

Migration and the family: essays on internationally mobile Germans

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TABLE OF CONTENTS

1	Introduction.....	6
1.1	Major research questions and their relevance	6
1.2	Implications for and outline of this dissertation.....	7
2	Definitions and contexts of the core elements	8
2.1	Migration	8
2.2	The family, family processes, and friendships.....	10
3	Theoretical considerations	11
3.1	Underlying theoretical concepts.....	11
3.1.1	Principles of action theory	11
3.1.2	The life course approach.....	12
3.1.3	Social capital.....	13
3.2	Theorizing on migration and the family	14
3.2.1	Migration as a process in the life course	14
3.2.2	A framework for studying the consequences of migration.....	17
3.2.3	Family patterns in the life course	18
3.2.4	Considering migration and the family jointly.....	19
3.3	Application of these considerations to the posed research questions.....	21
3.3.1	The effect of migration on family patterns	22
3.3.2	The role of the family and other social relations in the integration stage	27
3.4	Concluding theoretical remarks	31
4	Research gaps and their implications	32
5	Data to study the family-migration nexus	36
5.1	General data requirements for studying the posed research questions.....	36
5.2	Problems of existing data sources	37
5.2.1	General data sources.....	38
5.2.2	Specific migrant surveys	40
5.3	Internationally mobile population: GERPS	42

5.4	Internationally non-mobile population: pairfam	44
6	Summary of the articles	45
6.1	Article one.....	45
6.2	Article two	47
6.3	Article three	49
6.4	Article four.....	50
7	Conclusion	52
7.1	Summary and discussion of key findings	52
7.2	Theoretical implications	55
7.3	Limitations	57
7.4	Directions for future research	58
7.5	Societal relevance.....	59
7.5.1	Relevance of findings for migrants	60
7.5.2	Relevance of findings for origin and destination societies	61
	References.....	63
	Article one.....	i
	Article two.....	ii
	Article three.....	iii
	Article four.....	iv

FIGURES

Figure 1: Adjusted four-stage model of voluntary migration15
Figure 2: Interdependence between living domain and family domain in the life course19
Figure 3: Combining GERPS and pairfam data.....45

TABLES

Table 1: Number of observations by migrant status and survey wave.44

1 INTRODUCTION

1.1 Major research questions and their relevance

Migration is a prevalent phenomenon for societies across the world, with migration and family patterns interacting in various ways. Not only should migration decisions be understood within family contexts (Cooke, 2008), but the family also plays a crucial role considering the consequences of migration: first, family patterns (e.g., partnership stability, family formation) might be directly shaped by migration, and second, these family patterns may influence the consequences of migration with respect to other life domains (e.g., the occupational domain, subjective well-being). These interdependencies provide the context for this dissertation, which focuses on the consequences of migration and poses two major research questions:

- (1) How does migration affect family patterns?
- (2) How do these family patterns (and other social relations) shape the consequences of migration with respect to other life domains?

Studying the consequences of migration on the individual in terms of family outcomes (**research question one**) emphasizes the potentially changing and context-dependent role of the family and specific family members in migrants' lives. Acknowledging that migration generally implies that the majority of social relations are left behind (cf. Guveli et al., 2016), family relations appear especially relevant in migrants' lives. Therefore, understanding the way in which migration structures family processes may help elucidate the consequences of migration with respect to an integral part of migrants' lives. Family patterns are crucial for individuals' subjective well-being (e.g., Johnson, Neyer, & Finn, 2021; Myrskylä & Margolis, 2014) and adjusting family plans due to migration can be assumed to have far-reaching consequences for migrants' life plans. Two directions of potential effects can be distinguished. First, primarily due to migration's association with stress (cf. Boyle et al., 2008), migration may delay or disrupt family processes (*disruption hypothesis*, e.g., Lindstrom et al., 2021). Second, as migration and family decisions may be made as joint decisions (*interrelation hypothesis*, e.g., Lübke, 2015), family processes may also be accelerated.

Assessing the consequences of migration on the individual not in terms of but in relation to the family (**research question two**) emphasizes the relevance of the family-migration nexus for succeeding in different life domains, and thus in shaping individuals' subjective and economic well-being. In this sense, the interplay of migration and the family appears crucial for social participation, and thus for patterns of integration and social inequality (Erlinghagen & Hank, forthcoming-b). Again, two directions of potential effects can be distinguished: The family or

particular family members may represent a barrier or bridge to successful outcomes after migration (cf. Baykara-Krumme, 2020; Nauck, 2004). For example, family members for whom an individual has care obligations may hinder labour market participation (i.e., be a barrier), whereas a partner who is fluent in the host country's language may be helpful in finding a job (i.e., be a bridge). Such patterns may differ by gender, suggesting questions of gender equality and distributional patterns within families and partnerships. The analysis of such social inequalities builds the core of social structure analysis (e.g., Blau, 1977).

An important extension of the so-called family-migration nexus (Erlinghagen & Hank, forthcoming-b), that is, interdependencies of the family and migration, also considers other significant social relations. Alongside the family, social relations outside the family are relevant in migration contexts. One promising example of emotionally close ties (i.e., strong ties, Granovetter, 1973), are friends, which can be understood as “families of choice” (cf. Bowlby, 2011; Wrzus et al., 2012). Especially shortly after migration, it appears plausible that many emotionally close social relations are conducted across international borders (cf. O’Flaherty et al., 2007). Thus, investigating the role played by friends who stayed behind in the previous country of residence in shaping migrants’ lives can be considered an extension of investigating the interplay of migration and the family for social participation. With this extension, the research now assesses the interplay of migration and significant social relations, not just family relations, for social participation, and thus patterns of integration and social inequality.

1.2 Implications for and outline of this dissertation

Along with this synopsis, this dissertation comprises four articles. The research presented in the first two articles in this thesis was used to assess the first major research question, the effect of migration on partnership stability (article one) and family formation (article two). The remaining two articles refer to the second research question and analyze the role of family patterns in shaping the economic consequences of emigration (article three), and – expanding the focus on the family to further emotionally significant social ties as outlined above – the relation of emigrants’ cross-border friendships and their subjective well-being (article four).

By using data from the German Emigration and Remigration Panel Study (GERPS, Erlinghagen, Schneider, & Ette, 2021), all four articles analyse the family-migration nexus in the context of migration from and back to a highly industrialized welfare state. This appears an important task as such movements make up more than a quarter of global migration movements (Pison, 2019) and have been under-researched thus far (see chapter four outlining major research gaps).

The remainder of this synopsis is organized as follows. Chapter two provides the background for studying the family-migration nexus. In particular, it provides the reader with definitions and contextualization of the main concepts of this dissertation, namely international migration, family patterns, and further social relationships. Chapter three provides the theoretical framework for this dissertation. It starts with general theoretical considerations on human behaviour, the concepts of the life course approach and social capital. It then applies these general theoretical considerations to migration and the family before presenting more specific ideas on the two major research questions. Chapter four presents relevant research gaps referring to the two major research questions posed. Chapter five elaborates on (a) data requirements to study the family-migration nexus, (b) why existing data has tended to fail in fulfilling these requirements, and (c) to what extent GERPS does fulfil these requirements in its majority. Chapter six is comprised of summaries of the four articles. Finally, chapter seven concludes this synopsis by discussing the main findings and implications of the articles.

