

Introduction: Fertility and Social Inequalities in Migrant Populations: a Look at the Roles of Selection, Context of Reception, and Employment

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Abstract

This paper is the introduction to the Special Issue on "Fertility and social inequalities in migrant populations." The Special Issue contains twelve empirical papers that deal with both international migrants and internal migrants, both women and men, both older migrant populations spanning several generations as well as recent immigrant groups, such as refugees, and include analyses of both behavior and intentions. The data used comprise macro indicators and individual-level data as well as qualitative material. Regional contexts include classical immigration countries in Europe and Oceania as well as relatively recent destinations. The papers draw on several comparative perspectives-migrants at destination, emigrants and stayers at origin, migrants with different numbers of children upon migration, and different migrant generations—to address three large questions. Six papers explore the role of time and sequencing in migrant fertility, in relation to both period effects and sequencing of births in the life course, as well as the role selection into migration plays in female and male migrants' fertility behavior. Four papers focus into how regional variation in the receiving contexts shapes fertility behavior, highlighting the role of migrant type, human capital, and social capital. Two papers look at how childbearing is associated with different degrees of economic assimilation, i.e., maternal employment. Overall, this Special Issue demonstrates the large heterogeneity in fertility among migrant and ethnic minority groups. Social inequalities shape fertility differentials, which in turn influence subsequent life courses of migrants and ethnic minority group members. Future research on migrant assimilation should pay more attention to variation in demographic behavior.

Keywords Migrants · Fertility · Demographic behavior · Maternal employment · Selection · Heterogeneity

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Motivation

This paper introduces the Special Issue on "Fertility and social inequalities in migrant populations: a look at the roles of selection, context of reception, and employment." Given large demographic differentials between origins and destinations, previous research on migrant fertility centered on whether migrant outcomes may converge to that of the respective majority populations-in the tradition of the classic assimilation approaches (Coleman, 1994; Gordon, 1964). Recent research, however, arrives at different conclusions. Adserà (2017, p. 86), for example, notes that the question of convergence may become "outdated" because fertility differentials decrease between receiving contexts in the Global North and potential sending countries in the Global South. By contrast, Kulu et al. (2019) find a large heterogeneity of fertility patterns among immigrant descendants across European countries and prompt the question for future research "whether the observed heterogeneity in childbearing patterns is likely to decline over generations or the diversity is here to stay" (Kulu et al., 2019: p. 1345). The Special Issue does not primarily aim to answer the question of convergence but rather draws attention to the heterogeneity within the subject by looking at fertility differentials and social inequalities across different groupings and time. As detailed below, this topic was motivated by five different strands of literature, which we aim to bring together.

Fertility, jointly with migration and mortality, is one of the driving forces of population dynamics and of social reproduction. Demographic patterns post World War II in the Global North were driven by **ideational changes on gender equality and the institution of the family**, such as increased union instability, a decline of marriage, and the decreased association of marriage and childbearing—these developments are labeled as *Second Demographic Transition Theory* (Lesthaeghe, 1995; van de Kaa, 1997, 2001) and are important contributors to contemporary low fertility in the Global North. What we understand by low fertility spans from on average just above one child to about two children per woman. The upper range is near the population replacement level (2.1), and the lower margin implies that subsequent generations of women are just about half the size of the previous ones. Implications of such lowest-low fertility are rapid population aging, a decline in labor supply, and ultimately, a decrease in population size.

Countries of the Global North are not only characterized by low fertility and population aging, but also by large-scale immigration. **Immigrants are an increasingly heterogenous** population with respect to legal status, religion, language, and other characteristics, what Vertovec (2007) refers to as *super diversity*. After more than halfa-century of large-scale immigration, migrant descendants born in receiving countries (the second generation) constitute a large share of the population in the Global North that receives increasing scholarly attention (de Valk & Milewski, 2011; Simon & Piché, 2012). As destinations host several migrant generations from the same origins, some first-generation migrants arrive under different legal conditions of entry, or with different knowledge of the host-country language than earlier ones (Erman, 2022).

Against the backdrop of profound demographic change and rising shares of immigrants in receiving countries, **immigrant's fertility** emerges as an important research topic in Western countries at the end of the twentieth century. Most of this research studies the impact of the migration event on an individual's subsequent life course, drawing on similarities between internal and international migrants (Kulu & Milewski, 2007), or comparing the first migrant generation and their descendants and/or migrants from different countries of origin (Adserà & Ferrer, 2015; Kulu and González-Ferrer, 2014; Kulu et al., 2019). These works mostly emphasize the life-course approach as a research perspective (Giele & Elder, 1998), which looks at the individual level and focuses on the sequencing of events such as moving, marrying, and giving birth, and their interrelatedness with changes in other life domains of individuals, their social relations, and societal context. Recently, studies on the ideational dimension of fertility, such as values, attitudes, and norms toward number of children, timing of births, and family-planning methods complement earlier literature (Milewski & Mussino, 2018). Still, the impact of immigration on fertility, population diversity, social change, or variation in family patterns on the whole population in receiving countries is hardly investigated (Bagavos, 2019; Sobotka, 2008). Rather, immigrants are studied-as in most empirical studies on migration and integration-in relation to the majority populations, thus emphasizing the differences between the long-term residents and the relatively recently arrived ones (Schinkel, 2019). This perspective neglects variation in both the majority and the immigrant populations.

