at age 15				
Large city			1	1
Medium/small city			0.93	0.94
Rural area			0.67***	0.69**
Mv			0.69*	0.63*

Covariates	Model A0	Model A1	Model A2	Model A3
Woman's religious affiliation				
Catholic			1	1
Protestant			1.11	1.04
Greek/other Christian			1.22	0.95
Other religion			0.56*	0.60*
No affiliation			1.36**	1.38**
Mv			0.56**	0.16***
Woman's importance of religion				
Important			1	1
Not important			1.44**	1.30*
Mv			0.68**	0.60***
Woman's willingness to take risks				
High (7–10)			1.11	1.04
None, low (0-6; including mv/na)			1	1
Woman's satisfaction with household wor	k (time-varying	)		
High (7–10)			$0.76^{\circ}$	0.77
Medium (4–6)			0.83	0.81
Low (0–3)			1	1
Mv			0.99	1.00
Characteristics of husband				
Subsequent marriage of the man				
No				1
Yes				1.93***
Age difference between partners				
Man 1 year younger/≤4 years older				1
Man 2+ years younger than wife				2.63***
Man 5+ years older than wife				0.94
Comparative school education				
Same education				1
Man more education				1.08
Man less education				1.24*
Mv				1.96*
Comparative religion				
Same religion				1
Different religion				1.60***
Mv				4.94***
Man's willingness to take risks				
High (7–10)				0.96
None, low (0-6; including mv/na)				1

Covariates	Model A0	Model A1	Model A2	Model A3
Marriage duration (baseline, years)				
0–5	0.000173***	0.000282***	0.000532***	0.000452***
5–10	0.000319***	0.000607***	0.001053***	0.001065***
10–15	0.000211***	0.000465***	0.000741***	0.000798***
15–20	0.000256***	0.000564***	0.000809***	0.000903***
20–30	0.000183***	0.000304***	0.000409***	0.000490***
LL	-2,224.48	-2,121.55	-1,999.15	-1,880.95

Table 2 continued

Source Calculations based on SOEP 1984–2010. N = 5,648

\*\*\* p < .001; \*\* p < .01; \* p < .05;  $\circ p < .1$ 

Mv missing values

Table 3	Relative	risks	of	divorce	in	mixed	marriages-	-the	effect	of	country	of	origin
							<u> </u>						

Model B0	Model B1	Model B2	Model B3
l	1	1	1
).52***	0.52***	0.39***	0.42***
1.81***	1.71***	1.54**	$1.27^{\dagger}$
1.28	1.24	1.25	1.07
-2,209.95	-2,112.25	-1,987.48	-1,870.40
Model C0	Model C1	Model C2	Model C3
1	1	1	1
0.46**	0.38***	0.18***	0.18***
0.75	0.58*	0.36***	0.42**
1.34*	1.38*	1.42*	1.19
2.14***	1.67**	1.32*	1.12
0.48***	0.62*	0.51**	0.52**
-2,207.96	-2,111.74	-1,984.83	-1,867.46
	Aodel B0 0.52*** .81*** .28 -2,209.95 Model C0 1 0.46** 0.75 1.34* 2.14*** 0.48*** -2,207.96	Model B0         Model B1           1         0.52***           .81***         0.52***           .81***         1.71***           .28         1.24           -2,209.95         -2,112.25           Model C0         Model C1           1         1           0.46**         0.38***           0.75         0.58*           1.34*         1.38*           2.14***         1.67**           0.48***         0.62*           -2,207.96         -2,111.74	Model B0         Model B1         Model B2           1         1         1           0.52***         0.39***         0.39***           .81***         1.71***         1.54**           .28         1.24         1.25           -2,209.95         -2,112.25         -1,987.48           Model C0         Model C1         Model C2           1         1         1           0.46**         0.38***         0.18***           0.75         0.58*         0.36***           1.34*         1.38*         1.42*           2.14***         1.67**         1.32*           0.48***         0.62*         0.51**           -2,207.96         -2,111.74         -1,984.83

