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First child of immigrant workers and their descendants in West Germany: Interrelation of events, disruption, or adaptation?

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Table of Contents

First child of immigrant workers and their descendants in West Germany: Interrelation of events, disruption, or adaptation?

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Abstract

This paper investigates the impact of immigration on the transition to motherhood among women from Turkey, Italy, Spain, Greece, and the former Yugoslavia in West Germany. A hazard-regression analysis is applied to data of the German Socio-Economic Panel study. We distinguish between the first and second immigrant generation. The results show that the transition rates to a first birth of first-generation immigrants are elevated shortly after they move country. Elevated birth risks that occur shortly following the immigration are traced back to an interrelation of events – these are migration, marriage, and first birth. We do not find evidence of a fertility-disruption effect after immigration. The analysis indicates that second-generation immigrants are more adapted to the lower fertility levels of West Germans than their mothers' generation is.

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1. Introduction

Since the middle of the 20th century, Western Europe has been faced with growing immigration flows. Although social research has focused on the first generation of international migrants, the interplay between international migration and the family dynamics of migrants has not been fully understood.

International migration is associated with a rapid change in the migrants' environment. This change usually takes place within a much shorter time span than societies alter as a whole. Immigrants have to cope with these changes. Therefore, the study of the demographic behavior of migrants enables us to gain insights into the patterns and speed of the demographic responses of individuals or groups to sudden environmental alterations they are exposed to (Coleman 1994). The life-course approach allows us to analyze the sequencing of several events and therefore to study the short-term as well as the long-term effects of migration on a person's life. Studies show, for example, that international migration often coincides with a social downward-trend of the migrants as to occupation, income, and housing conditions – just to name a few (Constant and Massey 2005). Internal or international migration and partner selection are frequently interrelated processes (Milewski 2003, Straßburger 2003, Kulu 2006), repeated moves have an impact on the sub-sequent stability of a union (Boyle *et al.* 2006), and the divorce risk of binational couples is higher than that of married partners who have the same nationality (Roloff 1998). When it comes to fertility, the impact of migration is discussed based on competing hypotheses to address the following questions: Does a migration and its related socio-economic consequences and cultural changes have a depressing impact or the opposite effect, i.e., a stimulating impact on childbearing behavior? Do migrants continue to display the behavior of their old environment or do they adopt the behavior of the new environment? And what are the mechanisms behind the respective behaviors?

The population of the second immigrant generation is growing in European receiving countries; it consists of persons who moved with their immigrant parents to another country when they were a child and it comprises persons born to one or two immigrant parents in a country of destination. Second-generation immigrants have reached family-formation ages; a third generation is rising. 'Growing up in an immigrant family has always been difficult, as individuals are torn by conflicting social and cultural demands while they face the challenge of entry into an unfamiliar and frequently hostile world' (Portes and Zhou 1993: 75). Hence, research should consider a comparison between the immigrant generations.

This study investigates the transition to motherhood of immigrants and their children's generation in West Germany. We compare women of the first and second immigrant generation of traditional labor migrants from Turkey, the former Yugoslavia,

Greece, Italy, and Spain to West Germans. Since women of the second immigrant generation can still be considered to be in their reproductive life span, we do not look at the completed number of children. The focus of this analysis is rather on the transition to a first birth, which allows us to shed light on their fertility behavior. The study contributes to the theoretical framework of the short-term and long-term impact of migration on the fertility of immigrants, compared to persons from the country of destination. It also aims at broadening the understanding of population behavior and changes in behavior in Germany and Western Europe overall since labor migration to West Germany has parallels in other Western European countries.

The present paper begins by introducing the theoretical considerations behind our analysis, and then provides information on the West German context. This is followed by an introduction of the working hypotheses guiding this study as well as of data, methods, and explanatory variables used. The analysis applies intensity regression techniques to the transition to a first birth; its results are discussed in the last section.

2. Background

2.1 Theoretical considerations

Five hypotheses are discussed when analyzing the fertility behavior of international or internal migrants. They refer to timing effects, the socio-demographic characteristics of migrants as well as their living circumstances and cultural factors.

1) Disruption: The underlying assumption of the disruption hypothesis is that a move in itself as well as the time preceding and following the move is stressful for a person. For couples, migration may also mean that the two partners live separately for a certain time period, given that they move at different points in time. Accordingly, fertility levels may decrease preceding the migration due to the anticipation of a move and/or the separation of the partners. Fertility levels may also decline shortly after the migration because of difficulties related to the migration itself or to the new environment. Especially international migrants are confronted with a drastic change in their daily-life conditions. Evidence for the disruption hypothesis has been found for immigrants moving to Australia (Carlson 1985a), Mexicans moving to the United States of America (Stephen and Bean 1992), immigrants to Canada – although the disruptive effect has been found to be of very short nature (Ng and Nault 1997) – as well as for internal migrants (Goldstein 1973). Frequently, elevated birth rates shortly after migration are interpreted as constituting catching-up behavior for postponed or

interrupted childbearing in the phase shortly preceding and during the migration (Goldstein and Goldstein 1981, Ford 1990, Toulemon and Mazuy 2004).

2) Interrelation of events: Instead of interpreting elevated birth transition rates shortly after immigration as catching-up behavior, they can be seen as a situation in which several events take place at the same time, namely migration and union formation (Mulder and Wagner 1993). Evidence for this assumption has been presented for international migrants as well as for internal migrants (Andersson 2004, Kulu 2005, Lindstrom and Giorguli Saucedo 2007). One would expect childbearing to start soon after migration and marriage in particular for marriage migrants as a special type of family re-union. This has been proven, for example, for immigrants to the Netherlands (Schoorl 1990, Alders 2000), Canada (Ng and Nault 1997), and the U.S. (Singley and Landale 1998). Single migrants, by contrast, may also have to take into account longer searching time for a future partner. Carlson (1985a) shows elevated marriage ages for first-generation immigrants moving to Australia when they were single, Milewski's study (2003) yields the same results for first-generation immigrants to Germany. Hence, it is important to consider the partnership status of a migrant. However, once married, the fertility levels of former single migrants do not seem to be influenced by migration (Carlson 1985a). Meanwhile, Ng and Nault (1997) observe lower fertility for some Asian immigrant groups to Canada because of their high share of non-married women.

3) Adaptation: While the hypotheses of disruption and interrelation of events focus on short-term impacts of migration, the adaptation hypothesis offers a medium-term perspective. Given that fertility patterns vary between the regions of origin and destination, a convergence may be achieved within some years of stay (shown by Rindfuss 1976 for Puerto Ricans to the U.S., Nauck 1987 for Turks to Germany, Ford 1990 for the U.S., Mayer and Riphahn 2000 for labor migrants from Mediterranean countries to Germany). This resemblance may be triggered mainly by two channels: cultural factors or socio-economic conditions. Andersson (2004, Andersson and Scott 2005) points out that a convergence of the fertility behavior of immigrants to that of the host society (here: Sweden) is not due to acculturation, but can be seen as adaptive behavior to the general situation in the host society as to its social, political, and labor-market conditions. For immigrants to Israel, Friedlander, Eisenbach, and Goldscheider (1980, see also Friedlander and Goldscheider 1978) observe an adjustment of the timing of births to the respective socio-economic circumstances. Adaptive behavior starts immediately following immigration. 'The convergence of fertility *within* ethnic groups and the great convergence of fertility *between* ethnic groups is remarkable evidence of rapid fertility response appropriate to societal changes' (Friedlander and Goldscheider 1978: 313). Socio-economic circumstances as channels of adaptive behavior have also

been found among Norwegians who immigrated to the U.S. a century ago (Gjerde and McCants 1995).

Whereas most of the studies on family dynamics of migrants focus on persons moving from a higher to a lower-fertility context and reveal a convergence between autochthonous and allochthonous residents, a convergence can also be observed for those moving from a low-fertility environment to a higher-fertility one, as is the case for immigrants from the former Soviet-Union states to Israel. Nahmias (2004) explains that this behavior is related to better socio-economic circumstances that are conducive to having more children compared to the country of origin. Hwang and Saenz (1997) also observe increased fertility for immigrants from the People's Republic of China, where one-child politics dominates fertility behavior, to the U.S.

4) Socialization: This hypothesis emphasizes the role of the migrants' socialization, focusing on the values, norms, and behavior dominant during a person's childhood and assuming their continuance during the life course. Accordingly, immigrants follow the fertility patterns as perceived in their country of origin even if they differ from that of the host society. Immigrants from different countries of origin who exhibit different fertility patterns may also show fertility differences in the same country of destination (Schoorl 1990, Alders 2000).

The long-term impact of migration can be observed in the fertility behavior of second-generation immigrants who are exposed to their parents' behavior, values, and norms as well as to those prevailing in the receiving country. If the environment during childhood and adolescence was dominant in a meaning-giving system, second-generation women who are born in the new destination to immigrant parents would consequently show a behavior as seen at destination and that is different to that of their parents. This has been discussed mainly as the assimilation hypothesis in the U.S. context. Whereas these generational differences have been seen as a continuous process in the past (Gordon 1964, Kahn 1988, Stephen and Bean 1992), research today reveals a more diversified picture. Portes and Zhou (1993) point out that a process of adaptation should be seen as segmented or selective assimilation. In the U.S. context, children of immigrants would remain in their co-ethnic community because this is regarded as the best strategy to capitalize on material and moral resources otherwise not available.