Immigrants' attitudes toward fertility or female labor market participation, among others, may differ from those of host societies if their countries of origin differ from destinations in demographic patterns, gender-role behavior, value of children and/or religiosity, all of which constitute crucial markers of migrant assimilation (or barriers to it) (Foner & Alba, 2008; Koopmans, 2016). Some of these differences may even persist among second-generations and beyond. Researchers employed information of countries of parental ancestry, to find continuities in fertility and employment behavior of second-generation individuals who were not born in those countries (Fernandez & Fogli, 2006, 2009). Thus, fertility and employment differentials across social groups may therefore also lead to the persistence of social inequalities across them. However, as the immigrant literature recognizes, **migrants may be selected** from the origin population and differ systematically from non-migrants in their countries of origin (Borjas, 1987), their fertility preferences may resemble more those of the destination country, and this selectivity may explain their subsequent fertility and employment patterns (Blau, 1992; Forste & Tienda, 1996; Sobotka, 2008). Understanding selection processes should be central to the literature.

Contemporary industrialized countries are characterized by **growing social inequalities** (Adserà, 2017) that **can impact especially immigrant populations** if they are excluded from economic gains, and this hampers their assimilation processes in the country. Unequal access to the labor market, to information, or to services may affect female labor force participation among migrants. Lack of role models among working mothers may, in turn, impact employment and fertility patterns of their offspring. The more fragile economic situation of migrants during recent crises led to different outcomes across destination countries: either migrants were particularly hit economically during the crises and their fertility fell relatively more (at least temporarily) in many places (such as the USA or Southern Europe); or inequality (exacerbated by the crises) could per se exclude migrant women from labor market isolating them more, reduce their household income, and, in turn, impact negatively their children's socioeconomic outcomes such as education, health, or future access to employment.

Studying Migrant Fertility

Keeping these five strands of research as a motivational background, a brief overview of how the literature on migrant fertility evolved since its inception allows the reader to better understand the specific contributions of these collection of papers.¹ The first phase of migrant fertility research started around 1990 until the years 2000s, when immigrants in western Europe had turned into stable resident populations following large-scale labor immigration (including so-called guest worker programs) and/or migration from the colonial territories to the "mainland" in Europe. Childbearing took place to an increasing extent in these receiving countries, and a second generation grew up in those countries. Demographers and economists started to calculate the number of children of migrants (Mayer & Riphahn, 2000/Germany), or their total fertility rate (TFR) (Toulemon, 2004/France), (Coleman, 1994/UK; Kane, 1986/Germany; Schoenmaeckers et al., 1998/Belgium; Schoorl, 1990/The Netherlands) after migrating. These studies mainly used aggregate data or summary measures in the tradition of population studies. Only few studies looked at fertility of migrants before and after their relocations (Dinkel & Lebok, 1997).

In the 2010s, work on migrant fertility emerged from multiple disciplines. Social demographers increased their attention to the individual behavior; the life-course approach flourished. This was fostered by increasingly available individual-level data from official statistics or social surveys, which now included at least some migrant groups and/or accounted for the "migration status" of the respondents (Kulu & Milewski, 2007). On the macro level, demographers were particularly interested in replacement fertility; i.e., whether immigration could prevent population decline in Western European countries with low fertility (Bagavos, 2019; Sobotka, 2008). Additionally, migrant fertility was interesting from a methodological perspective: an open question was whether demographers could work with the same assumptions for all population subgroups, or needed to account for population heterogeneity, for example, in population projections (Bohk, 2012). Perhaps more in the tradition of human geography, how migrating or moving impacted the subsequent life course of individuals became central to immigrant's fertility research (Kulu, 2005).

A new theoretical framework developed, which draws from various disciplines and relates to the classical assimilation theory. It centers around three main mechanisms to explain migrant-nonmigrant fertility differentials that are not mutually exclusive, but rather complement each other (Adserà & Ferrer, 2015; Kulu et al., 2019). First, migration over national borders or within a country is characterized as a stressful process associated with further impacts on the subsequent life course such as fertility disruption. Second, selection into migration may result into unobserved and observed (compositional) differences between migrant and non-migrant groups that account, at least in part, for fertility differentials. One prominent example is the interrelation-of-events-effect; migrants exhibit shortly after arrival elevated birth transition rates, which are caused by selection into migration based on marriage or family reunification

¹ A few detailed literature reviews were published rather recently (Kulu et al., 2019; Milewski & Mussino, 2018).