2 DEFINITIONS AND CONTEXTS OF THE CORE ELEMENTS

2.1 *Migration*

The International Organization for Migration (2024) defines a migrant as “a person who moves away from his or her place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons.” This broad term reflects the variety of movements that can be summarized under the term migration: moves from a temporary work stay to another part of the same country – to people seeking refuge in a country on a different continent, not knowing whether they will ever be able to return to the place of origin. In light of this heterogeneity, not all such moves can be studied at the same time, but rather a particular focus is required.

In this sense, this dissertation focuses on international, voluntary migration of citizens from a highly developed welfare state, acknowledging heterogeneity with respect to temporality of migration, migration directions, and migration motives. Even though **international** migration is often followed by internal migration and vice versa (Bernard & Vidal, 2023; King & Skeldon, 2010), these two movements are commonly distinguished by scholars as it appears unclear to what extent the consequences of these movements differ (see argumentation regarding transferability between contexts, chapter 4). **Voluntary** migration can be differentiated from non-voluntary migration by four conditions: physical and psychological non-coercion, sufficiency (the available alternatives in the origin country can be deemed “good enough”), exit options (the availability of alternatives to the current migration status), and the possession of

adequate information about what to choose from (Ottonelli & Torresi, 2013). Referring to migration from **highly developed welfare states**, migrants are often referred to as being “privileged migrants” (e.g., Fauser, 2020; Witte et al., 2023). Privilege can be understood as “social advantages that benefit and/or support some people’s profitable position in society” (Duplan & Cranston, 2023, p. 333). In the context of international migration, it has for example been used emphasizing the importance of residence permits and work visas (Witte et al., 2023), which are easier to obtain the richer (more *privileged*) the country of origin (Recchi et al., 2021; Whyte, 2008).

Alongside this particular focus, this dissertation aims to emphasize migrants’ heterogeneity and the role of migrations’ and migrants’ characteristics in shaping migration outcomes. Regarding the **temporality** of migration, this implies that migrants are considered independently of how long they plan to stay or how long they (will) actually stay. Still, to assess timing patterns when analysing the outcomes of migration, it appears helpful to focus on migrants who crossed the border within a certain (short) time period. Relying on data that made use of the requirement that people leaving and moving back have to (de)register at their local registration offices (Ette et al., 2020) enabled the important distinction of migration (i.e., actual changes of residence) from very short-term international mobility such as travelling. This leads to the distinction of **migration directions**: the term emigration is used referring to citizens who leave their country of origin and move to a different country (here: German citizens leaving Germany). In contrast, the term remigration (or return migration, see Constant, 2021; Lindstrom et al., 2021) refers to those who did so previously but then return to their country of origin (here: German citizens who move back to Germany after having lived in another country). Distinguishing these two directions enables not only understanding how stays abroad “pay off” (Hagan & Thomas Wassink, 2020), but also analysing “migration processes from both ends, namely regarding the time before and after emigration, and before and after remigration” (Ette et al., 2020, p. 21). Along with temporality and migration direction, there may be heterogeneity with respect to **migration motives**. Also in the context of migration from (and back to) one specific country, the underlying motives or reasons for migration may differ. These motives may well shape the consequences of migration. For example, employment patterns after migration vary between those migrating for their own career and those migrating for their partner’s career or other family-related motives (e.g., Boyle et al., 2009; Geist & McManus, 2012). Specifically, migration motives were found to differ by migration direction and migrant gender (Erlinghagen, 2021b), suggesting potential interdependencies between these dimensions of heterogeneity.

2.2 *The family, family processes, and friendships*

Various definitions of the family exist, emphasizing different aspects or focussing on certain family types (e.g., Baldassar et al., 2014; Ganong & Coleman, 2017; Letablier & Wall, 2018; Seltzer, 2019). In the context of international migration, legal definitions (Löbel, 2020) as well as the prevalent family forms and patterns differ between countries (e.g., within Europe; Kalmijn, 2007; Steinbach et al., 2016 and across the globe (Therborn, 2014; see also part two in Arránz Becker et al., 2023, composed of articles on families in different world regions). Yet three core elements of the family can be identified that distinguish families from other ways of living (Nave-Herz, 2018): (1) the biological-social dual nature referring to the reproductive and socialisation function of the family; (2) generational differentiation implying that the family consists of at least two generations (e.g., parent(s) and child(ren)); and (3) a particular relationship of co-operation and solidarity between family members, defining their social roles (e.g., as mother or sister).

This dissertation assesses family patterns, that is not only family constellations (family statuses or episodes), but also family dynamics (family status changes or events). Thereby, it acknowledges that families are not stable units but dynamic social constructs (Fasang & Zagel, 2023). This dynamic understanding requires analyses from a life course perspective (see subchapter 3.2.3). Manifold family dynamics exist, affecting constellations of and relations within the family. This thesis' primary focus is on two major family dynamics, namely fertility (and more specifically the birth of the first child, i.e., family formation) and union dissolution. Fertility is a family process by definition. Union dissolution is not necessarily encompassed in some definitions of family processes. Considering the three criteria above, union dissolution is a family process in the above sense insofar as the criterium of generational differentiation is fulfilled (e.g., if there are children). In terms of analysing the family in the life course, however, with partnerships being crucial in shaping fertility intentions (Kuhnt et al., 2021; Sturm et al., 2023) and actual fertility patterns (Baizán et al., 2004; Baizán et al., 2003; Hellstrand et al., 2022; Thomson et al., 2012), union dissolution can be understood as a family inhibiting process.

The last article in this dissertation looks outside of the family contexts to consider friendship ties. In contrast to family ties (except for the partner), friends are chosen voluntarily by the individuals (Lee & Ishii-Kuntz, 1987) and are thus sometimes considered as “families of choice” (cf. Bowlby, 2011; Wrzus et al., 2012). Similar to defining the family, core elements exist for defining friendships. Annis (1987, p. 350) outlined four such elements: “mutual liking, shared experiences, care and trust.” Still, with the feelings of liking and being liked being

crucial for defining a tie as a friend, friendships depend on the subjective evaluation of these relationships (Allan & Adams, 2007). Important for the context of this dissertation, the formation of friendships (Thomas, 2019), their structures (Völker, 2022), processes (Blieszner & Roberto, 2009), and consequence (e.g., in terms of health, Ajrouch et al., 2024) vary over the individual's life course.

In the context of migration, friendships with people in the destination country are often understood as a measure of integration in the host (destination) society (cf. Facchini et al., 2015), whereas friendships with people at origin emphasize the link to the origin country. Scholars studying friendships tend to concentrate on this integration perspective (e.g., Haug & Pointner, 2007; Lancee, 2012; Nannestad et al., 2008). In contrast to these studies, but similar to Janta et al. (2015), in this dissertation the focus is on ties to friends who remained at the place of origin (here: Germany). Taking this perspective appears important as “migrants are often in the situation where many of their most emotionally significant relationships are conducted internationally” (O’Flaherty et al., 2007, p. 819).