Regarding fertility behavior, results on subsequent immigrant generations at several destinations do not show a uniform picture, neither do several groups at the same destination follow a similar pattern (Kahn 1994). One trend can be identified: Fertility levels of second-generation women are in the main between that of the first generation and that of non-migrants at destination (Stephen and Bean 1992 for Mexican-origin women in the U.S., Kahn 1988 for the U.S.). Landale and Hauan (1996) observe a convergence between second-generation immigrants from Puerto Rico to the

U.S. in terms of a delay of marriage and an increasing share of extra-marital births. However, no common pattern appears for second-generation immigrants to Australia. Immigrants with a background that resembles the Australian one (such as other Anglo-Saxons) show a fertility behavior that is more similar to the Australian fertility behavior than do persons with a background that differs from that of Australians (see also Ford 1990 for the U.S., Ng and Nault 1997 for Canada, Schoenmaeckers, Lodewijckx, and Gadeyne 1998 for Belgium, Khoo *et al.* 2002).

5) Selection and characteristics: The selection hypothesis predicts convergence of fertility patterns between immigrants and their counterparts in the host society because migrants are assumed to share the fertility intentions of the persons at destination. Therefore, immigrants may have fertility intentions that resemble those of the receiving country rather than those dominant in their country of origin. This selection can result from observed characteristics, such as education, or from unobserved factors, such as social-mobility ambitions or family proneness (Macisco, Bouvier, and Weller 1970, Hwang and Saenz 1997, Kreyenfeld 2002, Kulu 2005). One may consider the hypothesis of interrelated events (marriage and migration) to be part of the selection hypothesis; however, we list it separately here. We argue that the interrelation effect occurs only once, that is shortly after migration, but that the completed fertility differs between migrants and people at destination – not due to adaptive behavior, but due to long-term fertility intentions.

Then again, fertility differentials may be caused by socio-economic differences between migrants from different origins and/or between migrants and people at destination (Coleman 1994, Ng and Nault 1997). For example, a cross-over is observed for Mexican-U.S. migrants. Whereas earlier Mexican emigrant cohorts displayed a lower fertility than the stayers in Mexico, it is today the opposite. 'Migration increasingly may be selecting women with socio-demographic profiles that are conducive to higher fertility patterns, such as women with a lower educational level from more rural and/or marginalized areas that are characterized by higher fertility norms' (Frank and Heuveline 2005: 97). A comparatively low socio-economic status may be inherited also by second- and third-generation immigrants, and this can be interpreted by taking a racial-stratification perspective: Differential opportunity structures channel fertility behavior in a way that younger women who face lower opportunity costs because of their lower socio-economic status engage in early and high fertility (Frank and Heuveline 2005).

Finally, we briefly mention another hypothesis that has been increasingly discussed in recent years: The 'legitimacy' hypothesis assumes a causal relationship between international migration, the legal status, and demographic events, such as child birth (Bledsoe 2004, Toulemon and Mazuy 2004, Bledsoe, Houle and Sow 2007). The

assumption is: If international migrants aim at gaining citizenship by giving birth in a given country of destination, this would be reflected in relatively high transition rates to a birth soon after arrival. The hypothesis has not received much empirical grounding yet, and the possibility of any link between birth and citizenship may depend on the legal conditions in the respective countries.

2.2 The West German context

2.2.1 Immigrant workers to West Germany

Germany[2] has been one of the main countries of destination in Europe (Fassmann and Münz 1994), this despite the fact that politicians for a long time have not acknowledged West Germany to be an immigration country (Höhn 1979, Ronge 1997). Three main types of international migration can be distinguished; these are labor immigration, the immigration of ethnic minorities as well as the migration of refugees and asylum seekers (e.g., Rudolph 2002). Although the stay of immigrants to Germany was to one part intended as a temporary measure only – as with migrant workers – immigrants in fact have shown an increasing tendency to make Germany their centre of living. At the turn of the century, Germany had about 82 million inhabitants, of whom about ten percent were of foreign nationality. The share of persons born abroad of this foreign population was 81 percent (six million people). A total of 1.4 million were born to immigrants to Germany (Münz and Ulrich 2000). However, the number of persons with an immigration background is higher since increasing numbers of naturalization hide the migration background.

The focus of our analysis is on women originating from countries that have provided West Germany with labor migrants since the 1950s. West Germany started recruitment activities in Southern Europe as early as the beginning of the *Wirtschaftswunder*. Its first guest-worker treaty was signed with Italy in 1955. Treaties followed with Spain in 1960, Greece in 1960, Turkey in 1961, Morocco in 1963, Portugal in 1964, Tunisia in 1965, and Yugoslavia in 1968. Whereas in 1960 half of the immigrant workers came from Italy, Greece and Spain took over four years later, and then Turkey dominated at the end of the 1960s. 'Guest workers' received a working and residence permit for one year. This included a rotation of the recruited workers.

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[2] In this paper ,'Germany' refers to the Federal Republic of Germany as it has been existing since October 3rd, 1990. 'West Germany' refers to the pre- and post-unified former FRG, including West Berlin. 'East Germany' refers to the former German Democratic Republic (GDR) before October 3rd, 1990 and to the new federal states of the FRG since this date.

Accordingly, the number of immigrants and emigrants was high until the early 1970s. As early as in 1964 (Turkey), the rule of forced rotation was changed gradually to two-year permits and later to five additional years if a worker has been employed for five years. However, the rotation model failed – on the immigrants' side, because the workers tended to stay in West Germany for a longer time than anticipated, on the employers' side because the training costs for new workers were too high.

The year 1973 marked a turning-point in the guest-worker policies of West Germany and of other Western European countries. A recruitment ban was put into force because of the recession resulting from the OPEC oil embargo and the oil crisis. West Germany supported the return of migrant workers to their country of origin by financial means. This applied to workers from non-member states of the European Communities (EC). Persons stemming from the member states of the European Union (EU) and its predecessor, the EC, have been enjoying freedom of movement since its foundation in 1957; this applies in the main to workers from Italy, Greece, and Spain (Münz and Ulrich 2000, Rudolph 2002).

Mainly as a reaction to the recruitment stop, migrant workers made West Germany their focus of living and brought their families to West Germany, too. Family re-unification was and still is possible after the recruitment stop. It includes spouses and children of persons residing in Germany. Half of the total immigration to West Germany during the 1970s and 1980s involved family members. The stay of immigrant workers became increasingly permanent. Moves were made easier because 'guest workers' had been building up social networks consisting of families, associations, and religious communities. A stable immigrant population was being formed (Bade 1994). Up to today, the majority of the foreign population lives in the western part of Germany. Among all foreigners, only about every tenth lives in Eastern Germany and Berlin; the share of the foreign population as to the total population in the five Eastern *Bundesländer* is less then three percent each (StaBa 2006). The largest groups of immigrants from non-EU countries living in today's Germany are people from Turkey as well as the former Yugoslavia and its successor states (Migrationsbericht 2003). As the length of stay inreased, the structure of the foreign population started resembling that of the host society with respect to sex ratio, age structure, and labor-force participation (Bürkner, Heller, and Unrau 1987).

On the one hand, immigrant workers who live in West Germany may be better off in economic terms than in their country of origin. Turkish workers, for example, mainly came from areas that did not provide satisfactory jobs. 'Thus the distribution of Turkish workers in Federal Germany at this early stage represents the whole process of the migratory chain, starting with the economically depressed village dwellers, who, rather than moving to larger cities first, make the leap by joining their relatives or countrymen abroad' (Abadan-Unat 1974: 368/369). On the other hand, a comparison between the

immigrant population in West Germany and German natives shows that immigrants have a lower socio-economic status than West Germans; a downward-trend of international migrants such as this is also observed in other countries of destination (Fassmann 1997, Constant and Massey 2005). This includes education attainment, in the sense that the educational qualification of immigrants is on average lower than that of natives, or immigrants cannot utilize their education to the fullest in the labor market. This disadvantage also continues to their children's generation. Yet, in general a trend towards higher education is visible among younger cohorts in the last years (Seifert 1997, Fritzsche 2000, Konietzka and Seibert 2003).

2.2.2 The fertility of immigrant workers in West Germany and in their countries of origin

Whereas research focused on issues of structural integration, such as education, the family formation of immigrants to Germany did not receive much attention for long (Vaskovics 1987) and 'no attempt has been made to analyze the longer trends in guest worker fertility or to link migrant fertility to selectivity or assimilation' (Kane 1986: 103). This situation has not changed much in the meantime. Most of the studies use nationality as an indicator for classifying someone as an immigrant. Due to naturalization, this may not cover all of the births given by the immigrant population (Straßburger 2000). Only few studies distinguish between migrant generations (Milewski 2003, Straßburger 2003, González-Ferrer 2006 on partner selection) and take the duration of stay into account (Mayer and Riphahn 2000 on fertility). All fertility studies use summary measures, such as the Total Fertility Rate or completed fertility, rarely considering the sequencing of childbearing and migration (Nauck 1987 looks at the role that children who remain in the country of origin play in further childbearing).

Looking back to the 1960s, only about five percent of newborn children in Germany were of non-German nationality. At the end of the previous century, about 100.000 newborn babies per year were of foreign nationality, representing about 13 percent, with a peak of 17 percent in 1974. So far, the fertility of immigrant women from Mediterranean countries declined in the previous three decades, whereas the TFR of West German women has been relatively stable since the 1970s (about 1.3). The decline of the TFR of foreign children after 1975 was not equally distributed by nationalities. The decrease began with married couples from Spain, followed by Yugoslavian, Italian, and Greek couples one year later. The largest decline of the TFR was later witnessed for Turkish couples; however, their TFR remained above that of Germans and other immigrant groups. Today it is even higher than the TFR of persons

who live in Turkey (Münscher 1979, Vaskovics 1987, Schwarz 1996, Roloff 1997, BMFSFJ 2000).

The family patterns of immigrants and West Germans are different in several ways. With more than 20 percent, the level of childlessness is much higher among West German women than it is among the several immigrant groups. The West Germans' mean age at first birth has increased steadily from 23.7 years for the 1945 birth cohort to 25.4 for the cohort of 1958 and it is higher than that of immigrants. Among West Germans, the two-child family (about 35 percent) is dominant whereas immigrants more often have three and more children (Vaskovics 1987, Roloff 1997, Kreyenfeld 2001).