Models B0 + C0: controlled for marriage duration and calendar period

Models B1 + C1: in addition controlled for premarital cohabitation, marriage before/after migration, children under age 16 living in the household

Models B2 + C2: in addition controlled for woman's characteristics

Models B3 + C3: in addition controlled for man's characteristics

Source Calculations based on SOEP 1984–2010. N = 5,648

\*\*\* p < .001; \*\* p < .01; \* p < .05; ° p < .1; <sup>†</sup> p = 0.11

affiliation and educational level (Model C3), the differences declined significantly although exogamous marriages between natives and immigrants from regions other than southern and southeastern Europe nevertheless have a somewhat higher likelihood of ending in separation particularly when compared to endogamous marriages in these groups (Model C3). These findings show that much of the initial cultural heterogamy effect is largely explained by religious affiliations and other individual traits.

# 4.2 The Effect of Control Variables

The effects of other variables are largely as expected; thus we will report them, however not discuss them in detail. The divorce levels have increased over time (Chan and Halpin 2003; Gonzáles and Viitanen 2009); the presence of children reduces the risk of separation (Erlangsen and Andersson 2001); the marriages formed prior to migration or in the same year as migration are more stable than unions formed after migration as are marriages that did not include prior cohabitation. Divorce risks decrease with increasing age at marriage (Feng et al. 2012); individuals with no degree or only a compulsory degree are more likely to experience divorce than those with lower secondary and higher educational levels (Hoem 1997). Women who were raised in rural areas have lower divorce levels than those who grew up in urban areas (Kulu and Boyle 2010); religious women have a lower risk than those who consider religion unimportant in their lives (Lehrer and Chiswick 1993). There were no differences between women who were willing to take risks and those who were not whereas women who were not satisfied with their husbands' contribution to household tasks had a significantly higher risk of divorce than those who were satisfied with their partners' involvement.

The results of partners' characteristics and comparative age, education and religion are also consistent with the findings of previous studies: marriages in which the husband was married prior to the current marriage are more prone to separation than those unions in which both partners are marrying for the first time; marriages in which the partners have different educational levels are more likely to dissolve than marriages in which the partners have similar educational qualifications; unions in which the wife has more education than the husband have particularly high divorce levels (Chan and Halpin 2003; Kulu and Boyle 2010). Similarly, religious heterogamy within the marriage increases divorce risks. Finally, we see that divorce levels are the highest between the 5th and 10th year of marriage (Hoem and Hoem 1992).

# 5 Discussion

Our study investigated divorce levels of mixed marriages in Germany, one of the main destination countries for immigrants in Europe. We used rich data from the German SOEP, which is the largest longitudinal survey in Germany to collect information on life histories of both German-born and immigrant populations. We examined the divorce levels of marriages between immigrants and German non-migrants and between immigrants from different countries and compared these to the marriages of endogamous couples (marriages between two non-migrants or between two immigrants from the same country). The results supported the *exogamy* 

*hypothesis*: mixed couples had significantly higher divorce levels than endogamous couples. This finding is consistent with recent literature on immigrants in Sweden and on ethnically mixed couples in Great Britain (Dribe and Lundh 2012; Feng et al. 2012) as well as the raw divorce rates published on German population data (Roloff 1998: approximately 15 % of German men and 30 % of German women married to a foreign citizen experienced divorce). The analysis also revealed that the likelihood of divorce increased with an increase in the 'cultural distance' or differences in other socio-demographic characteristics between the spouses, thus also supporting the *cultural dissimilarity/heterogamy hypothesis*.