(Milewski, 2007). Others show that such elevated birth rates follow a phase of spousal separation in the life course, and childbearing marks the end of this disruptive phase (Adserà & Ferrer, 2016), while in other countries, where family policy measures depend more on having gainful employment prior to birth, immigrants establish first in the labor market and then have children (Andersson & Scott, 2005). Third, adaptation processes at destination generally lead to declining fertility differentials.

To what extent adaptation exists (or not) depends on the initial fertility differential between origin and destination contexts upon migration. The impact on fertility behavior of the societal context in which migrants experience their primary socialization and which may be different from that of their later destination country is referred to as the socialization hypothesis. The recognition of cross-cultural fertility differentials gives rise to studies of within-migrant variation by their country of origin. Multiple papers study the continuities of fertility across generations applying an epidemiological perspective by looking at whether behaviors from the country of ancestry of migrants or parents of second generation significantly explain variation on behavior of migrant children in destination countries (Fernandez & Fogli, 2009, as an example). Similar to classical and new assimilation theories, research on migrant fertility expands its scope to the second generation and compares different migrant generations, suggesting the importance of intergenerational transmission. In relation to this, researchers analyze whether certain immigrant groups may become minority groups and preserve distinct patterns of family formation compared to the majority group (de Valk & Milewski, 2011; Milewski, 2010). More recent research points to the importance of the periodcohort perspective. Current immigrant populations are not only diverse with respect to their national origins, but also different migrant generations of the same origin are present in destination countries at the same time due to international migration systems, such as the Mexican or the Turkish migration systems (Erman, 2022).

Concurrent with increasing immigration flows, destination countries also experience profound social and demographic change. While all industrialized receiving countries have relatively low fertility levels, there is substantial cross-country variation in the life-course patterns associated with those, such as non-marital cohabitation, out-of-wedlock birth, postponement of marriage and childbearing as well as female labor force participation. This cross-country variation shows that "... the major misconception ... (of the Second Demographic Transition Theory-added by the authors) ... is the expectancy of a highly uniform process especially vis-à-vis the timing of particular societal changes and an expected fertility response" (Johnson-Hanks et al., 2011, p. 4). An open question remains of whether, while migrant destination countries exhibit much cross- and within-country variation, immigrants contribute to this diversity (Kulu et al., 2019). It is also unclear under which conditions ethnic segregation in immigrant destinations may hamper the diffusion of attitudinal and demographic change (Esping-Andersen & Billari, 2015) and whether migrants' demographic trends will ultimately resemble those of the majority populations. This Special Issue is inspired by the approach to understanding the variation in demographic change (Johnson-Hanks et al., 2011) in migrant populations. Following recent work that suggests the need to focus more into within-migrant variation, the twelve papers in this collection pay special attention to how the interrelationship of social inequalities and fertility explains whether or not differences persist.

The Contributions of the Special Issue

The research questions of the Special Issue are organized around three main themes. The first topic addresses how time affects the fertility of migrants with regard to both period effects and sequencing of births in the life course as well as how selection into migration impacts subsequent fertility behavior. The second topic revolves around how regional variation in the receiving contexts in combination with human and social capital heterogeneity shape fertility behavior. The interaction of maternal employment and educational trajectories and its effect on fertility is the third focus of the Special Issue.

Selection into Migration and Variation in Fertility—Age, Time, and Gender

The first part of the Special Issue centers on "Selection into Migration and Variation in Fertility—Age, Time, and Gender" A long-standing literature shows that selection is central to the occurrence of international migration. Selection can occur in different dimensions: economic incentives and expectations of return in the destination market as compared to origin (Borjas, 1987); on similarity of preferences on fertility or social norms, in general, with the destination country (Blau, 1992; Forste & Tienda, 1996), or on the life-cycle and parenthood status of individuals when making the migration decision (Dinkel & Lebok, 1997). In addition, within the traditions of the life-course approach and of assimilation theories, the literature mainly focuses on the impact of the migration event on subsequent events in the life course, such as childbirth, and on migrant-nonmigrant differentials in receiving contexts.

Demographers work with various measures of fertility, covering aspects of quantum and timing as well as their interrelationships and with different strengths and limitations. When researching migrant fertility, deciding what is the best measure is even more complex (see Tønnessen & Wilson). A first implicit, but fundamental question in that task is what children need to be counted when we measure migrant fertility. Usually, the lenses of assimilationist approaches to study immigrant fertility are to compare immigrants to non-migrant populations at destination. Individuals may, however, become migrants only after having children and may migrate with or without them. Children born prior to their parents migrating are counted in demographic data as migrants themselves; strictly speaking they are not part of migrant fertility in destination, but just children of migrants. Official national statistics register the births occurring within their countries. This data artifact leads to an underestimation of the total number of children a migrant woman has and limits the ability of researchers to estimate the impact of previous births on birth spacing or future fertility.