Marriage is the main partnership type for West German women as well as for immigrant women to West Germany. It is also the most important factor for childbirth, both for West Germans and for immigrants (Carlson 1985b). Compared to the respective levels in the countries of origin, the share of extra-marital births at the total number of births of immigrant women to West Germany is higher, however, and reaches levels similar to those of West Germans (about 12 percent at the beginning of the 1980s). The author traces this back to an 'overarching structure of social pressure and possibilities', a structure that defines normative bounds of marriage and childbearing. As social environment changes, fertility behavior changes, too (Carlson 1985b: 111).

As far as further determinants of fertility are concerned, the few studies carried out so far show that the behavior of immigrants and West Germans is affected in a similar manner. The effect on fertility is decreasing when a woman has received secondary education. Women who do not have any religious affiliation have a lower fertility than women who are affiliated with a religious group. Females stemming from rural areas have a higher fertility compared to women originating from cities. In general, fertility declined towards the end of the 20th century (Kane 1986, Mayer and Riphahn 2000).

Whilst the fertility of immigrants in West Germany declined, birth rates fell in the respective countries of origin of the labor migrants, too. Although fertility dropped to different levels in the Mediterranean countries, childlessness still remains exceptional in each of them. Moreover, childbearing and marriage are strongly correlated. In Turkey, for example, only about two percent of all Turkish women never marry. Almost all births occur within marriage (Hancioglu 1997, Ergöcmen and Eryurt 2004). However, in the three biggest cities of Turkey at the end of the 1960s, the number of children a woman has ever born varied greatly by education and region: from 4.3 for illiterates in villages to 1.9 for women with secondary schooling (eight years), and this at a time when labor emigration was high (Shorter and Macura 1982). Towards the end of the 20th century, fertility differentials remained or even widened in terms of women's education: The TFR of women without education or without a school leaving certificate

was 4.2 in 1993, whereas the TFR of women with secondary or higher education was 1.7 (Toros 1994, Hancioglu and Ergöcmen 2004). The median age at first birth increased steadily, from about 21 years for women born in the 1950s to about 23 years for the cohorts of the 1970s (Koc and Özdemir 2004). The changes in fertility levels that Turkey showed in the past four decades were the most substantial alterations among the Mediterranean countries.

Women living in the other countries have remarkably delayed childbearing to higher ages, too. The family size, however, is on average smaller and the share of women remaining childless is higher than in Turkey. Compared to the 1970s, the TFR decreased by about one child on average: in Greece to 1.4, in Italy to 1.3, and in Spain to 1.2 in the mid-1990s. Marriage has been remaining the universal form of partnership and the share of extra-marital births has been at a low level in these regions compared to Central and North European countries. The similarities between Turkey, Greece, Italy, and Spain are usually traced back to a shared inheritance of traditionally patriarchal family structures and the persistence of strong family ties (Hionidou 1995 for Greece, Rosina 2004 and Dalla Zuanna 2004 for Italy, Reher 2004 for Spain, BMFSFJ 2000).

2.3 Working hypotheses

The main research question of this study is: Are transition rates to first birth of immigrant women different from those of West German women? If so, what is the extent to which fertility differentials can be explained by immigrants' selectivity, duration of stay in Germany, and compositional differences between the immigrant and the native population? What are the factors that play a role in first-birth behavior? We compare immigrant generations, and we investigate whether or not there are differences between national sub-groups.

Our guiding hypotheses are derived from the theoretical framework as follows:

H1) Disruption: For first-generation immigrants, we expect to find a disruption effect of the move on fertility. We hypothesize that the move delays childbearing and/or decreases first-birth intensities of migrant women shortly after immigration.

H2) Interrelation of events: The second hypothesis competes with the first one and assumes that immigrant women have high first-birth risks shortly after immigration: Women of the first migrant generation coming to Germany from the countries selected for this study moved to a low-fertility regime from countries that had a tradition of higher fertility earlier on. A large share of these moves may have been due to family re-

union, with a spouse belonging to the first migrant generation himself in earlier decades. In recent years, union formation may be of particular importance for migration as the number of second-generation immigrants living in Germany has been growing into marriage ages. When male second-generation immigrants marry a partner from the parents' country of origin, the formation of the conjugal household usually takes place in Germany. Therefore, we think that the birth of a first child would be desirable among immigrant women and their partners in order to complete the union formation. Hence, first-birth intensities are expected to be elevated shortly after the move.

H3) Adaptation: Next, we ask the question whether or not there is an adaptation effect by the duration of stay of first-generation immigrants. The longer immigrants live in the new environment, the more they get to know of the fertility behavior and norms dominant there and the more they are exposed to the socio-economic conditions that structure daily life. Therefore, they may be more likely to behave in a manner similar to natives as their length of stay increased. The adaptive process towards lower fertility may accelerate when a woman with an immigration background is married to a West German man, compared to an immigrant woman who is married to a partner from the same country of origin (Saenz, Hwang, and Aguirre 1994).

H4) Socialization: The women in our study stem from five countries of origin or are born to a parent from either of them: Turkey, Yugoslavia, Greece, Italy, and Spain. A common trait of these countries is that they all experienced fertility decline in the past four decades; however, there are differences in the timing of this decline and in the patterns of fertility. We assume these differences to be reflected in the first-birth intensities of emigrants from these countries to West Germany. Therefore, first-generation immigrant women from Turkey are expected to have higher transition rates than their counterparts from South and South Eastern Europe. This is because women in Turkey enter motherhood earlier and do so more often. In order to see the long-term effects of migration, we compare the first-birth risks of first-generation immigrants to that of the second generation. Second-generation migrants experienced the low-fertility context of West Germany much longer than did their parents' generation and they are more likely to marry a West German spouse than women of the first immigrant generation are (González-Ferrer 2006). Therefore, we expect that the first-birth intensities of the second generation may be similar to that of West Germans, too, and that they are lower than that of first-generation migrants.

H5) Characteristics: Finally, we review the assumption of selection and characteristics. We have seen that the education attainment (as a proxy for socio-economic status) of immigrant women is in general lower than that of women of the

host society. We assume that these differences lead to differences in fertility levels, too. Mainly, we expect to find that higher education has a decreasing impact on childbearing intensities (Mayer and Riphahn 2000). Since second-generation immigrants generally achieve an education that is higher than that of first-generation immigrants, these compositional differences may also cause fertility differentials between the generations.

We do not assume legitimacy to be of major importance for our study population. Legally, German citizenship is not accorded by childbirth. Before 2000, it was based on descent (*ius sanguinis*)[3]. An application for naturalization was possible only after the person in question had stayed in Germany for at least 15 years. Hence, most of the immigrant workers who moved to West Germany in the 1950s and 1960s have remained or still remain 'foreigners' for a long time. However, not having German citizenship does not necessarily mean that a migrant cannot stay in the country. Migrants from Italy, Spain, and Greece have freedom of movement and residence since they are members of the European Union and therefore do not need that citizenship in order to stay in Germany. Although these rules do not apply to emigrants from Turkey and the former Yugoslavia, women from these countries may nevertheless have a relatively small problem obtaining a residence permit due to the 'guest-worker' conditions described above.[4]

2.4 Data, variables, and method

2.4.1 Data

We use data from the German Socio-Economic Panel (SOEP), carried out by the German Institute for Economic Research, Berlin. Foreigners in West Germany are overrepresented in Sample B. It includes households with a Turkish, Greek, Spanish, Yugoslavian, or Italian household head. The original sample size was 1393. Sample D

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[3] The *Staatsangehörigkeitsrecht* was changed in January 1st, 2000. Accordingly, it is possible to apply for German citizenship after having lived in Germany for at least eight years. For the first time, elements of the territorial principle *(ius soli)* have been introduced into German law: If one of the parents has had an *Aufenthaltsberechtigung (*right of residence) for longer than eight years or has an *unbefristete Aufenthaltserlaubnis (*unlimited residence permit), a child born by foreign parents in Germany is granted German citizenship. If a child is granted the citizenship of the parents in addition to German citizenship, this person has to choose between the two citizenships before reaching age 23 (Angenendt 2002, Dornis 2002).
[4] The legal conditions are different for other immigrant groups, though. Investigating the migration strategies of Cameroonians, Fleischer (2007) points at the possibility that migrants can gain a residence permit if they have custody for a child with a partner who has either the German citizenship or a residence permit. But even so, marriage remains the crucial factor both for those people who aim at gaining legal status in Germany and immigrants moving to Germany owing to family re-union.

on 'immigrants' was started in 1994/95. It includes households in which at least one person has moved from abroad to Germany after 1984. The starting size was 522 households. Sample A, the so-called West German sample, contains households with heads of German nationality. Few of the respondents in Sample A have an immigration background. The initial sample size was 4528 households. In 2002, still almost half of the respondents of the initial sample were re-interviewed. Third persons moving into and children grown-up in an existing SOEP household were added (Haisken-DeNew and Frick 2003).

Respondents have been questioned annually since 1984. We use waves 1984 to 2004. The SOEP also provides retrospective information, such as on births, marriage, immigration, and education. The focus of our study is on women born from 1946 to 1983 and who live in West Germany. In order to distinguish between West Germans and immigrants and their children, we do not use the sample indicator, since we also account for the possibility of naturalization: Women in our sample are considered to be West Germans if they were born in Germany and have reported a German citizenship in each survey year. Accordingly, we define as an immigrant or someone with an immigration background each person who has ever reported having a non-German citizenship and/or was born abroad (no matter whether or not a change of citizenship took place later). All respondents of Samples A, B, and D who can be defined as of Turkish, Yugoslavian (or its successor states), Greek, Italian, Spanish, or West German origin were considered for our analysis.