To detect and control for the effects of selection and of socio-demographic composition, we included in the analysis characteristics of the marriage, of the woman, and of the husband. Bivariate analysis had shown that couples who were of mixed origin were also more frequently mixed in educational attainment, religious affiliation, and age difference, and the husband was more likely to have had a prior marriage. Each of these control variables was associated with a higher likelihood of separation and explained some of the risk differentials between mixed and endogamous couples. Our findings thus provided some support for the selection hypothesis although the role of selectivity by observed socio-demographic variables was not large. To disentangle the effect of self-selection on mixed marriages, we included the personal willingness to take risks, which was reported by the women and men annually (although within-person variation between calendar years was not large). In a bivariate analysis, women showed a higher frequency of mixed marriages when they classified themselves as high-risk takers whereas there was no association of these variables for men. In the multivariate analysis, however, the effect of risk-taking on divorce rates was not significant. Most importantly, once the individuals' and couples' characteristics were controlled for, the divorce levels of mixed marriages remained significantly higher than those of endogamous marriages, particularly those between migrants.

We identified no support for the *adaptation* and the *convergence hypothesis*; divorce levels for mixed marriages were neither similar to those of one of the constituent origin groups nor fell between the levels of the two groups; the divorce levels for mixed marriages were significantly higher than those for any other type of marriage. However, a careful examination of the results shows that the risk of divorce in exogamous marriages was not *significantly* higher than that of endogamous marriages between natives once we controlled for compositional factors. Nevertheless, although the differences were not statistically significant, all models showed a clear tendency of mixed marriages to exhibit a higher risk of divorce than any endogamous marriage.

Future studies should investigate the causes and mechanisms that drive the high instability of mixed unions by considering the dynamics of these unions. To what extent is union instability related to conflicts between the partners that arise from their different cultural backgrounds? To what extent do external causes play a role such as the role of discrimination against mixed couples or either of the partners, be it by their families or other individuals? As one possible indicator, we used the woman's satisfaction with household work in our study. Indeed, our results indicate that extremely low satisfaction is associated with higher risk of divorce. Compared to the

effect size of other variables used, however, the effect of satisfaction is rather small. This shows that the family context, particularly the presence of children in the household, and structural indicators such as female work force participation are more important when couples decide whether to maintain a marriage or to divorce. Higher female work force participation occurs both as a prerequisite and a consequence of increasing divorce rates over time (Yodanis 2005). Because socio-demographic heterogamy between the partners is another crucial factor, future analysis may also consider conflicts arising from these configurations and their effect on divorce risks.

In our further analysis, we examined the role of discrimination using information from the panel study on whether immigrants had experienced discrimination in Germany because of their origins. In the sample, one-fourth of the immigrant women had experienced some discrimination in their lives. Notably, however, immigrant women in mixed marriages reported less frequency of discrimination than immigrant women who were endogamously married, suggesting that the role discrimination does play in instability in mixed marriages may be smaller than was generally thought. However, our sample was too small to draw any firm conclusions.

Although our study showed instability in ethnically mixed marriages, the results should not necessarily suggest that the risk of divorce for inter-ethnic marriages in Germany and elsewhere in Europe will also remain high in the future (cf. Feng et al. 2012). In many European countries, inter-ethnic unions are increasingly partnerships between 'natives' and descendants of immigrants rather than marriages between 'natives' and immigrants; this development has important consequences. First, descendants of immigrants are generally better integrated than immigrants themselves and share the culture and values of their country of birth; this should reduce the role of factors traditionally responsible for instability in inter-ethnic marriages (the value conflict or discrimination). Second, with the increase in premarital cohabitation, even among ethnic minorities, it is likely that selection of inter-ethnic marriages will increase in the future and heterogamous marriages will become robust; only those consensual unions or 'trial marriages' in which the partners' match is stable are turned into marriages whereas frail inter-ethnic relationships are 'weeded out'. Immigrants, particularly 'marriage migrants', have lacked an opportunity to form a 'trial marriage' and will likely also lack this opportunity in the future for legal reasons. Conversely, a growing portion of endogamous immigrant marriages will consist of secondgeneration migrants who married a first-generation partner from their parents' country of origin. Eeckhaut et al. (2011) showed that Belgian divorce risks are between the levels of endogamous first-generation immigrant marriages and endogamous nonmigrant marriages. Hence, divorce rates may also increase slightly among immigrants. As numerous studies show, divorce rates have been increasing over calendar time because women are less willing to depend financially on a man (Yodanis 2005). Which direction will be taken will most likely depend on the extent to which immigrants adapt to the attitudes regarding gender equality and the family norms of their host society's traditions and institutions.