Similarly, with the life-course focus in social demography, children born prior to moving become rather neglected. The life-course logic posits to look at each birth transition separately (events; cornerstones). This procedure has several advantages, such as allowing to better understand patterns of fertility with respect to timing and sequencing of events in the life course and to estimate whether any determinant impacts parity transitions differentially. The drawback of the parity-specific view in an assimilation framework is that this research covers mainly—if not only—childbearing behavior relevant for the majority population; i.e., generally the first three births. Immigrants who have their first child before moving are usually not considered as belonging to the *population at risk of having a first birth* because at the time they are childless, they belong to the population in their country of origin. Moreover, this literature pays attention to moving itself as an event in the life course with implications for the subsequent family transitions (Kulu & Milewski, 2007). As a result, researchers studying the transition to the first birth only include in their samples immigrants who are childless upon their move. Parities above three are usually not investigated at all—despite likely being more relevant for immigrants than for non-migrants. This leads to a mismatch of fertility quantum in demographic studies and the (on average higher) actual number of children in migrant families (summing up pre- and post-migration births).

Previous work includes some attempts to solve the problem of this gap. Kulu et al. (2017) analyze the birth transitions of migrant descendants in European countries and use the first-migrant generation as reference group—no matter whether their first birth occurs before or after moving. Wilson (2019) argues from the perspective of intergenerational transmission and includes the first migrant generation with all children as reference point for the second generation. Comparing the completed number of children of the second generation to all children in the first generation suggests that the processes of adaptation toward the majority populations and the changes as compared to the first generation are for some migrant groups even more pronounced than seen when only partial fertility is analyzed; for others, intergenerational transmission of higher fertility and the migrant-nonmigrant difference is larger.

Another aspect of time that is receiving growing attention in social demography is the age at arrival of migrant children. This parallels research in other aspects of migrant assimilation, such as schooling or labor-market activity (Bleakley & Chin, 2010). Overall, age at migration matters for migrant fertility in the way that adaptation processes are more pronounced the younger the migrants are upon moving (Adserà et al., 2012). And the older the migrants are upon moving, the more selection plays a role. Tønnessen and Wilson introduce a novel visual framework based on cohort fertility curves (the average number of children ever born by age of the woman) that shows life-course profiles of immigrant childbearing in Norway. The authors demonstrate, for example, that immigrant groups, which vary by legal status/reason for migration, also vary in their age and number of children at arrival, which also leads to differences in the number of children ever born toward the end of the reproductive life span of immigrant women. It suggests that we should think differently about migrants and their family dynamics depending on all those variables that matter, such as the age at which migrants arrive, previous fertility, and cohort of arrival.

To understand the role of selection into migration on fertility behavior, social inequalities need to be considered as well. Education is a crucial determinant of fertility, and it matters for variation in migrant fertility. Baffour et al. focus on withinmigrant variation in Australia over a time span of 35 years. The reading suggests that fertility change is not uni-directional from migrants toward non-migrants at destination, but that there is substantial variation in change at origins, regional heterogeneity in the receiving context within one country as well as changing selectivity into migration—a "postponement pattern" is found among highly skilled migrants. Much of the previous research on migrant fertility looks at the role of internal moves or on international migration. Ethnic diversity is perceived mainly as arising from international migrants turning into stable resident populations. Kazenin and Kozlov investigate the associations of ethnicity, internal moving, and fertility among women in a long-term poly-ethnic context, i.e., in Daghestan (North Caucasus), which is an example of an urban population with a majority of migrants and descendants of several ethnicities. The authors find education having a moderating effect and conclude that ethnic differentials in labor market participation across ethnic groups may play a role, which implies differential opportunity costs of fertility.

Selection into migration connects to the question in contemporary migration research of what the appropriate comparison group is. A small number of studies on migrant fertility introduce the population of/ at origin as reference group, following the pioneering work of the Mexican American Migration Project (Massey & Espinosa, 1997). While not being the main focus of some data collections, the study of migrant fertility benefits from projects like TIES (The Integration of the European Second Generation; Crul et al., 2012), which compares migrant descendants of three migrant worker origin groups in several European destination countries, and MAFE (Migration between Africa and Europe; Beauchemin, 2018), which pursues a similar endeavor for migrants from two sub-Saharan countries to three destinations in Europe. The 2000 Families study focuses only on one origin context (Turkey; Güveli et al., 2016) and investigates emigrants and their descendants in comparison to the stayers at origin. Both country contexts at origin and at destination become important in this kind of analyses either as comparative integration context, analyzing rather homogenous origin groups in different reception contexts, or in a dissimilation perspective, the comparison of emigrants to stayers at their origin. Both approaches have in common that they analyze and explain variation within migrant groups.