We construct birth histories for 5261 women in total who are under risk of a first birth in West Germany: 1369 women with an immigration background (558 first generation, 811 second generation) and 3892 non-immigrant West Germans. First-generation immigrants who gave birth to a first child or whose pregnancy started before the immigration are excluded from this analysis.

Concerning the immigrant generation, we take age 15 to distinguish between the generations: Immigrants coming to Germany at age 15 or older are considered to be of the first generation. Women aged under 15 when immigrating to Germany or born in Germany are defined as being of the second generation. There are different reasons for using age 15 to distinguish between the migrant generations: Firstly, the basic time process of our analysis – age of the woman – starts with the 15th birthday. Secondly, we take into account a relatively early start of marriage formation in the countries of origin we are looking at. Ergöcmen and Eryurt (2004) show, for example, that about eight percent of women born in the 1950s were married by age 15 in Turkey (the SOEP also contains women married at age 15). Thirdly, in Germany compulsory school education ends in general at about age 15 or 16. Hence, persons immigrating at younger ages are expected to participate in school education, they are therefore more exposed to the influence of German socialization than older immigrants, who are no longer

participating in the educational track. Concerning the second generation, the SOEP does not contain enough information to reconstruct for all respondents whether or not both of their parents are immigrants. Therefore, the group defined as second-generation immigrants includes persons with one or two immigrant parents. We do not distinguish between second-generation immigrants born in Germany and those who moved during childhood, either. This choice is related to the relatively small size of the sample.

Since we are interested in fertility behavior after immigration, we only take into account conceptions that occurred following the move to West Germany. Hence, cases where a birth took place in the same year as immigration are excluded, too. We assume that these pregnancies may be correlated with the anticipation of the move; however, the reason for our sample selection is that the anticipation of a new living environment and the actual experience of being in the new living circumstances may differ from each other. Taken into account only first-generation immigrants coming childless to Germany, the share of women remaining childless is 17.5 percent compared to 21.8 among the second generation and 23.5 among West German women (Kaplan-Meier survival estimates).

2.4.2 Covariates

The covariates capturing migrant-specific characteristics are: migrant generation, country of origin (for immigrants derived from ever reported non-German citizenship), and time since arrival for the first generation. First-generation immigrants start being under risk of a first conception from the date of their arrival in West Germany (the mean age at immigration is about 20 years), second-generation immigrants and West German women are under risk from age 15 onwards.

We reconstruct the marital status and marriage situation at the time of migration for the first generation (this variable is called 'migration process'). A total of 61.8% of the first-generation immigrant women are married to a man of the first generation, 20.4% are married to a man of the second generation, and 3.2% to a West German. The first category of this variable contains women who were married before moving to West Germany and who migrated with the partner in the same year. In this category, both partners settled in the new environment at the same time. The second category are women who were married before they moved, but who migrated at a different point in time than did the partner; it also contains women married before migration or in the same year, but whose spouse is a West German or second-generation immigrant to West Germany. The women in this category share the experience of spatial separation from the spouse, but in most of the cases the husband had already settled in Germany when his wife migrated. Finally, we distinguish women not married at the time of the

move (a last category is on women without information on the spouse). By doing so, we account for different forms and phases of migration.

We consider only women who were unmarried or married for the first time at the first birth or at censoring. The number of women who were married more than once before they had their first conception is negligible. In our analysis, they are included with their first marriage. Also, the share of immigrant women living in non-marital unions is inconsiderable. Only less than six percent of first-generation immigrants were not married at the time of censoring, and there is no unmarried mother among the first-generation women in the sample (one percent of the mothers of the second migrant generation are not married, compared to 3.4% of West German mothers). The vast majority of first-generation immigrants, even in the youngest cohorts of the sample, was married at censoring, compared to lower numbers of unmarried women among the second generation and West Germans. This may be an indicator for selection towards family migration of the first generation. The shares of unmarried women are similar among second-generation immigrants and West Germans in each birth cohort.

We can identify the respective partner of the woman since panel data containing information on the household is available from 1983 onwards. In case of subsequent partners, our procedure is the following: Women married only once are related to the partner with whom they shared a household during the panel time. Women who got divorced or widowed before panel time (i.e., before 1983) cannot be linked to the first spouse. Naturally, in case a woman had several partners, we use the information on the partner at the time of pregnancy. However, we include into the analysis the partner's information for married couples only. We consider this sufficient although the sample's share of married women of the second immigrant generation is only about 50 percent as extra-marital births are exceptional among these women.

As indicator of the socio-economic background, we use the school leaving certificate of the women. We built the following categories: The first graded certificate relates to the *Hauptschule* (nine years of schooling) and *Realschule* (ten years of schooling) in Germany as well as to the completed level of compulsory school education in the respective country of origin. The second graded certificate refers to the German *Abitur* or *Fachabitur* and the equivalent secondary education abroad (a certificate qualifying for entry into college or university). A third category captures school visits that cannot be summed up under the previous two categories, but which is combined with the first graded school certificate since the number of the respondents here is very small. Finally, we have a category for respondents who did not obtain a school leaving certificate or never have been to school. We decided to focus on school-leaving certificates rather than completed apprenticeship or tertiary education (university) because this is more appropriate to our sample. Of the female first-generation immigrants in our sample, 24.2% (n=135) did not complete school

education, and 11.8% of second-generation females (n=96) (2.7% among West Germans, n=104) did not do so. A total of 18.1% of the women of the first migrant generation and 15.4% of second-generation women completed secondary school (compared to every forth West German woman).

Moreover, we reconstruct the employment status of the women as time-varying covariate. The categories are full-time employment, part-time employment, unemployed, and in education. The latter category captures, for example, apprenticeships as well as tertiary education and refers only to those women who have completed school education.

If information on the spouse is available, we include into the analysis the partner's school degree for all married women and the partner's country of origin for immigrant women. For the latter, we distinguish between spouses coming from the same country as the women (77.5% of all married immigrant women), spouses from a different country (3.5%), and West German partners (5.5%; missing % are due to missing information on the origin of the spouse). Finally, we control for birth cohort in order to capture period effects if there are any. For sample statistics, see Table 1.

Table 1: Sample statistics: person-months (exposures) and first conceptions (occurrences)

Variable	First-generation migrants		Second generation		West Germans	
	Exposures	Occurrences	Exposures	Occurrences	Exposures	Occurrences
Socio-demographic characteristics						
Birth cohort						
1946–59	21,452.5	230	7847	47	193,807	972
1960–69	6900.5	97	33,458	162	202,937	753
1970–79	2761.5	58	29,115	87	100,846	271
1980+	126.0	4	4450	8	16,609	22
Marital status (time-varying)						
Unmarried	19,594.5	49	65,188	71	435,262	710
Married	11,646.0	340	9682	233	78,937	1308
School education						
No certificate	8131.0	82	6473	28	7507	20
First or other certificate	17,105.0	234	50,705	234	340,776	1601
Second certificate	5752.0	64	16,153	35	158,863	379
In school education	84.0	1	728	1	2501	3
No info	168.5	8	811	6	4552	15

Table1:   (Continued)

	First-generation migrants		Second generation		West Germans	
	Exposures	Occurences	Exposures	Occurences	Exposures	Occurences
Employment (time-varying)						
Full-time	13,276.0	119	22,638	143	209,639	1062
Part-time	1271.0	11	2795	11	22,001	101
Unemployed	13,089.5	226	10,093	122	44,705	481
In education or training	1643.0	3	31,633	16	182,574	137
No info	1961.0	30	7711	12	55,280	237
Country of origin					n.a.	
Turkey	11,186.5	168	27,546	139		
Yugoslavia	8608.5	86	12,454	34		
Greece	3907.0	37	12,768	37		
Italy	4427.5	64	15,678	67		
Spain	3111.0	34	6424	27		
Migration process			n.a.		n.a.	
Married, spouses migrated together	1429.5	23				
Married, spouses migrated separately	5919.0	216				
Unmarried at migration	21,103.0	116				
Partner, no info	2789.0	34				
Spouse's characteristics						
Spouses' origins						
She migrant, he West German	1460.0	13	5225	25	n.a.	
Both migrants, from same country	23,525.5	333	26,369	232	n.a.	
Both migrants, from different countries	1028.0	9	2156	17	n.a.	
She West German/he migrant	n.a.		n.a.		20,709	112
Both West German	n.a.		n.a.		262,295	1429
No info on partner	2789.0	34	6906	22	60,862	344
Never married	2438.0	0	34,214	8	170,333	133
Spouse's school education						
No certificate	4927.5	60	2323	24	1779	12
First or other certificate	15,607.0	232	22,039	183	171,505	1056
Second certificate	4688.5	59	7300	57	97,471	427
In education	0.0	0	0	0	108	0
No info	3579.5	38	8994	32	73,003	390
Never married	2438.0	0	34,214	8	170,333	133
Total	31,240.5	389	74,870	304	514,199	2018

Source: Calculations based on German Socio-Economic Panel Study, 1984–2004.

2.4.3 Method

We analyze the transition to a first conception that lead to a live birth and apply piecewise linear intensity-regression models as a form of indirect standardization (Hoem 1987, Hoem 1993, Andersson 2004). We use monthly information on births, which we have for births since January 1983. For births occurring before 1983, only yearly data is available. Hence, the births are assumed to occur in June. In order to calculate the transition to a first conception, we backdate the time at birth by nine months. Concerning the date at immigration of first-generation immigrants, we use monthly information. If this is not available, we assume the immigration to have taken place in January of the year reported.

The model can be formalized as follows:

$$\ln \mu_i(t) = y(t) + \sum_k z_k(u_{ik}+t) + \sum_j \alpha_j x_{ij} + \sum_l \beta_l w_{il}(t) \ ,$$

where *$\ln \mu_i(t)$* denotes the hazard of a first pregnancy leading to a birth for individual *i* and *y(t)* represents the impact of the baseline duration – time since age 15 – on the hazard. The parameter *$z_k(u_{ik}+t)$* expresses the spline representation of the impact of continuously time-varying covariates with the origin *u_{ik}* (duration of stay, duration of marriage). The term $w_{il}(t)$ represents the effect of discretely time-varying variables (employment). The term *x_{ij}* denotes the effect of time-constant covariates (migrant generation, country of origin, marriage situation at migration, birth cohort, school leaving certificate).