3 THEORETICAL CONSIDERATIONS

This chapter aims to provide a theoretical framework for studying the family-migration nexus. It is divided into four subchapters. Subchapter 1 outlines basic theoretical concepts underlying this dissertation. It covers general assumptions underlying human behaviour (3.1.1), provides a short introduction into the life course approach (3.1.2), which is later argued to be crucial when analysing migration and family patterns, and outlines the concept of social capital (3.1.3), which is required to conceptualize family and friendship ties. Subchapter 2 outlines theoretical considerations on the key concepts of this dissertation. It elaborates on migration as a process (3.2.1) and a framework for studying the consequences of migration (3.2.2). Subsequently, it argues that not only migration but also family patterns need to be studied from a life course perspective (3.2.3), and lastly, that (and how) migration and the family need to be studied jointly (3.2.4). Subchapter 3 applies these theoretical considerations more directly to the two major research questions underlying this thesis: the effect of migration on family patterns (3.3.1), and the role of the family (and other social relations) in shaping the consequences of migration in different life domains (3.3.2). The final subchapter summarizes these theoretical considerations.

3.1 *Underlying theoretical concepts*

3.1.1 *Principles of action theory*

Rational choice theory assumes individuals to be subjectively (or bounded, Simon, 1993) rational actors who “consider the costs and benefits of available alternatives, form expectations

about the consequences of these alternatives, and choose the alternative that best satisfies their preferences” (Kroneberg & Kalter, 2012, p. 76). These subjectively rational actors can be described using the acronym RREEMM: resourceful, restricted, expecting, evaluating, maximizing [wo]men (Lindenberg, 1985). To explain actual behaviour, scholars regularly rely on the so-called subjective expected utility (SEU) rule, which describes actors as choosing from a set of alternatives with every alternative promising a certain utility and involving a certain cost. These alternatives are weighted by their subjective probabilities of occurrence. Actors then choose the alternative with the highest net utility, or with the highest difference between subjectively perceived costs and utility (Langenheder, 1975). Extensions or refinements of the SEU approach include prospect theory (Kahnemann & Tversky, 1979), the discrimination model (Lindenberg, 1980), and the model of frame selection (Esser & Kroneberg, 2015; Kroneberg, 2007). Although the concept of the subjectively rational actor is no longer explicitly mentioned in the following subchapters, it forms the basis for all further theoretical considerations. It is also in line with Elder et al. (2003, p. 11)’s “Principle of Agency.”

3.1.2 The life course approach

Having outlined the principles of action theory, and thus the basic assumptions on human behaviour, this subchapter outlines the life course approach in order to move away from individual decisions to be able to understand interdependencies of decisions. The starting point of the life course approach is the notion that the individual life course consists of a sequence of events (or transitions) and episodes (or trajectories, durations) (Blossfeld & Huinink, 2001; Elder & Johnson, 2003; K. U. Mayer, 1990). Typically, three types of interdependencies are outlined as being crucial to the life course perspective (Bernardi et al., 2019; Fasang & Zagel, 2023; Heinz et al., 2009). Systematizations of these interdependencies are in their majority similar, even though minor differences exist (Fasang & Zagel, 2023).

First, interdependencies exist in terms of time, that is, among the past, the present, and the future (Elder & Johnson, 2003; Emirbayer & Mische, 1998). The individual life course is path-dependent: Current decisions depend on cumulated experiences and resources, and thus on prior decisions (Huinink & Schröder, 2019, also “endogenous causation,” K. U. Mayer, 2004, p. 166). Individuals know about this interdependence, and thus, anticipated future decisions also influence current decisions (Huinink & Schröder, 2019). This dimension is considered in this dissertation through investigation of the specific consequences of migration, something that happened in the past, and its consequences in the present.

Second, interdependencies exist between life domains (Bernardi et al., 2019, also called social spheres, Konietzka & Kreyenfeld, 2021, or careers, Mulder & Wagner, 1993). This interdependence has also been named “multidimensionality of life courses” (Fasang & Zagel, 2023). The life course is a multidimensional process and its different domains (e.g., educational, occupational, family) influence each other (Huinink & Schröder, 2019). Events and episodes take place at the same time across domains, that is, they can be combined, even though domains also compete for resources (Heinz et al., 2009). In this dissertation, the major focus is on the two domains living (i.e., international migration) and family (including also other social relationships). Furthermore, consequences in the occupational and subjective well-being domain are considered.

Third, interdependencies between the micro and the macro-level exist (e.g., Bernardi et al., 2019; Heinz et al., 2009). Individuals are embedded in contexts at different levels, which restrict (and supply resources for) their actions. Huinink and Schröder (2019) broadly distinguish the following contexts: (1) historical and societal context (including cultural, economic, and political aspects as well as social structure); (2) the embeddedness in social groups, networks, and organizations; and (3) couple and family relations. Intrapersonal interdependencies have also been termed “The Principle of Linked Lives,” emphasizing that “Lives are Lived Interdependently and Social-Historical Influences are Expressed Through this Network of Shared Relationships” (Elder & Johnson, 2003, p. 68). Such interdependencies between the individual and family members or other social relationships are emphasized in this dissertation by (a) considering migration within the family context, (b) applying bargaining approaches to understanding decisions, and (c) assessing the consequences of migration in terms of relationships (the termination of partnerships, the start of a parent-child relationship by studying family formation, and the quality of friendships).

Timing appears to play a crucial role in shaping these three sets of interdependencies. In particular, the consequences of certain transitions depend on its timing in the individual’s life (Elder, 1998; Elder & Johnson, 2003). Thus, for example, the consequences of migration may differ between individuals in different family stages. In this context, one of the articles in this dissertation investigates to what extent economic outcomes after migration depend on different family constellations and transitions.

3.1.3 Social capital

Social capital can be defined as the “capital captured through social relations” (Lin, 2001, p. 19). Lin (2001) outlined four reasons for which social relations to other people may actually

provide resources (i.e., social capital): (1) by providing information, (2) by exerting influence on relevant people, (3) by serving as a social credential of the individual, and (4) by strengthening recognition and identity. Social relations providing social capital has also been termed “ties.” More precisely, Granovetter (1973) distinguished strong vs. weak ties. The strength of a ties is defined as “a (probably linear) combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize the tie” (Granovetter, 1973, p. 1,361). Strong ties are assumed to provide less social capital (i.e., be less “helpful”) than weak ties as the individual’s networks overlap more (Granovetter, 1973, 1983, referring primarily to the labour market).

Family members can generally be understood to be “strong ties” (Granovetter, 1973, 1983). In contrast, referring to friends, it has been argued that some may represent strong ties but others need to be understood as weak ties (Elmer et al., 2017). Referring to the above definition of strong ties, it appears plausible to assess the strength of friendship ties by contact frequency (see Bauernschuster et al., 2010; Blömers & Letschert, 2011, applying similar approaches). Those friends who are frequently in touch with each other or spend time together (even if not in person) can be assumed to be emotionally close. In this sense, and similar to family members, such friends can be considered strong ties (see also Décieux & Mörchen, 2021; Kim & Fernandez, 2023).

3.2 *Theorizing on migration and the family*

After having outlined the basic theoretical concepts underlying this dissertation, the following subchapter outlines theoretical considerations on the core concepts of this dissertation (migration and the family), and how they should be considered jointly.