Strictly speaking, these perspectives also allow to look at the role of selection into migration and its impact on subsequent demographic behavior better than approaches just comparing immigrants to non-migrants at destination (Baykara-Krumme & Milewski, 2017; Impicciatore et al., 2020). Selection effects are important for the understanding of not only migrant fertility, but also structural measures of migrant participation, most importantly education and labor force participation (Borjas, 1987). Moreover, transnational perspectives (Glick, 2010) show that both conditions in destination societies as well as in the homeland community matter for family lives of migrants. Family research shows that individuals draw on resources and family networks in both origin and destination contexts; individuals redefine their own role in the family as well as their life course constantly in a rather dynamic way. These processes may also result in a new consensus about altered roles and responsibilities within families, including gender roles (Aybek & Milewski, 2019). The inclusion of destination and origin of migrants appears even more important in contexts of rapid social change. Different cohorts of emigrants from the same origin may exhibit different demographic behavior not (only) due to adaptation processes at their destination, but also because their country of origin is undergoing demographic changes.

Research on migration came a long way in the past decades (Cooke, 2008), from the (economic) focus on the male migrant as the one initiating the international move and the "trailing wife." Today we know that international migration involves not only men and couples, but also women (Donato et al., 2011) and multi-generational households. Migrants are subject to various policy levels. Potential conflict areas arise when policies that target different goals interfere with each other. As an example, think of entrance regulations into EU countries for third-country nationals. At present, the main legal option in most EU countries is family migration. If marriage and migration coincide, and if partners are not permitted to work (as in some EU countries temporarily), it is not surprising to see rather elevated first-birth rates in the first years after migration (Milewski, 2007). Thus, legal circumstances foster the traditional male breadwinner model and may thus reinforce gender-role attitudes, which may have caused selection into migration in the first place. A crucial proxy for gender-role attitudes and socio-demographic differences between migrants and non-migrants is education as well as fertility differentials (Adserà, 2017). Past studies on post-migration fertility look almost exclusively at women.

In the Special Issue, the authors draw attention also to gendered effects of selection into migration and fertility, applying the origin-destination, or transnational, perspective. Ammann Dula takes the focus on social inequalities in an intergenerational comparison a step further by looking at variation within transnational families from the Balkan region. The study shows that members within transnational families of the same origin develop diverse strategies to deal with exclusion and discrimination processes, comparing their positions in transnational fields. Gender roles and attempts for social mobility, such as higher education and employment, need to be negotiated with institutional constraints in childcare work. Milewski and Baykara-Krumme focus on male migrants' fertility from Turkey applying the dissimilation perspective. Similar to previous findings on emigrant women, they find that first-generation migrant men have increased first-birth transitions compared to stayers at origin, and that they are closely linked to marriage and migration. Migrants' overall numbers of children, however, are smaller than those of the stayers in Turkey. Thus, the findings indicate that there are crossover trends among emigrant men characterized by higher rates of transition to family formation linked to migration, but lower overall fertility. Kraus and González-Ferrer take a couple perspective to estimate birth transitions among emigrants from Senegal to Europe. Despite similarities with other migration systems like the Turkish one, the Senegal-to-Europe migration system has a peculiarity important for family demography-polygamy is a legal and frequent family type in Senegal. This family type collides with European legal conditions both for marriage as well as for family migration and is therefore even more subject to disruption processes. Kraus and González-Ferrer find lower fertility both for women and men compared to stayers at origin independently on whether the man, the woman, or both partners ever migrated. The authors interpret their findings as evidence for disruption effects. Lower fertility was mainly found among emigrants in polygamous constellations.

Context Heterogeneity and Fertility—Migrant Type, Human Capital, and Social Capital

The second part of the Special Issue delves deeper into aspects of within-migrant variation in fertility. In a cross-country perspective, studies on one origin group in

multiple destinations (Milewski, 2011) or studies on multiple groups in multiple destinations (Kulu et al., 2017) demonstrate that the national receiving context matters in shaping migrants' adaptation processes. Within countries, however, spatial variation is less explored, in part due to lack of appropriate data. Previous research focuses mainly on socio-demographic determinants of fertility assuming similar effects for migrants as for non-migrants of the local context. Yet the direction of the impact of local unemployment on fertility cannot be unambiguously predicted and may be driven by differences in the spatial distribution of individual characteristics (Hank, 2002). Balbo et al. (2013) provide a good overview of how both economic and cultural contexts (macro-level factors) as well as local networks with whom individuals interact (meso-factors) shape fertility. They also note the difficulties of measuring some of these factors such as, for example, peer interactions at a local level. Further, several authors point out that education may interact with the environment to produce differential fertility behavior. Individuals with different education may face distinct constraints and opportunities in the labor market, and those gaps may be larger for migrants in a context of rising inequality (Adserà, 2017; Kulu et al., 2019).

Educational attainment is not only a crucial determinant of immigrant adaptation; it is also a structural condition. Differences in educational attainment across groups and in particular, between migrants and non-migrants, can be the result of segregation in the schooling system, both across educational tracks and across geographical boundaries. As lower educational tracks are associated with higher co-ethnic presence for migrants, more intense interaction with co-ethnic peers may increase the likelihood of intergenerational transmission and ethnic-minority patterns. By contrast, higher education may foster inter-ethnic/bridging social capital (Putnam, 2007) and therefore more adaptive behavior in migrant groups.