3. Results

We achieved the results by stepwise modeling. Table 2 presents the estimates of the five main steps of the analysis.

<u>Model 1:</u> Model 1 displays a simple comparison between the two migrant generations and non-migrants, controlling for the age of the woman. We observe highly elevated first-birth risks for the first generation and smaller, but elevated risks for the second generation, compared to West Germans. All differences are significant.

Table 2: **Factors influencing the transition to a first child: relative risks for categorical variables and parameter estimates for continuous variables**

Variable	Model 1	Model 2	Model 3	Model 4A	Model 4B	Model 5
Migrant generation						
First generation [a]	2.53 ***					
Second generation [a]	1.23 ***	1.25 ***	1.07	1.08	1.06	1.04
West German	1	1	1	1	1	1
Time since arrival in years (slope) [b]						
Intercept		1.813 ***	0.902 ***	0.935 ***	0.652 ***	0.604 ***
0–1		0	0	0	0	0
1–2		−0.050 ***	−0.030 **	−0.030 **	−0.023 *	−0.021
2–5		−0.024 ***	−0.010 *	−0.011 *	−0.009	−0.010
5+		−0.009 ***	−0.007 **	−0.008 **	−0.007 **	−0.007 **
Marriage duration in years (slope) [c]						
Intercept			2.386 ***	2.326 ***	2.190 ***	2.192 ***
0–1			0.033 ***	0.033 ***	0.034 ***	0.034 ***
1–2			−0.023 ***	−0.023 ***	−0.022 ***	−0.022 ***
2–5			−0.008 ***	−0.009 ***	−0.008 ***	−0.008 ***
5+			−0.009 ***	−0.010 ***	−0.009 ***	−0.009 ***
Unmarried			0	0	0	0
Birth cohort						
1946–59				1	1	1
1960–69				1.02	1.05	1.05
1970–79				0.97	1.02	1.03
1980+				0.86	0.98	1.00
School education						
No certificate				0.90	0.86	0.81 *
First or other certificate				1	1	1
Second certificate				0.66 ***	0.76 ***	0.75 ***
In education				0.74	0.87	0.91
No info				0.95	0.84	0.84
Employment						
Full-time					1	1
Part-time					0.99	0.99
Unemployed					1.65 ***	1.65 ***
In education or training [d]					0.46 ***	0.47 ***
No info					1.73 ***	1.75 ***
Spouse's school education [e]						
No certificate						1.40 ***
First or other certificate						1
Second certificate						1.05
In education						n.a.
No info						0.98

Table 2:   (Continued)

Variable	Model 1	Model 2	Model 3	Model 4A	Model 4B	Model 5
Age in years (slope)						
15–20	0.042***	0.042***	0.025***	0.026***	0.022***	0.022***
20–25	0.005***	0.006***	−0.003**	−0.003**	−0.003**	−0.003**
25–30	0.003*	0.004***	0.003**	0.004***	0.003***	0.003***
30–35	−0.009***	−0.008***	−0.008***	−0.009***	−0.009***	−0.009***
35–45	−0.030***	−0.030***	−0.027***	−0.027***	−0.028***	−0.028***
Constant	−7.847***	−7.896***	−7.669***	−7.574***	−7.366***	−7.388***
Log-likelihood	−17,133.71	−17,035.35	−15,336.73	−15,299.74	−15,150.99	−15,143.59

Source: Calculations based on GSOEP, 1984–2004; event: first conception.
Significance: '*'=10%; '**'=5%; '***'=1%.
[a]– Refers to all five countries of origin of immigrants,
[b]– Piece-wise linear spline for first-generation immigrants,
[c]– Piece-wise linear spline for married women,
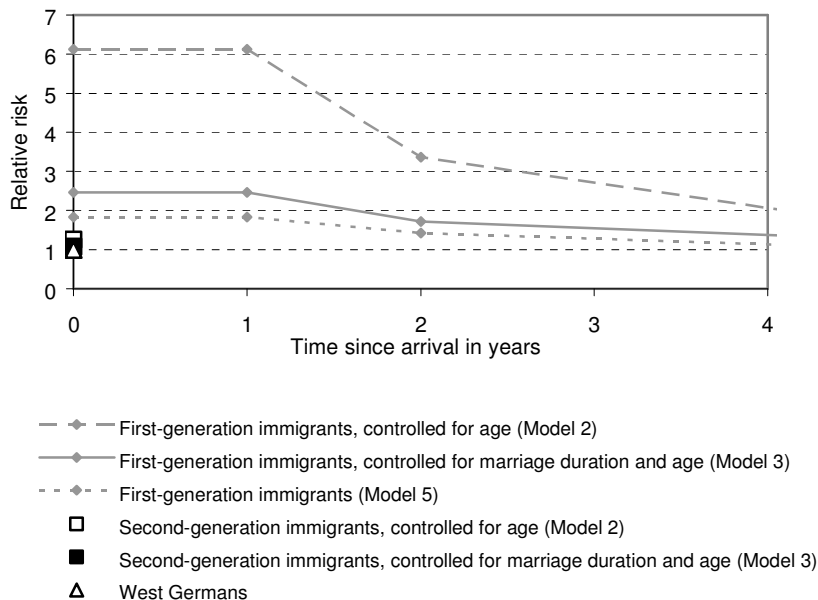[d]– Only for persons who have basic finished school education,
[e]– Applies only to married women.
Model 5: controlled for spouse's employment.

Model 2: The second step in the modeling process replaces the constant risk for first-generation immigrants by a time-varying risk by time since arrival to West Germany. We see a jump in conception risks right after immigration, followed by slightly declining levels. Note that women who were pregnant upon moving to West Germany were excluded from the analysis. Even without them, the effect of arriving in the new country on first-birth behavior is very strong.

Model 3: We test the hypothesis of the interrelation of events by including marriage duration in the third step of the analysis. Controlling for marriage duration reduces the high birth risks right after migration by about 60 percent (see Figure 1; the patterns are similar for first-generation immigrants, second-generation immigrants, and West Germans). Taking marriage duration into account, first-birth risks of second-generation immigrants are not different from those of West Germans, whereas the higher transition rates of first-generation immigrants remain significant.

Figure 1:   **Transition to a first child by time since arrival, relative risks –**
Models 2, 3, and 5

--- ◆ --- First-generation immigrants, controlled for age (Model 2)

——◆—— First-generation immigrants, controlled for marriage duration and age (Model 3)

- - ◆ - - First-generation immigrants (Model 5)

☐   Second-generation immigrants, controlled for age (Model 2)

■   Second-generation immigrants, controlled for marriage duration and age (Model 3)

△   West Germans

Source: Calculations based on GSOEP, 1984–2004.

    Model 4 (A and B): The next steps contain the woman's school education and a period indicator (Model 4A). Neither of them adds much of an explanation to the fertility differentials between first-generation immigrants and West Germans[5]. For second-generation immigrants, we find the risks slightly enlarging when controlling for birth cohort. This indicates their overrepresentation in cohorts that have a lower fertility. School education matters for the second generation, too. Controlling for this covariate reduces fertility risks and differentials, thus indicating compositional differences (results of stepwise modeling not displayed here). In general, both,

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[5] We also used (not shown here) an indicator for the immigration cohort of first-generation immigrants. The estimation showed higher first-birth risks for first-generation immigrants who have moved since 1980, compared to women who have immigrated between the 1960s and 1980. The results were only significant when not controlling for stay duration and marriage duration. Hence, we decided to include the birth cohort as a covariate and this variable applies to all women in the sample.

immigrant women and West Germans show the same behavior: The first-child risks are significantly lower if a woman has a higher school certificate compared to women who have a first school certificate.

So far, the transition rates for first-generation immigrants remain high shortly after arrival. In model 4B, the employment status is added. This covariate decreases the transition rates of first-generation immigrants by 25 percent. The important status here is unemployment, which increases the transition to motherhood by about 65 percent compared to women who work either full- or part-time. The effect is the same for immigrants and West Germans.

Model 5: This step adds to the analysis the partner's school education for married women. Controlling for this, first-child risks are slightly reduced for first-generation immigrants; however, adding the partner's school education does not change the results for the second generation. This indicates that the composition of the first-generation group is different from the one of the second generation, namely that spouses without school leaving certificate are overrepresented in the first immigrant generation. The decrease in fertility differentials is explained by the category of women married to a man who has not obtained any school certificate. Their first-child risk is almost 40 percent higher than that of women with a spouse who has a first school certificate. This model also controls for the employment status of the husband, the latter which, however, does hardly affect the first-birth risks of any of the three groups. It is the employment status of the woman that remains crucial (see Figure 1).

Model 6: Next, we control for three factors that apply to immigrant women only (conditional covariates; see Table 3). Model 6A tests differences by country of origin. Initially, we had run the models testing the effect of each of the countries of origin interacting with the migrant generation compared to West Germans. Then, we made tests to see whether or not there are differences between the migrant groups. We cannot find any differences by country of origin for first-generation immigrants after controlling for the duration of stay and the duration of marriage. For second-generation immigrants and comparing between women of Turkish, Yugoslavian, Greek, Italian, and Spanish descent, we find small differences only for women of Turkish descent. There are no differences between women from the Southern and South Eastern European countries (SSEE). Therefore, we combine the categories of the variable referring to the country of origin: Turkish and Southern/South Eastern European. However, when considering the covariates from the previous models, these differences do not remain significant.

The next steps take into account the partner's country of origin of immigrant women and the marital status of the first-generation immigrants at the time of the move.