3.2.1 *Migration as a process in the life course*

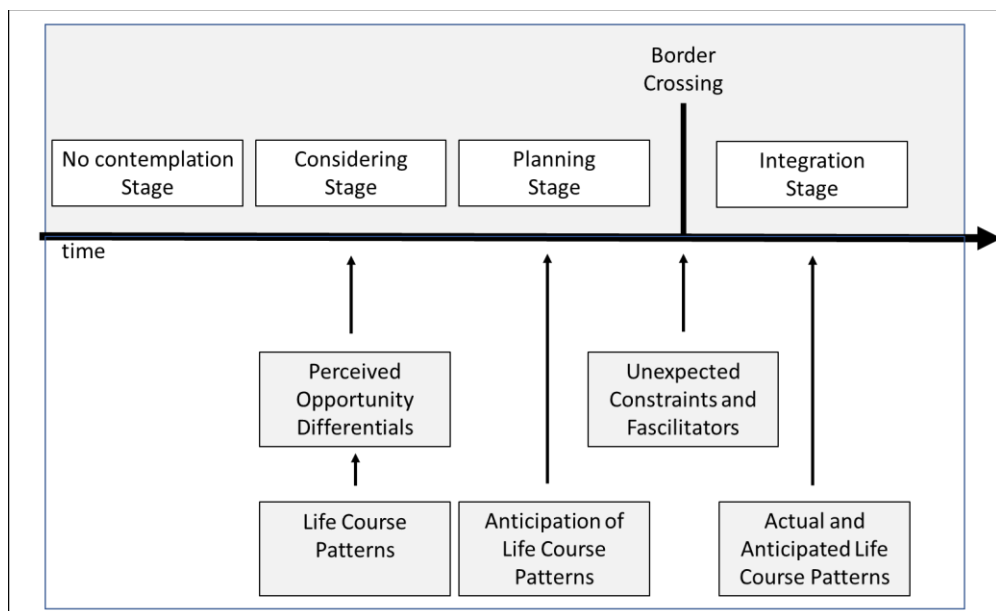
Even though the actual border crossing might be considered as an event, it does not take place suddenly without any prior considerations or subsequent consequences. In this sense, migration should be understood as a process (Fawcett & Arnold, 1987). Two models of voluntary migration appear helpful in conceptualizing this process. First, a three-stage model by Kley (2011, 2017) combines goal formation in a life course perspective with the psychological Rubicon model. It consists of (1) a predecisional phase in which migration is being considered, (2) a postdecisional (preactional) phase in which migration is planned, and (3) an action phase in which the actual moving takes place (Kley, 2011). Notably, life course episodes (e.g., being in a partnership, working in a certain job) and events (e.g., union formation and dissolution,

birth of a child, starting a new job) as well as the anticipation thereof are assumed to affect the different stages of migration (Kley, 2011).

Second, the Migration Change Model by Tabor and Milfont (2011) is a psychological four-stages model. This model distinguishes (1) precontemplation, during which individuals do not yet consider migration; (2) contemplation, during which individuals examine options to migrate; (3) action, during which individuals actually migrate; and (4) acculturation, including sociocultural adaptation and psychological adjustment after the actual move (Tabor & Milfont, 2011). The benefits of Kley's (2011) model are the distinction of two preactional stages (considering and planning migration) and her elaborations of the role of life course patterns in shaping these stages, and the advantages of Tabor and Milfont's (2011) model are the addition of a post-action phase ("acculturation") and the inclusion of potential on- or remigration.

Combining these two models may help to gain a broader picture of the whole migration process (see figure 1). The border crossing (the migration *event*) is represented by a vertical line to emphasize its event-character as opposed to the action stage in the Migration Change Model (Tabor & Milfont, 2011), which includes a variety of actions related to the actual border crossing, such as booking a flight or informing friends and extended family members about the migration.

Figure 1: Adjusted four-stage model of voluntary migration



Note: Combination and extension of Kley's (2011) three-stage model and Tabor and Milfont's (2011) Migration Change Model. Own representation.

The four stages of this combined model are the following:

- (1) The *no contemplation stage* is based on Tabor and Milfont's (2011) precontemplation phase during which individuals do not (yet) consider migration. The renaming emphasizes that not necessarily all individuals will start to contemplate migration, that is, non-migrants might never leave this phase (they might, however, also pass to the other preactional phases but restrain from border crossing, or the migration *event*). Including this stage allows the location and differentiation of the migration process (consisting of the next three stages) from "no migration phases" in the living domain of the individual.
- (2) The *considering stage* corresponds to the considering (i.e., predecisional) stage as outlined in Kley (2011). It is the stage in which migration is being considered. It is primarily determined by the perception of opportunity differentials between the current place of residence and other possible places of residence, which are shaped by life course events (e.g., new parents may have different requirements for their place of residence compared to childless individuals) (Kley, 2011). I use the notion life course patterns instead of events to suggest that life course episodes may also shape the migration process. For example, it is not only childbirth that may lead to different requirements for the place of residence, but rather it can be assumed that different requirements for place of residence will hold throughout the episode of having children at certain ages (e.g., preschool children, teenage children).
- (3) The *planning stage* corresponds to the planning (i.e., postdecisional, preactional) stage as outlined in Kley (2011). It is assumed to be determined primarily by the anticipation of life course events (e.g., starting a new job) that imply ties with one specific alternative place of residence (Kley, 2011). Similar to the considering stage, I use the notion of patterns to suggest that the anticipation of both life course events and episodes may shape this migration stage. For example, migration might be planned after realizing that commuting is too stressful. Thus, it may not be the event of a job offer or the starting of a job somewhere else that trigger migration, but experiencing the stress associated with commuting while being in the episode of working in the new job.
- (4) The *integration stage* is based on Tabor and Milfont's (2011) acculturation phase but expands their psychological perspective to a broader notion of integration, referring to outcomes in different life domains and understanding integration not only as relative to the destination but also the origin society and the individual life course (Erlinghagen, Ette, et al., 2021, see subchapter 3.2.2). This stage is assumed to depend on both actual

and anticipated life course patterns. For example, being in a partnership or the birth of a child may influence individual employment patterns. This stage emphasizes that the migration process is not finalized with the act of border crossing. The stage allows for framing challenges specific to the situation shortly after arrival. Moreover, the integration stage is generally assumed to be a “no contemplation stage” with respect to a subsequent migration process. It may, however, overlap with preactional phases of a subsequent migration process (e.g., remigration, onmigration). The fact that subsequent migration processes are allowed for in this model is depicted by the bold arrow on the time-axis.

3.2.2 *A framework for studying the consequences of migration*

Focussing on the integration stage of this model, the so-called Destination-Origin-Migration approach (DOM; Erlinghagen, Ette, et al., 2021; Erlinghagen et al., 2019) has been developed to study the consequences of international migration. DOM starts from the notion that migration (notably both emigration and remigration) implies far-reaching consequences for the life course in the short-, medium-, and long-term. It applies a life course perspective to the integration stage of the migration process and provides a framework to study this stage from different angles.