As migrants live mostly in urban spaces, and there are substantial rural-urbandifferences among non-migrants, as well as variation in ethnic segregation of migrants within urban regions, how region/place and education interact is an important research question. A large literature on ethnic enclaves posits that previously settled migrants in the same municipality/neighborhood constitute social networks that can offer information and support to new arrivals (Bertrand et al., 2000; Damm, 2009) and notes that the quality of those networks (measured by average educational attainment of the peers) is relevant for migrant outcomes (Borjas, 1995). Neighborhood interactions are found to matter for fertility in different settings (Hill & Johnson, 2004; Kulu et al., 2017; Wilson & Kuha, 2018). The paper by Puur et al. takes advantage of the detailed information of the Finnish register to analyze the association between the composition of the neighborhoods where migrants live and their childbearing patterns. They analyze transitions to first, second, and third births among immigrant women of African and Middle Eastern origin (and their descendants) whose fertility patterns are markedly different from those of the host society. The paper shows that a higher concentration of co-ethnic immigrants in the residential neighborhood of the migrants is associated with an elevated propensity of having a second and third child, even among child migrants and the second generation. Another important area of social networks is the workplace which is more diverse on average than residential neighborhoods (Lichter et al., 1991). Thus, if migrants

are actively attached to the labor market, the heterogeneity of their networks and their exposure to local social norms is likely much larger than if they are not. The paper by Puur et al. also includes an analysis of the ethnic composition of co-workers. Measuring human interactions in space and time to develop indicators of diversity is an important goal for contextual research and is attracting the use of promising methods such as tracking mobile phone use (Palmer et al., 2013).

Even though local contextual factors are clearly associated with individual fertility choices (Dribe et al., 2017; Kulu & Washbrook, 2014), the ability to draw strong conclusions about the causal impact of those factors is limited by the fact that individuals generally select their residential location. Some researchers use the composition of childhood residential neighborhood of immigrants as measure of contextual exposure with the argument that the selection of residence is one step removed from the individual, as it is the parents rather than them, who select the place of residence. Wilson and Kuha (2018) show that high community-level concentration of ethnic peers during childhood increases fertility of secondgeneration migrants or child migrants. The paper by Andersen et al. employs the quasi random assignment of refugees across municipalities in Norway to draw a stronger statement about the role of contextual characteristics on subsequent fertility. A large literature previously used refugee assignment policies to measure multiple migrant outcomes such as employment (for example, Aslund & Rooth, 2007; Edin et al., 2004), but research on fertility was missing. Results by Andersen et al. show some heterogeneity on the importance of context by education and parity at settlement. While the share of non-Western immigrants already living in the municipality is not associated with fertility, the municipality's fertility rate is positively correlated with the likelihood of giving birth to a child in Norway, especially for women who are childless at arrival. The links between local unemployment rates and fertility are heterogenous across education groups, with high total unemployment reducing the fertility of middle educated women and migrant unemployment increasing fertility among the least educated.

Finally, it is important to highlight another form of migrant heterogeneity with regard to both legal status and reasons for migration and its potential impact on fertility behavior. Human capital and migrant type clearly intersect as migrants moving for economic reasons may likely self-select according to the needs of the local market as opposed to refugees whose destination choices are rather constrained. Those differences may impact differentially the work and family trajectories of those migrant groups, especially among women. The literature finds a gap in the entry of refugees into the labor market compared to that of work migrants during the first years after arrival (Brell et al., 2020) and among low-educated refugees, particularly women, the pace of entry is slower (Adserà et al., 2022). Below, in the last section of this piece, we discuss further the role of female labor market participation on fertility.

In some instances, the pace of migrant adaptation may be faster with regard to demographic behavior than in terms of the overall cultural adaptation (such as gender role norms). Recent literature on migrant fertility includes work on the ideational dimension of fertility and family planning and finds significant migrantnonmigrant differences in values and attitudes, but somewhat smaller differences in short-term intentions across groups (Holland & de Valk, 2013; Milewski & Mussino, 2018). Not surprisingly, age at migration stands as an important factor to explain the extent of cultural adaptation in the same way it has been shown to impact fertility behavior (Adserà et al., 2012). Mussino et al. contribute to the growing literature on fertility intentions among immigrants in Italy. They estimate the factors associated with strong intentions to have a child (or positive fertility intention) and strong intentions not to have a child (or negative fertility intention) in the short term. Migrant women have both higher positive and lower negative (net) fertility intentions are different for natives and migrants as a function of age, educational level, marital status, parity, homeownership, and, notably, labor market status. Among migrant women fertility intentions vary by age at arrival and time since migration with significant heterogeneity by origin.