These steps apply to married women only. Neither of them contributes significantly to explaining first-child differentials between the groups, though one may see a slight trend here: First-generation immigrants who moved at a different point in time than their partner have higher transition rates than women who moved with their husband. Women who are married to a husband from a different country or to a West German have elevated transition rates, too (there is probably an overlap with the category for which information on the husband's immigration history is not available).

We do not include further control variables in this analysis. A covariate often used in fertility studies in general and particularly in studies on international migration is religious affiliation. However, our analysis showed that the religious affiliation does not reveal significant differences between the religions for immigrants to West Germany (see Mayer and Riphahn 2000). This results probably from a high correlation between the country of origin and religious affiliation. We also used other indicators for cultural background, such as religiosity and type of place where the women lived at age 15. However, as each variable had a large share of missing answers, we did not include them.

Table 3: **Migrant-specific factors influencing the transition to a first child: relative risks for categorical variables and parameter estimates for continuous variables**

Variable	Model 6A	Model 6B	Model 6C
West German	1	1	1
Migrant generation and country of origin			
First generation, Turkey:			
Time since arrival in years (slope) [a]			
Intercept	0.591 ***	0.595 ***	0.309
0–1	0	0	0
1–2	−0.021	−0.020	−0.015
2–5	−0.010 *	−0.010	−0.007
5+	−0.007 **	−0.007 **	−0.007 **
First generation, SSEE [b]	1.03	1.03	1.08
Second generation, Turkey [c]	1.14	1.16	1.21 *
Second generation, SSEE [b]	0.87	0.83	0.82
Spouse's origin [d]			
Migrant from same country		1	1
Migrant from different country or Germany		1.16	1.13
No info		0.82	0.64 **
Migration process [e]			
Married, migrated together			1
Married, migration with separation			1.35
Unmarried at migration			1.00
No migration info on partner			2.16 **
Log-likelihood	−15,142.76	−15,141.14	−15,136.10

Source: Calculations based on GSOEP, 1984–2004; event: first conception.
Significance: '*'=10%; '**'=5%; '***'=1%.
Models 6A-C: controlled for age, birth cohort, school education, employment status of the woman; school education, employment of spouse; marriage duration.
[a]– Turkish immigrants relative to West German women, piecewise linear spline,
[b]– SSEE (Southern and South Eastern Europe): Yugoslavia, Greece, Italy, Spain relative to Turkey,
[c]– Turkish-descent women relative to West Germans,
[d]– applies only to married immigrant women,
[e]– applies only to first-generation immigrants.
Note that the reference category shifts in the Models 6A-C. The reference category in Model 6C is a first-generation Turk who is homogenously married and moved to West Germany with the husband at the same point in time. For second-generation migrants, e.g., read Model 6C as follows: the first-conception risk of a second-generation women from Southern/South Eastern European country who is married to a man of the same origin is 18 % lower than for a first-generation woman of Turkish descent who is married to a Turkish man.

4. Discussion

Our analysis focuses on the first-birth behavior of women with an immigration background in West Germany, drawing comparisons to the birth behavior displayed in the host society. We see that it is important to distinguish between the immigrant generations. The first-birth risk of first-generation immigrants who moved to West Germany when childless is 2.5 times higher than the corresponding risk of West Germans. Second-generation immigrants living in Germany have 1.2 times higher transition rates to a first birth compared to natives. The marriage status is the most important covariate for both immigrant generations. It stresses the endogeneity of first marriage and first child (Baizan, Aassve, and Billari 2003).

For first-generation immigrants, we find the hypothesis of interrelated events proven: Migration, marriage, and a first pregnancy follow in short sequence. This effect would even be more pronounced if we included women of the first immigrant generation that had become pregnant shortly before migration, probably in anticipation of the move. Here, marriage duration seems to be a more important factor than the migration background of the partner – it does matter little whether or not the partner immigrated from the same or another country or whether the partner is of West German origin. Birth risks are elevated in the first year following immigration and in the first year of marriage. Taking spatial separation of the spouses into account, higher transition rates to motherhood are observed for immigrants who followed their husband later and for women who moved to West Germany in order to form a household with either a second-generation immigrant or a West German compared to immigrant women who moved with their husband. We conclude that the temporary separation in itself does not trigger the transition to motherhood. Temporary separation can rather be seen as indicating that either of the spouses has been already familiar with the living circumstances at destination. This familiarity may facilitate the decision to have a child compared to couples where both partners have to get used to the new living environment. However, the size of the sample used for this analysis is not large, and accordingly the number of women in a few categories is small. In general, our findings lead to the assumption that childless couples arrange marriage and migration within a narrow time span.

As the transition to a first pregnancy is much elevated in the first year following immigration, we cannot prove the hypothesis of fertility disruption shortly after immigration. It rather seems that a first child marks the end of a couple's migration process. A child also may strengthen the position of an immigrant wife, who 'completes' the union of the partners by becoming a mother, and this adds to the union the status of family. Especially in patriarchal family structures, motherhood gives value and prestige to a woman. This mode of thinking was confirmed in interviews carried

out with immigrants in Germany and with women and men in the respective countries of origin. A child also emphasizes the connection between the two families of origin. It has been shown that second-generation immigrants of Turkish descent see their union as constituting a link between the two families (Straßburger 2003). If a marriage was traditionally arranged by family members, having children soon afterwards may be seen as desirable by the young couple and their relatives. We see this attitude reflected in the transition rates to motherhood, rates that remain slightly elevated for second-generation migrants of Turkish background.

As pointed out, we do not assume German citizenship and the German residence permit to have a direct impact on the fertility of women in the traditional migrant-worker groups. However, there are other (West) German laws that may directly or indirectly affect the childbearing behavior of immigrants. The first is the law on child-care benefit, which is paid in general for two years: Women from EU countries receive the benefit even when they give birth to and raise the child in their country of origin, provided that they previously worked in Germany. This compares to families from non-EU countries that since 1986 only receive child benefits for children born and raised in Germany (Schwarz 1996). Hence, women from Turkey and the former Yugoslavia may postpone childbearing in anticipation of the move. Note that the mean age at immigration of the first-generation immigrants in the sample is about 20 years. Compared to the women in the country of origin, Turkish immigrants for example have postponed first child birth when they moved to West Germany. Almost every second women who lives in Turkey has become a mother by this age.[6]

The work permit is the second law that is interesting in the context of the fertility behavior of immigrants. Ever since the recruitment policies ended, persons who move to (West) Germany have not been allowed to work immediately[7]. People coming from EU member-states are not affected by this rule, in contrast to family members of persons from non-EU countries who move to Germany for reasons of family re-union. Since 1974, persons immigrating for reasons of family re-union have not received a work permit in the first years following the immigration (Münscher 1979, Angenendt 2002). Therefore, we may think of the first two or three years following the move as a time of few opportunities, competing with childbearing and child raising; in other words, a good time to have children.

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[6] If compared to the first-generation immigrants who gave birth before they moved to West Germany, we see also that immigrants coming without a child are on average about two years older at entry into motherhood. This may indicate that migration postpones childbearing, however, such a comparison is not reasonable since it conditions the emigrants on the later move, and we do not have information on all women in the countries of origin, either.

[7] The recruitment of highly qualified IT specialists from non-EU countries has been an exception since 2000.

This is proven by the employment status in our estimation. However, we must be cautious with the interpretation: On the one hand, women of the first migrant generation may anticipate family formation, thus they may not aim to become gainfully employed during the first few years following arrival (endogeneity). On the other hand, unemployment has a fertility increasing impact also on second-generation immigrants and on West Germans (Kreyenfeld 2001). As for a long time the country has encouraged young mothers to stay at home women may regard motherhood as constituting an alternative career in general. Our results stress that immigrants react to similar circumstances in a similar manner to people of the host society. This applies to the impact of education attainment, employment, and union formation on fertility and confirms the hypothesis of adaptation, as it has been found for other countries. Note that these patterns vary between countries. The speed and nature of converging behavior between immigrants and natives also may depend on the degree of similarities or difference between the countries of origin and destination (Carlson 1985b, Nahmias 2004, Andersson and Scott 2005).

The '3 pack' of marriage, migration, and first child implies that labor-migrants are a selected group. Female first-generation migrants moved to West Germany mainly for reasons of family re-union or family formation. Migrants doing so may be prone to have a first child. Unmarried women immigrating to West Germany, by contrast, have lower transition rates to first birth than their counterparts married by the time of the move. The lower transition rates of single migrants may be attributed to the partner-selection process, a process that may take a relatively long time as it takes place in a new living environment, or it may be the result of selection: Single immigrant women may come for different reasons than married women. Consider here, for example, the participation in higher education. Further research, however, should focus on the transitions to subsequent births, too, in order to fully address the question of whether or not immigrants to West Germany are a selected group regarding their fertility (intentions).

We cannot answer in full the question on the impact of socialization when analyzing only the transition to a first birth, either. We attribute the elevated transition rates of first-generation immigrants to selection, or more specifically, to the interrelation of events rather than to the influence of socialization. This is because the risks are elevated only shortly after immigration. We do not find fertility differentials in the respective countries of origin to be reflected in the first-birth risks of first-generation immigrants to West Germany. First-generation immigrants from Turkey, the former Yugoslavia, Greece, Italy, and Spain have in common that the first-birth risks decrease as the duration of stay increases. This proves the assumption true that immigrants adopt the behavior of their destination with increasing length of stay.