Following Pries’ (2010) elaborations on assessing social inequalities, Erlinghagen, Ette, et al. (2021) argued that certain spatio-temporal reference units are required. In particular, they proposed two spatial and one temporal reference units, respectively: (1) the destination country, (2) the origin country, and (3) along the life course with reference to the migration process (Erlinghagen, Ette, et al., 2021). First, within the destination perspective comparisons between immigrants and non-migrants at destination or between different groups of immigrants at the same destination are carried out. The destination perspective is taken by most migration research and especially conventional integration research. It enables answering questions about integration. Second, the origin perspective is based on comparisons of migrants to non-migrants at origin (those who “stayed behind”). The origin perspective has also been labelled “homeland dissimilation” (FitzGerald, 2012, p. 1,733) and “dissimilation from origins” perspective (Guveli et al., 2016, p. 9). It allows for addressing questions on the effect of migration on different outcomes and investigation of migrants’ selectivity. The third reference unit is not spatial but temporal in nature. The “migration perspective” puts the migration *event* and the individual life course at the focus of the analysis. Thus, the “migration perspective” is closely related to the life course approach as outlined above. International migration is understood as a “dynamic, open, and multi-dimensional process” (p. 7), and previous migration experiences and migration

characteristics such as different migration durations can be considered. Next to these temporal interdependencies, the “migration perspective” emphasizes interdependencies between different life domains as well as individuals (Erlinghagen, Ette, et al., 2021).

3.2.3 *Family patterns in the life course*

Not only the migration process, but also family patterns need to be analysed from the life course perspective. Families are not static, but change across the life course of their individual members (Fasang & Zagel, 2023), and family patterns exhibit the three major interdependencies of the life course approach. Explanations and examples of these three interdependencies are outlined in the following paragraphs.

First, interdependencies of family patterns exist in terms of time. Family patterns vary (1) with the individual’s increasing age and (2) with the timing of certain life course events. An example of a “simple” age effect is that approaching the end of the reproductive age (i.e., getting older) is associated with more uncertainty in fertility intentions (Kuhnt et al., 2021) as well as lower actual fertility (Delbaere et al., 2020). Timing patterns include that marriages at older ages are associated with a subsequent lower probability of parenthood (Nitsche & Hayford, 2020).

Second, interdependencies of family patterns exist between different life domains. Referring to family patterns, this implies that either family patterns are influenced by patterns in other domains (e.g., the occupational domain, the health domain) or that family patterns impact patterns in other domains. Examples of family patterns being influenced by other domains include the effect of commuting (Kley, 2012) or unemployment (Di Nallo et al., 2022) on partnership stability, or the effect of educational attainment on age at marriage (Fukuda et al., 2020). Examples of the opposite direction of causality include the effect of childbirth on earnings (Hsu, 2021; La Vega, 2022) or on subjective well-being (Johnson, Galambos, & Krahn, 2021). Studies tend to find stronger effects of occupational and educational dimensions on family patterns than the other way around (Fasang & Aisenbrey, 2022), and some studies of the effect of family patterns on other domains have found evidence of selectivity instead of causal effects (e.g., Ludwig & Brüderl, 2018, on a potential male marital wage premium).

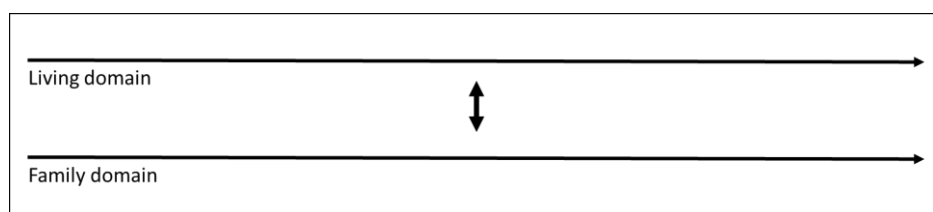
Third, interdependencies of family patterns exist between the micro- and the macro-level. Thus, family patterns may depend on (1) historical and societal contexts; (2) social groups, networks and organizations; and (3) couple and family relations (cf. Huinink & Schröder, 2019). There are several examples of these relations. With regard to historical and societal contexts, cohabitation patterns have changed through history and differ by countries (Di Giulio et al., 2019), and different family patterns were found to depend on legal regulations and family

policies (Hank & Steinbach, 2019). Regarding social groups, networks, and organizations, social mechanisms such as social contagion or social pressure affect fertility decisions (Bernardi & Klaerner, 2014), with social mechanisms for example including the number of siblings, friends, and acquaintances with young children (Lois & Arránz Becker, 2014) and having a colleague who gave birth in the previous year (Pink et al., 2014). Lastly, couple and family relations, that is, relationships between individuals, can be considered. Next to those relationships at the core of this dissertation (specifically partnerships, parenthood, and friendships), additional relationships can be studied. Generally, intergenerational relations (Baykara-Krumme & Fokkema, 2019; Foner & Dreby, 2011; Steinbach et al., 2019; Steinbach et al., 2020; Steinbach & Silverstein, 2020) and intragenerational relations such as sibling relationships (Baham et al., 2008; Kersting & Feldhaus, 2016; Poortman & Voorpostel, 2009; Steinbach & Hank, 2018; Tanskanen et al., 2016) are distinguished. In addition to studying these relationships directly, scholars assess how the characteristics of social ties impact an individual's own life course, for example the role of parental education (Sutin et al., 2018) or parental involvement (Treviño et al., 2021) in shaping subjective well-being, or the role of heterogamy vs. homogamy in affecting partnership stability (Mäenpää & Jalovaara, 2014; Wright et al., 2017).

3.2.4 *Considering migration and the family jointly*

The joint consideration of migration and the family corresponds to the interdependence of different life domains, which were posed as one of the three major interdependencies of the life course approach (subchapter 3.1.2). Interdependencies imply bidirectional causal relations. In this sense, the arrows pointing from life course patterns to the migration process in the adjusted four-stage model (figure 1 above) should not be considered as unidirectional (see figure 2, below, which no longer depicts the migration process in detail but emphasizes this interdependence).

Figure 2: Interdependence between living domain and family domain in the life course



Despite this general notion of interdependence of life domains, different perspectives on the family-migration nexus have largely remained disconnected (Erlinghagen & Hank, forthcoming-b). To tackle this disconnectedness, this dissertation considers that

- (a) migration decisions are made considering family conditions; and
- (b) family patterns manifest in light of past migration experiences, the current migration process, and potential future migrations.

Migration decisions are assumed to be “family affair[s]” (Rumbaut, 1997, p. 6) and thus to be made within the family context, even when observing migration of individuals (Cooke, 2008). This becomes apparent looking at the above adjusted four-stage model (figure 1), considering that life course patterns include family patterns. For example, whether migration is considered an appropriate way of behaving for a family member was found to be an important determinant of his/her migration behaviour (De Jong, 2000), and family commitments may discourage migration (Carling & Schewel, 2018).

Bargaining approaches can be used to explain (migration) decisions in light of potentially different preferences among family members (e.g., Lundberg & Pollak, 1996; Ott, 1992). Bargaining power, which is crucial for bargaining agreements and thus decisions, depends primarily on the individual’s economic situation (Abraham et al., 2010; Ott, 1992). The fact that not all family members tend to be able to benefit economically to the same degree from migration (idea of “tied migration,” introduced by Mincer, 1978) thus appears crucial for the bargaining process. Still, preferences and outcomes of the migration process are not solely economic in nature (e.g., Preston & Grimes, 2019 assessing outcomes also in terms of subjective well-being), and other dimensions can be incorporated. Independent of what exactly determines individuals’ preferences, without binding, long-term contracts (Ott, 1992), family members can be assumed to decide to migrate if the loss in bargaining power of the less advantaged partner is still acceptable (Abraham et al., 2010).