Gender-roles attitudes and the perceived value of children are crucial indicators of cultural differences around the globe and also between migrants and non-migrants from regions with different family norms. How persistent those gender norms and ethnic identity are among migrants (and, most importantly, their offspring) in destination countries is likely highly intertwined with both the reception context (Portes & Zhou, 1993) and the educational opportunities they face (such as tracking systems) in a similar way to their performance (Cobb-Clark et al., 2012). The paper by Nauck in the Special Issue addresses both the relevance of context and heterogeneity, in this case for educational outcomes, as consequential for later life-course outcomes. The paper highlights how parental background, parent–child relationship, and institutional differences interact in determining second-generation youth's educational aspirations in a comparative European setting. It tests for effects of academic trajectories on the multidimensional concept of ethnic retention at the end of lower secondary school and finds some variation across countries.

Socio-Economic Heterogeneity—Fertility and Employment

As noted, fertility variation between and within migrant groups of different origins may be associated to what degree cultural values and ethnic identity from origin countries persist over time. Some research specifically relates long-run fertility differentials to the development of a migrant-minority status, i.e., belonging over more than two generations into a minority group (Bean & Tienda, 1990). In European destination countries and in Northern America, on the one hand, cultural differences between migrants and natives as well as between various migrant groups play a role here, for example, by religious affiliation and/or ethnicity or by attitudes toward gender equality and gender-role behavior. On the other hand, a minority status is often closely linked to the presence of social inequalities, i.e., an underrepresentation of minority-group members in higher education (as it was just discussed and in relation to the paper by Nauck) and lower female labor force participation in the group compared to natives. Both educational attainment and female participation are important determinants of fertility and, in turn, themselves affected by the number of children a woman has. The last two papers in the Special Issue analyze the interaction of employment and family trajectories employing two methodological perspectives (sequence analyses and fixed effects with longitudinal data) that highlight the life-course perspective of this research. Much of the previous literature on migrant integration emphasizes the crucial role of labor force participation, and migrant women are increasingly included in research on employment. The first strand of literature to analyze women's performance in the labor market views them as secondary workers who migrate along with their husbands and enter and exit the labor force as needed while the household adjusts to the new environment, but never as a career choice (Blau et al., 2003). Current analyses clearly show migrant women in many cases migrating alone and, in general, more permanently entering the labor market even though their rates of attachment and the jobs they do vary across origins (Adserà & Ferrer, 2014; Lee et al., 2020). Still, among second-generation migrants, the literature observes some persistence with regard to social norms of female participation in countries of parental origin (Fernandez & Fogli, 2009).

Similar to non-migrant native women, the degree of attachment to the labor market depends largely on whether a woman has dependent children in the household or not, with mothers of non-European origins showing the least favorable position. Previous research either relies often on cross-sectional data, and thus is not able to consider pre-motherhood employment characteristics, or investigates one dimension, i.e., labor force participation only. Two papers in this Special Issue aim at considering the interdependence of employment trajectories and fertility. The paper by Maes et al. on Belgium uses retrospective information on the employment before, around, and after childbirth in order to estimate the effect of motherhood on work. This paper contributes to the literature by considering pre-birth employment and wage potential of both the woman and her spouse. There are no migrant-native differentials among women with weak labor market attachment before the birth of their first child and only limited differentials in employment trajectories around parenthood among those with medium and high levels of attachment before parenthood. Thus, there is a robust path dependency of employment trajectories around parenthood for migrant women and natives alike, but the lower pre-birth attachment of second-generation migrant women accounts for the generally observed migrant-native differentials in maternal employment. The paper by Samper investigates different pathways into motherhood and employment in Germany using sequence analysis and looks at the role of intergenerational transmission of female labor force participation. The method identifies four types of employment trajectories according to their modal states ("long education," "full-time employment," "part-time employment," and "non-employment") and three types of family trajectories ("postponement of family formation," "early family formation," and "early single motherhood"). Results show that trajectories of low labor market participation and of early family formation are closely related. The remaining differences in women's patterns are partially explained by their school track, their parents' socioeconomic backgrounds, and their maternal role models (the mother's employment when the woman was 15).

Evidence of persistent generational differences highlights the importance of supporting migrant women as they navigate the family-work trade-offs since mothers constitute role models of the next generation. Moreover, immigrant women may face double care obligations as they care for the elderly relatives even more than non-migrants. Strong attitudes toward gendered intergenerational support to both elderly and children put even more constraints on the migrant women's own ability to be involved in gainful employment than for natives (de Valk & Schans, 2008; Milewski, 2013). Differences both in fertility and in female labor force participation are particularly large between Europeans and immigrants from Muslim countries and largely related to differences in attitudes between western destinations and Muslim origin countries (Norris & Inglehart, 2012). Latin American, Eastern Europeans, or African immigrants in Europe display much higher rates of participation.