Acknowledgments Research by Nadja Milewski was supported by a European Reintegration Grant provided by Marie Curie Actions (FP7 People, PERG-GA-2009-249266—MigFam) and funded by the European Commission. Hill Kulu's research was a part of research project on Families and Societies funded

by the European Union's Seventh Framework Programme (FP7/2007–2013) under Grant agreement No. 320116. The views expressed in this paper do not reflect the views of the funding agencies. A first draft of this paper was presented at the European Population Conference in 2012. We wish to thank Dr. Martin Dribe and other conference participants as well as two anonymous reviewers for feedback and helpful suggestions.

### References

- Adsera, A., & Chiswick, B. (2007). Are there gender and country of origin differences in immigrant labor market outcomes across European destinations? *Journal of Population Economics*, 20(3), 495–526.
- Arbaci, S. (2008). Reviewing ethnic residential segregation in Southern European cities: Housing and urban regimes as mechanisms of marginalisation. *Housing Studies*, 23(4), 589–613.
- Bauböck, R. (2003). Towards a political theory of migrant transnationalism. International Migration Review, 37(3), 700–723.
- Becker, G. S. (1981). A treatise on the family. Cambridge, MA: Harvard University Press.
- Becker, G. S., Landes, E. M., & Michael, R. T. (1977). An economic analysis of marital stability. *The Journal of Political Economy*, 85(6), 1141–1187.
- Blossfeld, H.-P., & Rohwer, G. (1995). Techniques of event history modelling. New approaches to causal analyses. Mahwah: Lawrence Erlbaum.
- Brewster, K. L., & Rindfuss, R. R. (2000). Fertility and women's employment in industrialized nations. Annual Review of Sociology, 26, 271–296.
- Bumpass, L. L., & Sweet, J. A. (1972). Differentials in marital stability: 1970. American Sociological Review, 37(6), 754–766.
- Burchinal, L. B., & Chancellor, L. E. (1963). Survival rates among religiously homogamous and interreligious marriages. Social Forces, 41(4), 353–362.
- Castles, S., & Miller, M. J. (2009). The age of migration: International population movements in the modern world (4th ed.). New York: Guilford.
- Chan, T. W., & Halpin, B. (2003). Union dissolution in the United Kingdom. International Journal of Sociology, 32, 76–93.
- Dribe, M., & Lundh, C. (2011). Cultural dissimilarity and intermarriage. A longitudinal study of immigrants in Sweden 1990–2005. *International Migration Review*, 45(2), 297–324.
- Dribe, M., & Lundh, C. (2012). Intermarriage, value context and union dissolution: Sweden 1990–2005. *European Journal of Population*, 28(2), 139–158.
- Eeckhaut, M. C. W., Lievens, J., Van de Putte, B., & Lusyne, P. (2011). Partner selection and divorce in ethnic minorities: Distinguishing between two types of ethnic homogamous marriages. *International Migration Review*, 45(2), 269–296.
- Erlangsen, A., & Andersson, G. (2001). The impact of children on divorce risks in first and later marriages. MPIDR, Working Paper WP-2001-033. Rostock: Max Planck Institute for Demographic Research.
- Feng, Z., Boyle, P., van Ham, M., & Raab, G. M. (2012). Are mixed-ethnic unions more likely to dissolve than co-ethnic unions? New evidence from Britain. *European Journal of Population*, 28(2), 159–176.
- Finnäs, F. (1997). Social integration, heterogeneity, and divorce: The case of the Swedish-speaking population in Finland. Acta Sociologica, 40(3), 263–277.
- Gonzáles, L., & Viitanen, T. K. (2009). The effect of divorce laws on divorce rates in Europe. European Economic Review, 53, 127–138.
- Gordon, M. M. (1964). Assimilation in American life. New York: Oxford University Press.
- Hoem, J. M. (1987). Statistical analysis of a multiplicative model and its application to the standardization of vital rates: A review. *International Statistical Review*, 55(2), 119–152.
- Hoem, J. M. (1993). Classical demographic methods of analysis and modern event-history techniques. In IUSSP 22nd international population conference, Montreal (Vol. 3, pp. 281–291).
- Hoem, J. M. (1997). Educational gradients in divorce risks in Sweden in recent decades. *Population Studies*, 51, 19–27.
- Hoem, B., & Hoem, J. M. (1992). The disruption of marital and non-marital unions in contemporary Sweden. In J. Trussel, R. Hankinson, & J. Tilton (Eds.), *Demographic applications of event history* analysis (pp. 61–93). Oxford: Clarendon Press.