These considerations primarily refer to adult partners but could be expanded to the broader family context by integrating, for example, children into this framework. There are two ways children could be integrated. First, the children’s well-being may be subject to the decision-making of their parents (e.g., regarding reunification with one parent or educational disruption; L. Ryan & Sales, 2013), representing resources and constraints. Second, children may be actively involved in the decision-making process (Bushin, 2009; Djajić, 2008). Thus, the bilateral bargaining approaches mentioned above would have to be expanded to include more bargaining individuals, with children potentially possessing less bargaining power than their parents (e.g., Moskal & Tyrrell, 2016, showed that that children’s agency in migration decisions may in fact be rather limited). As children’s age appears to crucially shape their role in the migration decision (Bushin, 2009; L. Ryan & Sales, 2013), age might also be important in

determining their bargaining power. Even though this direction of dependence between the family and migration is not the focus of this dissertation, understanding migration decisions in the family context helps to understand the consequences of migration in terms of the family.

Considering family patterns as potentially being influenced by migration, the whole migration process (i.e., its different stages), including past and potential future migrations, should be considered. In this sense, migration may also influence the family domain after a long time, for example with regards to partner choice (Hartung et al., 2011; Huschek et al., 2012; van Landschoot et al., 2018) or fertility patterns (Baykara-Krumme & Milewski, 2017; Krapf & Wolf, 2015; Mussino et al., 2021) among second-generation immigrants' descendants. This also emphasizes the interdependence between the micro- and the macro-level (e.g., the role of the societal context by assessing adaption vs. socialization) and “linked lives” patterns in the family-migration nexus. It is not (only) one's own migration process that influences these patterns, but also the migration experiences of one's parents. Furthermore, considering or planning migration (and thus the anticipation of the actual move) may influence family patterns (cf. Huinink & Feldhaus, 2009). For example, in terms of the effect of migration on fertility, scholars have argued that anticipating migration may imply a postponement of childbirth (Lübke, 2015; Milewski, 2007; K. Wolf, 2016).

Interdependencies between different domain are not necessarily two-dimensional: Migration-induced consequences in other domains (e.g., with respect to social networks, Décieux, 2021; Décieux & Mörchen, 2021; and employment and subjective well-being, Preston & Grimes, 2019) may in turn affect the family domain. Interdependencies can be assumed to have effects either directly or via shaping the family members' bargaining power. For example, one partner staying at home after migration to take care of the children because (a) s/he does not yet have a job and (b) there is no one else to take care of the children might affect family patterns directly (e.g., put a strain on the partnership, enhance that parent's relationship with the child, influence that person's preference for further children), but also affect that person's bargaining power in future negotiations. Such changes can be anticipated, implying that the planning of migration might also affect family patterns (cf. Ott, 1992).

3.3 Application of these considerations to the posed research questions

Given the provided theoretical framework to analyse the family-migration nexus in a life course perspective, this section takes this framework to the two narrower relations that are the foci of this dissertation: (1) the effect of migration on family patterns (and other social relations) and

(2) the role of the family (and other social relations) in shaping different life domains within the integration phase.

3.3.1 *The effect of migration on family patterns*

Assessing the short-term effect of migration on family patterns, two potential directions of the effect can be distinguished. First, migration may have a disruptive effect, that is, in terms of partnership stability and family formation, migration may trigger union dissolution and delay family formation. It may also disrupt social networks outside the family. Second, migration may interrelate with family patterns, assuming that migration and family decisions are made jointly. Considering partnership stability and family formation, the interrelatedness of migration and family patterns would imply that union dissolution is less likely after migration and childbirth may occur just shortly after migration. Even though the terms “disruption” and “interrelation” in this context usually refer to the effect of migration on (only) fertility (e.g., Lindstrom et al., 2021; Milewski & Baykara-Krumme, 2021), the terms can also be adopted to explain partnership stability (as will be outlined below). These effects may not be universal, but rather depend on migrants’ characteristics.

The following theoretical arguments (as well as the analyses in the respective articles) focus on short-term patterns. Consequently, socialization or adaption arguments (popular in theoretical considerations of the effect of migration on fertility) are not considered, as they manifest themselves only in the long term (Lindstrom & Giorguli-Saucedo, 2007; Lübke, 2015; White et al., 1995). Furthermore, the so-called “selectivity hypothesis” is not presented in detail here. It poses that differences in (family) patterns between migrants and non-migrants may be explained not by an effect of migration but by structural differences between these groups (Baykara-Krumme & Milewski, 2017; Lindstrom et al., 2021; Mussino & van Raalte, 2013). Consequently, the selectivity hypothesis questions the interpretation of associations (here as disruption or interrelation effects) but does not represent a hypothesis of an effect in a narrower sense. Applying appropriate methods, however, it is possible to decrease potential selectivity problems (see subchapter 5.4).

Disruption of family patterns

Migration may trigger union dissolution and delay (first) births. Thereby it can be said to *disrupt* family processes. A starting point of this consideration is that migration causes stress. Migration requires major adjustments in daily life, social networks are lost, and partners may (temporarily) be separated (Impicciatore et al., 2020). Such changes can be understood as stressors if perceived as difficult by the individual (Smith & Khawaja, 2011). In this context, it has been

argued that migration “generates uncertainty, reduces control and increases ambiguity” (Wilkinson & Singh, 2010, p. 169) and thus involves not only economic but also psychological costs (cf. K. Wolf, 2016). On top of the stress directly associated with the migration process, stress may grow with increasing differences between the partners, such as in terms of individual economic outcomes (Cooke et al., 2009; Krieger, 2020), prior migration desires (Coulter et al., 2012), and satisfaction with the situation at the destination (Flowerdew & Al-Hamad, 2004). Putting these channels into life course terminology, migration causes changes in different life domains, and the stress associated with migration is influenced by “linked lives” (e.g., if the partner is unhappy about the situation and wants to return) and past life course patterns (e.g., prior migration desires).

Stress can be assumed to put a strain on partnerships and increase the risk of union dissolution (Boyle et al., 2008). It can also be assumed to cause a postponement of fertility (Schmid & Kohls, 2011). With respect to the latter, this pattern has been termed the “disruption hypothesis” (e.g., Andersson, 2004; Baykara-Krumme & Milewski, 2017; Kulu & Milewski, 2007; Kulu et al., 2019; Lindstrom et al., 2021; Milewski & Baykara-Krumme, 2021). Family patterns interact (i.e., interdependencies exist not only between different life domains but also within these domains). The birth of a child may destabilize partnerships by decreasing partnership satisfaction (Svarer & Verner, 2008). At the same time, fertility after migration may be disrupted due to higher levels of union dissolution after migration (Lindstrom et al., 2021).

The stressors associated with migration may be strongest directly after migration, thus the highest union dissolution rates and the lowest probabilities of first birth may be expected shortly after migration. Fertility disruption (but not partnership disruption) may be followed by a catch-up effect (i.e., higher fertility, Goldstein & Goldstein, 1981). The disruption may be observed during all stages of the migration process, including the time prior to the actual border crossing (i.e., in the considering and more likely the planning stage). With respect to fertility, this disruption prior to the actual move has been coined “anticipatory effect” (K. Wolf, 2016). In this sense, also interdependencies over time exist.