As to second-generation immigrants, we suggest that a discussion of their fertility behavior be placed within the context of adaptation rather than socialization. On the one hand, the first-birth risks of the second generation reflect the fertility differences between the respective countries of origin; women of Turkish background in West Germany have higher first-birth risks than women of Southern and South Eastern European background. This can be traced back to the compositional differences of the second immigrant generation in West Germany in their school education and labor-force participation. On the other hand, the differences between second-generation immigrants and West German women are only significant when the marital status is not taken into account. Married women of the second immigrant generation have birth risks similar to those of West Germans, for whom we observe an interrelation of marriage and first child, too. This shows that the second immigrant generation in West Germany is adopting the West German fertility behavior once married. In order to investigate whether or not the socialization background of the immigrant parents affects their children's family-formation behavior in Germany, one would probably need to analyze the marriage behavior more closely rather than marital childbearing.

Overall, the results indicate that current living circumstances affect fertility decisions, as indicated by the declining birth risks of the first immigrant generation by stay duration and by the lower risks of the second generation. The country of origin does not explain much of the first-birth behavior of immigrants in West Germany. However, since a first child can be seen as the norm in the countries of origin of the women analyzed in this paper and country differences occur mainly in higher parities, further research should study the transition to sub-sequent births as well. It is assumed that socio-economic characteristics and immigration-background variables may have an impact on these transitions different to first birth.

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References

Abadan-Unat, N. 1974. Turkish external migration and social mobility, in P. Benedict, E. Tümertekin and F. Mansur (Eds.), *Turkey. Geographic and Social Perspectives*. Leiden: E. J. Brill, pp. 362–402.

Alders, M. 2000. *Cohort Fertility of Migrant Women in the Netherlands. Developments in Fertility of Women Born in Turkey, Morocco, Suriname, and the Netherlands Antilles and Aruba.* Paper for the BSPS-NVD-URU Conference, 31 August – 1 September 2000, Utrecht: Statistics Netherlands.

Andersson, G. 2004. Childbearing after migration: fertility patterns of foreign-born women in Sweden, *International Migration Review* 38(2): 747–775.

Andersson, G., and K. Scott. 2005. Labour-market status and first-time parenthood: the experience of immigrant women in Sweden, 1981–97, *Population Studies* 59(1): 21–38.

Angenendt, S. 2002. Einwanderungspolitik und Einwanderungsgesetzgebung in Deutschland 2000–2001. in: K. J. Bade and R. Münz (Hgs.), *Migrationsreport 2002. Fakten – Analysen – Perspektiven.* Frankfurt/New York: Campus Verlag, pp. 31–59.

Bade, K. J. 1994. *Ausländer, Aussiedler, Asyl in der Bundesrepublik Deutschland.* 3. Aufl. Hannover: Niedersächsische Landeszentrale für politische Bildung.

Baizan, P., A. Aassve, and F. C. Billari. 2003. Cohabitation, marriage, and first birth: the interrelationship of family formation events in Spain, *European Journal of Population* 19: 147–169.

Bledsoe, C. 2004. Reproduction at the margins: migration and legitimacy in the new Europe, *Demographic Research.* Special Collection 3(4): 86–116. www.demographic-research.org/special/3/4.

Bledsoe, C., R. Houle, and P. Sow. 2007. High fertility Gambians in low fertility Spain: the dynamics of child accumulation across transnational space. *Demographic Research* 16(12): 375–412. www.demographic-research.org/Volumes/Vol16/12/default.htm.

Boyle, P. J., H. Kulu, T. Cooke, V. Gayle, and C. H. Mulder. 2006. *The effect of moving on union dissolution.* Rostock: Max Planck Institute for Demographic Research. WP–2006–002. www.demogr.mpg.de/papers/working/wp-2006-002.pdf.

BMFSFJ – Bundesministerium für Familie, Senioren, Frauen und Jugend. 2000. *Familien ausländischer Herkunft in Deutschland. Leistungen – Belastungen – Herausforderungen. Sechster Familienbericht.* Berlin: BMFSFJ.

Bürkner, H.-J., W. Heller, and J. Unrau. 1987. Rückkehrzwänge und Motivstrukturen türkischer Migranten. Zum Problem der Freiwilligkeit von Remigrations-entscheidungen, *Zeitschrift für Bevölkerungswissenschaft* 13(4): 451–472.

Carlson, E. D. 1985a. The impact of international migration upon timing of marriage and childbearing, *Demography* 22(1): 61–72.

Carlson, E. 1985b. Increased nonmarital births among foreign women in Germany, *Sociology and Social Research* 70(1): 110–111.

Coleman, D. A. 1994. Trends in fertility and intermarriage among immigrant populations in Western Europe as measure of integration, *Journal of Biosocial Science* 26: 107–136.

Constant, A., and D. S. Massey. 2005. Labor market segmentation and the earnings of German guestworkers, *Population Research and Policy Review* 24: 489–512.

Dalla Zuanna, G. 2004. The banquet of Aeolus. A familistic interpretation of Italy's lowest-low fertility, in: G. Dalla Zuanna and G. A. Micheli (Eds.), *Strong Family and Low Fertility: A Paradox? New Perspectives in Interpreting Contemporary Family and Reproductive Behavior.* Dordrecht (*et al.*): Kluwer Academic Publishers, pp. 105–125.

Dornis, C. 2002. Zwei Jahre nach der Reform des Staatsangehörigkeitsrechts – Bilanz und Ausblick, in: K. J. Bade and R. Münz (Hgs.), *Migrationsreport 2002. Fakten – Analysen – Perspektiven. Für den Rat für Migration.* Frankfurt (*et al.*): CampusVerlag, pp. 163–177.

Ergöcmen, B. A., and M. A. Eryurt. 2004. Other proximate determinants of fertility, in Hacettepe University Institute of Population Studies, *Turkey Demographic and Health Survey, 2003.* Ankara: HUIPS, Ministry of Health General Directorate of Mother and Child Health and Family Planning, State Planning Organization and European Union, pp. 89–96.

Fassmann, H. 1997. Is the Austrian labour market ethnically segmented?, *European Journal of Population* 13: 17–32.

Fassmann, H., and R. Münz. 1994. European East-West migration, 1945–1992, *International Migration Review* 28(3): 520–538.

Fleischer, A. 2007. Illegalisierung, Legalisierung und Familienbildungsprozesse: Am Beispiel Kameruner MigrantInnen in Deutschland. Rostock: Max Planck Institute for Demographic Research WP–2007–011. www.demogr.mpg.de/papers/working/wp-2007-011.pdf.

Ford, K. 1990. Duration of residence in the United States and the fertility of U.S. immigrants, *International Migration Review* 24(1): 34–68.

Frank, R., and P. Heuveline. 2005. A cross-over in Mexican and Mexican-American fertility rates: evidence and explanations for an emerging paradox, *Demographic Research* 12(4): 77–104. www.demographicresearch.org/Volumes/Vol12/4/default.htm.

Friedlander, D., Z. Eisenbach, and C. Goldscheider. 1980. Family-size limitation and birth spacing: the fertility transition of African and Asian immigrants in Israel, *Population and Development Review* 6(4): 581–593.

Friedlander, D., and C. Goldscheider. 1978. Immigration, social change and cohort fertility in Israel, *Population Studies* 32(2): 299–317.

Fritzsche, Y. 2000. Die quantitative Studie: Stichprobenstruktur und Feldarbeit, in A. Fischer, Y. Fritzsche, W. Fuchs-Heinritz and R. Münchmeier (Hgs.), *13. Shell Jugendstudie,* Bd. 1/Quantitative Studie. Opladen: Leske+Budrich, pp. 349–378.

Gjerde, J., and A. McCants. 1995. Fertility, marriage, and culture: demographic processes among Norwegian immigrants to the rural middle West, *The Journal of Economic History* 55(4): 860–888.

Goldstein, S. 1973. Interrelations between migration and fertility in Thailand, *Demography* 10(2): 225–241.

Goldstein, S., and A. Goldstein. 1981. The impact of migration on fertility: an 'own children' analysis for Thailand, *Population Studies* 35(2): 265–284.

González-Ferrer, A. 2006. Who do immigrants marry? Partner choice among single immigrants in Germany, *European Sociological Review* 22(2): 171–185.

Gordon, M. 1964. *Assimilation in American Life.* Oxford: Oxford University Press.

Haisken-DeNew, J. P., and J. R. Frick 2003. (Hgs.) *Desktop Companion to the German Socio-Economic Panel Study (SOEP).* Version 7.0 Updated to Wave 19 (S). Berlin: Deutsches Institut für Wirtschaftsforschung.

Hancioglu, A. 1997. Fertility trends in Turkey: 1978–1993, in Hacettepe University Institute of Population Studies/Macro International Inc. (Eds.), *Fertility Trends, Women's Status, and Reproductive Expectations in Turkey. Results of Further Analysis of the 1993 Turkish Demographic and Health Survey.* Calverton: HUIPS and MI, pp. 1–78.

Hancioglu, A., and B. A. Ergöcmen. 2004. Women's characteristics and status, in Hacettepe University Institute of Population Studies: *Turkey Demographic and Health Survey, 2003*. Ankara: HUIPS, Ministry of Health General Directorate of Mother and Child Health and Family Planning, State Planning Organization and European Union, pp. 33–44.

Hionidou, V. 1995. Nuptiality patterns and household structure on the Greek island of Mykonos, *Journal of Family History* 20(2): 67–102.

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*, IUSSP: 22nd International Population Conference, Montreal, Canada*, Volume 3, pp. 281–291.

Höhn, C. 1979. Children of foreigners in the Federal Republic of Germany – a social concern, in M. Macura (Ed.), *The Effect of Current Demographic Change in Europe on Social Structure.* Proceedings of the Third European Population Seminar. Beograd, 26–29 September, 1978. Beograd: Ekonomski Institut, pp. 33–41.

Hwang, S.-S., and R. Saenz. 1997. Fertility of Chinese immigrants in the U.S.: testing a fertility emancipation hypothesis, *Journal of Marriage and the Family* 59(1): 50–61.

Kahn, J. R. 1988. Immigrant selectivity and fertility adaptation in the United States, *Social Forces* 67(1): 108–128.