- Howard, M. M. (2005). Variation in dual citizenship policies in the countries of the EU. International Migration Review, 39(3), 697–720.
- Inglehart, R. (1997). *Modernization and postmodernization: Cultural, economic, and political change in* 43 societies. Princeton, NJ: Princeton University Press.
- Jones, F. L. (1994). Are marriages that cross ethnic boundaries more likely to end in divorce? Journal of the Australian Population Association, 11, 115–132.
- Jones, F. L. (1996). Convergence and divergence in ethnic divorce patterns: A research note. Journal of Marriage and the Family, 58(1), 213–218.
- Kalmijn, M. (1993). Trends in black/white intermarriage. Social Forces, 72(1), 119-146.
- Kalmijn, M. (1998). Intermarriage and homogamy. Causes, patterns, trends. Annual Review of Sociology, 24(1), 395–421.
- Kalmijn, M., de Graaf, P. M., & Janssen, J. P. G. (2005). Intermarriage and the risk of divorce in the Netherlands: The effect of differences in religion and in nationality, 1974–1994. *Population Studies*, 59(1), 71–85.
- Kalmijn, M., & van Tubergen, F. (2007). Ethnic intermarriage in the Netherlands: Confirmations and refutations of accepted insights. *European Journal of Population*, 22, 371–397.
- Kogan, I. (2007). A study of immigrants' employment careers in West Germany using the sequence analysis technique. Social Science Research, 36, 491–511.
- Kulu, H., & Boyle, P. J. (2010). Premarital cohabitation and divorce: Support for the 'trial marriage' theory? *Demographic Research*, 23(31), 879–904.
- Kulu, H., & Milewski, N. (2007). Family change and migration in the life course: An introduction. Demographic Research, 17(19), 567–590.
- Landis, J. T. (1949). Marriages of mixed and non-mixed religious faith. *American Sociological Review*, 14(3), 401–407.
- Lanzieri, G. (2012). Merging populations. A look at marriages with foreign-born persons in European countries. *Eurostat: Statistics in Focus*, 29, 1–4.
- Lehrer, E. L., & Chiswick, C. U. (1993). Religion as a determinant of marital stability. *Demography*, 30, 385–404.
- Lieberson, S., & Waters, M. C. (1988). From many strands. Ethnic and racial groups in contemporary America. New York: Russell Sage Foundation.
- Lillard, L. A., Brien, M. J., & Waite, L. J. (1995). Premarital cohabitation and subsequent marital dissolution: A matter of self-selection? *Demography*, *32*, 437–457.
- Lucassen, L., & Laarman, C. (2009). Immigration, intermarriage and the changing face of Europe in the post war period. *History of the Family*, 14(1), 52–68.
- Milewski, N. (2007). First child of immigrant workers and their descendants in West Germany: Interrelation of events, disruption, or adaptation? *Demographic Research*, 17(29), 859–896.
- Milewski, N. (2010). Immigrant fertility in West Germany: Is there a socialization effect in transitions to second and third births? *European Journal of Population*, 26(3), 297–323.
- Monahan, T. (1970). Are interracial marriages really less stable? Social Forces, 48(4), 461-473.
- Monden, C. W. S., & Smits, J. (2005). Ethnic intermarriage in times of social change: The case of Latvia. Demography, 42(2), 323–345.
- Musterd, S. (2005). Social and ethnic segregation in Europe: Levels, causes and effects. *Journal of Urban Affairs*, 27(3), 331–348.
- Rankin, R. P., & Maneker, J. S. (1987). Correlates of marital duration and black–white intermarriage in California. Journal of Divorce, 11(2), 51–67.
- Rebhun, U. (2010). Immigration, gender, and earnings in Israel. European Journal of Population, 26(1), 73–97.
- Reher, D. (1998). Family ties in Western Europe: Persistent contrasts. Population and Development Review, 24, 203–234.
- Rendall, M. S., Tsang, F., Rubin, J. K., Rabinovich, L., & Janta, B. (2010). Contrasting trajectories of labor-market integration between migrant women in Western and Southern Europe. *European Journal of Population*, 24(4), 383–410.
- Roloff, J. (1998). Eheschlie
  ßungen und Ehescheidungen von und mit Ausl
  ändern in Deutschland. Zeitschrift f
  ür Bev
  ölkerungswissenschaft, 23(3), 319–334.
- Scheller, F. (2011). Bestimmung der Herkunftsnationen von Teilnehmern des Soziooekonomischen Panels (SOEP) mit Migrationshintergrund. SOEP Papers, 407, 1–17.