When part of a family migrates, other family members may stay behind (“shrinking family,” Bonjour & Kraler, 2015, p. 1,419; Strasser et al., 2009, p. 171), and other social networks – including friends – can be disrupted by migration (Guveli et al., 2016). Migrants leave a part of their social network behind almost by definition. The disruption of contact with family members, friends, or other acquaintances can be argued to be more likely the weaker the tie (cf. Wahba & Zenou, 2012) and – acknowledging that friendships are less formal than family

relations – disruption of contact is more likely with friends than family members (Janta et al., 2015). In light of the disruption of in-person contacts, however, alternative methods of contact may be used to stay in touch (Guveli et al., 2016). The availability of modern communication and transportation technologies (including low-cost airlines, Dobruszkes, 2009) allows people to maintain contact and “connectedness” while living geographically apart (Barcus & Brunn, 2010, p. 281). Still, maintaining contact involves costs and thus the capacity to do so may differ between migrants (cf. O’Flaherty et al., 2007).

Interrelation of migration and family patterns

In contrast to the above hypothesis, migration can also be said to decrease the risk of union dissolution and increase the probability of (first) birth. In this sense, migration can be said to *interrelate* with the family domain in the sense that a couple’s decision to migrate is part of the broader plan to stay together and form a family. Building on the core principles of the life course approach, this interrelation hypothesis is based on the assumption of parallelism of events (Mulder & Wagner, 1993) and decision-making in one life domain involving the anticipation of events in other life domains (cf. Huinink & Feldhaus, 2009). Higher fertility shortly after migration might thus be explained by either individuals anticipating migration and thus postponing childbirth to after the actual border crossing (Lübke, 2015; Milewski, 2007) or by the plan to have children (and subsequently actually having children) triggering migration (Kley, 2011). Acknowledging the crucial role that partnerships play in fertility intentions and subsequent decision-making (Hellstrand et al., 2022; Kreyenfeld et al., 2017; Kuhnt et al., 2021), similar assumptions can be deduced for the effect of migration on partnership stability.

There are additional reasons for migration to have a positive effect on partnership stability. For example, referring to micro-macro interdependencies and the concept of “linked lives,” the “isolation hypothesis” poses that the new destination country may be perceived as a potentially hostile environment. With fewer people to rely on, the partnership might become more important (Shapira et al., 2019). However, Erlinghagen and Hank (forthcoming-a) found that social isolation corresponded to lower levels of partnership satisfaction, calling this argument into question. Further considerations on a potentially stabilizing effect of migration on partnerships are outlined in detail in article one.

Migrations’ and migrants’ characteristics in shaping these effects

With two opposing hypotheses regarding the effect of migration on family patterns (disruption vs. interrelation), it is important to emphasize that the effect may depend on the migrations’ and

migrants' characteristics. The current subchapter examines theoretical considerations of four crucial factors: (1) migration direction, (2) migration motives, (3) tied migration, and (4) gender differences.

With respect to migration direction, disruption of family patterns appears more plausible after emigration, whereas interrelation of migration and family patterns could be argued to hold especially after remigration. With the exception of the argument that stressors might be additive (from a psychological point of view, e.g., Zubin & Spring, 1977) and remigration is at least a person's second migration, the majority of arguments point towards remigration as more likely to imply interrelation. In particular, adjustments to the new environment and thus the stress associated with migration might be lower after remigration compared to emigration. Considering remigration, social networks in the previous country of residence are not only lost but also social networks in the country of destination, that is, the home country, might be reassessed. This could counteract the stress associated with the loss of ties in the previous country of residence. Assuming that some social networks can be reassessed after remigration and thus potentially more support, the "salmon hypothesis" poses that individuals' would postpone childbirth until after remigration (Kreyenfeld & Vatterrott, 2018). Thus, an interrelation of migration and family patterns appears especially plausible in relation to remigration.

The effect of migration on family patterns may also depend on the underlying migration motives. The importance of migration motives becomes especially apparent when looking at the interrelation argument. In particular, migration for family-related motives may be more likely to be part of a "family formation plan" and thus coincide with higher partnership stability and family formation rates than migration for education- or career-related motives (cf. Schmid & Kohls, 2011). This pattern provides a further argument for interrelation between remigration and family patterns being especially likely, given that the motives underlying remigration are more often family-related (Erlinghagen, 2021b).

Tied migration (Mincer, 1978) may also shape the effect of migration on family patterns. If one partner's (economic) gains are dominated by the other partner's gains, it appears plausible that differences between the two partners emerge or strengthen not only with respect to economic outcomes, but also regarding enthusiasm about the move, problems in the acculturation process, and social networks (Baykara-Krumme et al., 2021). As outlined above, such differences may put a strain on the relationship and disrupt family formation. Although different (economic) gains of migration (Krieger, 2020) might be seen as the major outcome of tied migration, tied

migration patterns themselves can be understood as non-egalitarian migration decisions with non-synchronized migration processes (see Baykara-Krumme et al., 2021). Non-egalitarian migration decision-making may indicate that other family decisions could also be dominated by one partner. Non-synchronized migration patterns may imply either reunification of the two partners or temporary geographical separation (depending on the place of residence of the partner). Both patterns may put a strain on the relationship as the patterns imply different experiences for the two partners. Reunification may counteract the isolation and loneliness of the leading partner (Della Puppa, 2018), but involves the stress associated with migration for the following partner. Geographical separation implies potentially different perceptions of alternatives to the current partnership and less time spent together (Baykara-Krumme et al., 2021). In addition to putting a strain on the relationship, patterns of subsequent migration may also represent a practical barrier to family formation (due to fewer opportunities to conceive a child).

The effect of migration on family patterns may further vary by gender. To start with, partner differences are often associated with decreased partnership stability when women are in a superior position compared to their male partners (e.g., in terms of educational attainment, Schwartz & Han, 2014; Theunis et al., 2018; and relative income, Hamplová et al., 2021). In this sense, migration might be more harmful to partnership stability if women are the leading spouses. Similarly, with partnership stability being a mediator of the effect of migration on fertility (Lindstrom et al., 2021), women taking the lead in migrating might also imply fertility postponement. As remigration tends to be more female-led (Amcoff & Niedomysl, 2015; Erlinghagen, 2021a), the disruptive effect might thus be stronger for remigration compared to emigration, providing an opposing argument for the theoretical considerations on migration direction made above. Turning to family formation more directly, article two of this dissertation argues that, with care work primarily being the female partner's responsibility (Hank & Steinbach, 2021), men and women would have to bear the "cost of family formation" differently, and thus female and male migration might affect family formation differently. Regarding friendship networks, it has generally been assumed that men's and women social network formation and maintenance patterns differ (Altmann, 2020). Over the course of migration, however, initial evidence has indicated that at least the subjective evolution of friendships might be quite similar for female and male emigrants (Décieux, 2021).