Concluding Remarks

The Special Issue on Fertility and social inequalities in migrant populations: a look at the roles of selection, context of reception, and employment explores variation in migrant and ethnic minority populations. The papers extend the literature on the role of selection into migration on fertility. As large-scale immigration to the Global North spans several decades now, the papers focus on both period and cohort effects. While previous research looks almost exclusively at women, the papers in this collection pay attention to migrant men as well. While previous studies generally center on the national context of destination as important for migrant adaptation, the contributing authors analyze the receiving context in more detail by looking at within-country variation, i.e., regional or municipal level. While much of the previous literature on female migrants' labor force participation employs cross-sectional analyses comparing mothers to non-mothers, the papers here look at the effect of becoming a mother into subsequent employment from a longitudinal perspective. A joint feature of all presented papers is the role of education as a crucial marker of social inequalities in shaping life-course outcomes, which appears in the analyses either as key covariate for fertility or as the outcome affected by fertility patterns themselves. The papers draw on various comparative perspectives as well as types of data and methods. They all add different pieces to the big picture of childbearing and childrearing in migration contexts. We are confident that looking at the results of such a variety of empirical studies together should convince readers that looking at only one specific part of the migrant fertility literature may provide biased interpretations.

Coming back to the initial motivation to study variation in social change, the papers demonstrate that immigrants and members of ethnic minority groups experience change through the process of migration itself and subsequent adaptation; at the same time, however, there is still substantial variation in migrants' fertility behavior which, in turn, may increase with the degree of diversity among non-migrants in receiving contexts. Therefore, future research should aim at accounting for the heterogeneity of the non-migrant majority populations in destinations as well. Migrant fertility should also be more present in theoretical frameworks of demographic change in the aging destination countries of the Global North as it may contribute heterogeneity in current social and demographic changes, like on the Theory of Conjunctural Action (Johnson-Hanks et al., 2011). Moreover, as fertility, gender roles, and female labor force participation are highly intertwined, theoretical approaches like the gender-revolution framework (Goldscheider et al., 2015) or

the gender-equity theory (McDonald, 2000) should also pay attention to variation within-countries and not only across countries.

As immigrants often come from countries with distinct family patterns and higher fertility than the destinations in the Global North, some authors speculate about the rise of a Third Demographic Transition in European destinations (Coleman, 2006): an increase in the share of (some) migrant groups among resident populations due to differential fertility in the younger age groups. A fertility increase in the younger cohorts can bring about a welcomed slow-down of population aging and decline in the workage population with potential economic benefits in the short and medium run. However, concerns on the *selective nature* of these demographic changes—increasing and younger immigrant groups on one end, and older and shrinking non-migrant majority groups on the other-have emerged not only in Europe, but also in most countries in the Global North. The question at stake is whether these differential population dynamics will cause a "diversity dividend or deficit." Yet, "demography is not destiny; rather, demographic destinies are shaped by social policies, most notably investments that can increase the quality and stock of human capital" (Tienda, 2016, p. 12). Policy makers should therefore not perceive (higher) migrant fertility as social problem, but rather address the needs in the educational system and in providing support to warranty the success of the next generations as measured by their social and economic participation of the society.

To include migrants in demographic theories of change is one assignment for future research. Another part of the agenda is that fertility behavior and attitudes toward children and family should be theoretically more linked to newer assimilation frameworks, like the neo-classical assimilation theory (Alba & Nee, 1997), the Segmented Assimilation Theory (Portes & Zhou, 1993), or transatlantic comparisons (Alba & Foner, 2015). So far, these frameworks are often gender-blind. Differences in the perceived value of children explain much of gender-role differences and fertility patterns across cultures around the globe (Nauck, 2014). Such patterns may remain also heterogenous in immigrant destination countries depending on the persistence of those cultural differences across subgroups. Understanding the role of gender (in)equality in shaping migrant-nonmigrant differentials better requires an intersectional perspective on migration and gender. Likewise, the importance of residential segregation and heterogeneity/ regional variations of the receiving context should be more recognized when analyzing fertility behavior and norms toward family and children. This recognition should help to answer vital questions: First, what is the role model, or the reference group, for migrant offspring? Second, are the assimilations processes among migrant children and subsequent generations more or less smooth, bumpy, or segmented? Third, how are social inequalities intertwined with cultural differences, such as religiosity? And, finally, how is demographic behavior and participation of migrants mediated by their inclusion or exclusion to social rights in modern welfare states (Dobrotić & Blum, 2020)? After all, whether migrants' demographic behavior converges to that of the non-migrant majority populations may be considered a rather academic question. Under which conditions migrants can achieve their reproductive goals and other goals in their destination countries is the question of practical importance for their lives and it may confront them with different societal expectations—a question leading to modern family policies, which are

designed for the majority populations in contemporary welfare states and may therefore impact migrant sub-populations differently and/or exclude them.

Note: While working on the introduction to the Special Issue, a new war in Europe is taking place forcing millions of people to flee their country as many previous or concurrent conflicts did in the past. Previous literature on migrant fertility mostly focused on voluntary migration; the study of family dynamics of forced migrants in Europe (Saarela & Wilson, 2022) only recently emerged and this Special Issue includes one example for the case of Norway. As the numbers of refugees and asylum seekers increase, they will contribute to the diversity within migrant populations. Surely, this will also challenge the theoretical framework used to study migrant fertility so far. The loss of children, widowhood, and the experience of violence and disruption of the life course need deliberate attention.

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