- Schmitt, C. (2012). Risikoneigung und Fertilität in Ost- und Westdeutschland. In J. Huinink, M. Kreyenfeld, & H. Trappe (Eds.), Familie und Partnerschaft in Ost- und Westdeutschland. Ähnlich und doch immer noch anders. Zeitschrift für Familienforschung (Vol. 9, pp. 119–146). Sonderheft.
- Seifert, W. (1997). Admission policy, patterns of migration and integration: The German and French case compared. *New Community*, 23(4), 441–460.
- Sobotka, T. (2008). The rising importance of migrants for childbearing in Europe. Demographic Research, 19(9), 225–247.
- SVR—Sachverständigenrat deutscher Stiftungen für Migration und Integration. (2010). Einwanderungsgesellschaft 2010. Jahresgutachten 2010 mit Integrationsbarometer. Essen: SVR.
- Swiazny, F., & Milewski, N. (2012). Internationalisierung der Migration und demographischer Wandel. Eine Einführung. In B. Köppen, P. Gans, N. Milewski, & F. Swiazny (Eds.), *Internationalisierung:* Die unterschätzte Komponente des demographischen Wandels in Deutschland (pp. 11–41). Schriftenreihe der DGD, Bd. 5. Norderstedt: BoD.
- TNS Infratest Sozialforschung (Hg.). (2010). SOEP 2010. Methodenbericht zum Befragungsjahr 2010 (Welle 27) des Sozio-oekonomischen Panels. München.
- Tzeng, M. S. (1992). The effects of socioeconomic heterogamy and changes on marital dissolution for first marriages. *Journal of Marriage and the Family*, 54(3), 609–619.
- Tzeng, J. M., & Mare, R. D. (1995). Labor market and socioeconomic effects on marital stability. Social Science Research, 24, 329–351.
- van Ham, M., & Tammaru, T. (2011). Ethnic minority-majority unions in Estonia. European Journal of Population, 27(3), 313–335.
- Wagner, G., Frick, J., & Schupp, J. (2007). The German socio-economic panel study (SOEP)—Scope, evolution and enhancements. *Schmollers Jahrbuch*, 127, 139–169.
- Yodanis, C. (2005). Divorce culture and marital gender equality. A cross-national study. Gender and Society, 19(5), 644–659.
- Zhang, Y. T., & van Hook, J. (2009). Marital dissolution among interracial couples. Journal of Marriage and the Family, 71(1), 95–107.