Kahn, J. R. 1994. Immigrant and native fertility during the 1980s: Adaptation and expectations for the future, *International Migration Review* 28(3): 501–519.

Kane, T. T. 1986. The fertility and assimilation of guestworker populations in the Federal Republic of Germany: 1961–1981. *Zeitschrift für Bevölkerungswissenschaft* 12(1): 99–131.

Khoo, S.-E., P. Mc Donald, D. Giorgas, and B. Birrell. 2002. *Second Generation Australians*. Canberra: Australian Centre for Population and the Department of Immigration and Multicultural and Indigenous Affairs.

Koc, I., and E. Özdemir. 2004. Fertility, in Hacettepe University Institute of Population Studies: *Turkey Demographic and Health Survey, 2003*. Ankara: HUIPS, Ministry of Health General Directorate of Mother and Child Health and Family Planning, State Planning Organization and European Union, pp. 45–58.

Konietzka, D., and H. Seibert. 2003. Deutsche und Ausländer an der „zweiten Schwelle". Eine vergleichende Analyse der Berufseinstiegskohorten 1976–1995 in Westdeutschland, *Zeitschrift für Pädagogik* 49(4): 567–590.

Kreyenfeld, M. 2001: *Employment and Fertility. East Germany in the 1990s*. Rostock: University of Rostock (Doctoral Thesis).

Kreyenfeld, M. 2002. Time squeeze, partner effect or self-selection? An investigation into the positive effect of women's education on second birth risks in West Germany, *Demographic Research* 7(2): 15–48. www.demographic-research.org/Volumes/Vol7/2/default.htm.

Kulu, H. 2006. Fertility of internal migrants: comparison between Austria and Poland, *Population, Space and Place* 12: 147–170.

Kulu, H. 2005. Migration and fertility: competing hypotheses re-examined, *European Journal of Population* 21: 51–87.

Landale, N. S., and S. M. Hauan. 1996. Migration and premarital childbearing among Puerto Rican women, *Demography* 33(4): 429–442.

Lindstrom, D. P., and S. Giorguli Saucedo. 2007. The interrelationship of fertility, family maintenance, and Mexico-U.S. Migration, *Demographic Research.* 17(28): 821–858. www.demographic-research.org/Volumes/Vol17/28/default.htm.

Macisco, J. J., L. F. Bouvier, and R. H. Weller. 1970. The effect of labor force participation on the relation between migration status and fertility in San Juan, Puerto Rico, *The Milbank Memorial Fund Quarterly* 48(1): 51–70.

Mayer, J., and R. T. Riphahn. 2000. Fertility assimilation if immigrants: evidence from count data models, *Journal of Population Economics* 13: 241–261.

Migrationsbericht (2003) *Migrationsbericht der Beauftragten der Bundesregierung für Migration, Flüchtlinge und Integration im Auftrag der Bundesregierung.*

Milewski, N. 2003. Partner selection by immigrants in Germany: the impact of religious affiliation and education on age at marriage, *Anthropologie* 41(3): 291–294.

Münscher, A. 1979. *Ausländische Familien in der Bundesrepublik Deutschland – Familiennachzug und generatives Verhalten.* München: DJI Verlag Deutsches Jugendinstitut.

Münz, R., and R. Ulrich. 2000. Die ethnische und demographische Struktur von Ausländern und Zuwanderern in Deutschland, in R. Alba, P. Schmidt und M. Wasmer (Hgs.), *Deutsche und Ausländer: Freunde, Fremde oder Feinde? Empirische Befunde und theoretische Erklärungen*. Wiesbaden: Westdeutscher Verlag, pp. 11–54.

Mulder, C. H., and M. Wagner. 1993. Migration and marriage in the life course: a method for studying synchronized events, *European Journal of Population* 9: 55–76.

Nahmias, P. 2004. Fertility behavior of recent immigrants to Israel: a comparative analysis of immigrants from Ethiopia and the former Soviet Union, *Demographic Research*, 10(4): 83–120. www.demographic-research.org/Volumes/Vol10/4/default.htm.

Nauck, B. 1987. Individuelle und kontextuelle Faktoren der Kinderzahl in türkischen Migrantenfamilien, *Zeitschrift für Bevölkerungswissenschaft* 13(3): 319–344.

Ng, E., and F. Nault. 1997. Fertility among recent immigrant women to Canada, 1991: an examination of the disruption hypothesis, *International Migration Review* 35(4): 559–580.

Portes, A., and M. Zhou. 1993. *The New Second Generation: Segmented Assimilation and Its Variants. Annals of the American Academy of Political and Social Science 530.* Interminority Affairs in the U.S.: Pluralism at the Crossroads: pp. 74–96.

Reher, D. S. 2004. Family ties in Western Europe: persisting contrasts, in G. Dalla Zuanna and G. A. Micheli (Eds.), *Strong Family and Low Fertility: A Paradox? New Perspectives in Interpreting Contemporary Family and Reproductive Behavior.* Dordrecht (*et al.*): Kluwer Academic Publishers, pp. 45–76.

Rindfuss, R. R. 1976. Fertility and migration: the case of Puerto Rico, *International Migration Review* 10(2): 191–203.

Roloff, J. 1997. Die ausländische und deutsche Bevölkerung in der Bundesrepublik Deutschland – ein bevölkerungsstatistischer Vergleich, *Zeitschrift für Bevölkerungswissenschaft* 22(1): 73–98.

Roloff, J. 1998. Eheschließungen und Ehescheidungen von und mit Ausländern in Deutschland, *Zeitschrift für Bevölkerungswissenschaft* 23(3): 319–334.

Ronge, V. 1997. German policies toward ethnic German minorities, in R. Münz and M. Weiner (Eds.), *Migrants, Refugees, and Foreign Policy. U.S. and German Policies Towards Countries of Origin.* Vol. 2. Providence/Oxford: Berghahn Books, pp. 117–140.

Rosina, A. 2004. Family formation and fertility in Italy: a cohort perspective, in G. Dalla Zuanna and G. A. Micheli (Eds.), *Strong Family and Low Fertility: A Paradox? New Perspectives in Interpreting Contemporary Family and Reproductive Behavior.* Dordrecht (*et al.*): Kluwer Acadamic Publishers, pp. 23–43.

Rudolph, H. 2002. Dynamics of immigration in a nonimmigrant country: Germany, in H. Fassmann and R. Münz (Eds.), *European Migration in the Late Twentieth Century. Historical Patterns, Actual Trends, and Social Implications.* 2nd ed. Laxenburg: IIASA, pp. 113–126.

Saenz, R., S.-S. Hwang, and B. E. Aguirre. 1994. In search of Asian war brides, *Demography* 31(3): 549–559.

Schoenmaeckers, R. C., E. Lodewijckx, and S. Gadeyne. 1998. Vruchtbaarheid bij Turkse en Marokkaanse vrouwen in Belgie: resultaten van de volkstellingen, *Bevolking en Gezin* 27(3): 127–154.

Schoorl, J. J. 1990. Fertility adaptation of Turkish and Moroccan women in the Netherlands, *International Migration* 28: 477–495.

Schwarz, K. 1996. Die Kinderzahl der Ausländer und ihre Bedeutung für die Bevölkerungsentwicklung in den alten Bundesländern, *Zeitschrift für Bevölkerungswissenschaft* 21(1): 57–67.

Seifert, W. 1997. Occupational and economic mobility and social integration of Mediterranean migrants in Germany, *European Journal of Population* 13: 1–16.

Shorter, F. C., and M. Macura. 1982. *Trends in Fertility and Mortality in Turkey, 1935–1975.* Washington DC: Committee on Population and Demography Report No. 8.

Singley, S. G., and N. S. Landale. 1998. Incorporating origin and process in migration-fertility frameworks: the case of Puerto Rican women, *Social Forces* 76(4): 1437–1464.

StaBA – Statistisches Bundesamt. 2006. *Gebiet und Bevölkerung – Ausländische Bevölkerung*. www.statistik-portal.de/Statistik-Portal/de_jb01_jahrtab2.asp.

Stephen, E. H., and F. D. Bean. 1992. Assimilation, disruption and the fertility of Mexican–origin women in the United States, *International Migration Review* 26(1): 67–88.

Straßburger, G. 2000. Transnationalität und Einbürgerung: Defizite in der statistischen Erfassung der Eheschließungen von Migranten, in J. Dorbritz und J. Otto (Hgs.), *Einwanderungsregion Europa?* 33. Arbeitstagung der Deutschen Gesellschaft für Bevölkerungswissenschaft (DGBw) in Zusammenarbeit mit dem Institut für Migrationsforschung und Interkulturelle Studien der Universität Osnabrück (IMIS). Osnabrück, 21. bis 23. April 1999. Materialien zur 3. Bevölkerungswissenschaft 99. Wiesbaden: Bundesinstitut für Bevölkerungsforschung, pp. 81–95.

Straßburger, G. 2003. *Heiratsverhalten und Partnerwahl im Einwanderungskontext. Eheschließungen der zweiten Migrantengeneration türkischer Herkunft.* Würzburg: Ergon Verlag (Doctoral Thesis).

Toros, A. 1994. Fertility, in Ministry of Health, Hacettepe University Institute of Population Studies, and Macro International Inc. (Eds.): *Turkish Demographic and Health Survey 1993*. Ankara: HUIPS, pp. 23–32.

Toulemon, L., and M. Mazuy. 2004. *Comment prendre en compte l'âge à l'arrivée et le durée de séjour en France dans la mesure de la fécondité des immigrants?,* Documents de travail 120. Paris: Institut National d`Etudes Démographiques.

Vaskovics, L. A. 1987. Geburtenentwicklung, Fruchtbarkeit und demographische Entwicklung bei Gastarbeitern, in H. Reimann und H. Reimann (Hgs.), *Gastarbeiter*. 2. Aufl. Opladen: Leske+Budrich, pp. 222–242.