3.3.2 *The role of the family and other social relations in the integration stage*

After considering how family patterns may be influenced by the migration process, it is necessary to also consider how they may in turn shape the consequences of migration, that is, the integration stage (the last stage in the adjusted four-stage-model of voluntary migration, see subchapter 3.2.1). In particular, the second set of articles in this dissertation (articles three and four) assesses how family patterns as well as friendships lead to outcomes in different life domains after migration. This approach implies an analysis of all three major interdependencies of the life course approach, that is, between different life domains, the past and the present, and “linked lives.”

Starting from the notion that close family members and friends can be conceptualized as social capital and more specifically as strong ties (Granovetter, 1973, 1983, see subchapter 3.1.3), the current subchapter argues that these strong ties may affect outcomes in different life domains. These life domains include social networks (specifically the formation of a new social network in the destination country), the occupational domain, and subjective well-being. On the one hand, strong ties may represent a barrier to changes in these life domains. This idea stems from the notion that strong ties might have an isolating effect. On the other hand, in the sense that social networks may lead to economic and subjective benefits in the migration context (Guveli et al., 2016), strong ties may represent a bridge to successful outcomes in the three life domains of analysis.

Strong ties as a barrier

Having a family and other strong ties may function as a barrier to building new ties in the host society. This might occur because existing strong ties already satisfy most social needs (Nauck, 2004) and at the same time restrict further interactions (Song, 2012), which are the basis for the formation of ties (Lin, 2001). The argument that strong ties represent a barrier might hold especially true when migrants have a partner (Sarkisian & Gerstel, 2016) and children (Song, 2012) present, as well as shortly after union formation (Rözer et al., 2015) and the birth of a child. Furthermore, given that staying in touch with people who remained in the country of origin can be assumed to be time-consuming and cost-intensive (e.g., due to regular visits, L. Ryan et al., 2015), strong ties to people who remain in the country of origin may represent a particular barrier to the formation of new ties in the destination country.

Having a family might also represent a barrier in the occupational domain. According to New Home Economics, migration takes place if the family’s utility increases (Becker, 1965), but not necessarily involves individual utility gains for each family member. The phenomenon of “tied

migration” describes a situation in which the individual economic gains of one partner exceed the individual economic losses of the other (Mincer, 1978). This might especially be the case with intrahousehold specialization (Becker, 1981) and in the presence of children. Given generally lower earnings and potential discontinuities on the labour market among women (Mincer, 1978) and the male partner’s employment prospects being more crucial to the migration decision due to traditional gender roles (Abraham et al., 2010; Jürges, 2006), it can be assumed that female partnered migrants benefit less economically from migration than male partnered migrants. Bargaining approaches would generally suggest more equal occupational outcomes, as they assume that migration takes place only if there is an acceptable loss of bargaining power of the tied migrant (Abraham et al., 2010). Still, bargaining approaches provide two additional explanations to explain post-migration gender differences in partnered migrants’ economic outcomes, outlined in more detail in article three. All these arguments apply specifically to partnered women (and especially those with children), not to female migrants in general. In turn, men’s occupational situations after migration might not be much affected by partnership or parental status. Considering further social ties, the existence of friends and other kin – either at origin or at destination – can be assumed to not represent a barrier in the occupational domain.

Under certain circumstances, strong ties might also act as barriers to positive outcomes in the subjective well-being domain. Having left part of their social networks and confronting a new environment (Heu et al., 2020), migrants are particularly prone to suffering loneliness (Sawir et al., 2008; van den Broek & Grundy, 2017) and homesickness (van Tilburg & Vingerhoets, 2021). This tendency might be intensified if strong ties hinder the building of a new social network (see above). For example, in the sense that children restrict their parents’ interactions (Song, 2012), parenthood might be especially isolating in the migration context, leading to loneliness (Nowland et al., 2021) and adversely affecting other dimensions of well-being (as loneliness and other dimensions of subjective well-being highly influence each other, VanderWeele et al., 2012).

Furthermore, even if new social networks are built, new ties may only barely compensate for the emotional loss due to geographical separation from strong ties, as different types of relationships cannot be assumed to be interchangeable (Horn & Fokkema, 2020, but see Wrzus et al., 2012 finding that lacking family ties might be compensated for with friendship ties). Therefore, additional negative consequences for the migrants’ well-being can be deducted from geographical separations since geographical separation from strong ties can be considered a

stressor (Bogic et al., 2012; Löbel, 2020). Geographical separation from strong ties comes with changes in power relations between the migrant and the person who stays in the origin country (Borell et al., 2014; Löbel, 2020), decreased support (Bilecen & Cardona, 2018), and may lead to or intensify “feelings of ‘uprootedness’ and ‘identity crisis’” (Horn & Fokkema, 2020, p. 4). Both a subsequent lack of belonging as well as the feeling of belonging to the origin society have been associated with higher levels of loneliness (Klok et al., 2017). Geographical separation from strong ties might thus lead to or intensify feelings of homesickness (Hofhuis et al., 2019) or loneliness (Horn & Fokkema, 2020) and adversely affect mental health (Alcántara et al., 2015; Löbel, 2020). Furthermore, general mechanisms that explain potential negative effects of social ties on well-being, including unfulfilled expectations about the relationship, if the respective tie him- or herself is not well (e.g., in terms of mental health) or if s/he transmits unhealthy behaviour (e.g., Amati et al., 2018, focussing on friends) also apply to migrants.

Strong ties as a bridge

In contrast to the above considerations, having a family and other strong ties may also act as a bridge in the integration stage. To start with, strong ties may facilitate the formation of new ties. Having left part of their social networks behind, those ties that remain may be particularly important (cf. Guveli et al., 2016) and by providing social foci (Feld, 1981) they may be used as a starting point for building a new social network. This holds not only for strong ties between adults but also for children, who provide their parents with opportunities of social gatherings and networking occasions, thereby linking them to locals (Schaeffer, 2013; Song, 2012). Given women’s involvement in childcare (Hank & Steinbach, 2021), this appears to be especially important for female migrants (L. Ryan, 2011). On top of providing the first social foci after migration, strong ties might be of particular importance for two major reasons. First, strong ties might provide more support after migration, for example, due to increased intergenerational solidarity (Baykara-Krumme & Fokkema, 2019). Second, they might simply be more helpful, for example, because a certain tie possesses better language skills in the language of the destination country than the individual, thereby facilitating contact with people at destination. The latter may hold also for children, who are faster in learning new languages (Nikolov & Djigunovic, 2006). Furthermore, children may provide an additional motivation for their parents to become able to communicate in the host country’s language, for example, to support them at school (Baykara-Krumme, 2020).

With respect to the occupational domain, strong ties may have a positive effect primarily via two channels: first, via their effect on building additional ties as outlined above, and second,

because these strong ties themselves represent social capital applicable on the labour market. Both channels appear plausible for adult family members and friends, whereas for children the bridging effect might be assumed to work primarily via the first channel. Regarding this first channel, new ties provide additional information and link the individual to other contacts. These new ties can be expected to include weak ties, which are assumed to be especially beneficial on the labour market (Granovetter, 1973, 1974, 1983, but see Kim & Fernandez, 2023 outlining challenges to this theory). Regarding the second channel, adult family members themselves may support the individual on the labour market. For example, they might be able to help with job applications if fluent in the host country's language or if they possess host country-specific information that the individual does not (yet) have, for example, about hiring processes. Referring to this kind of direct support, the finding that indeed one single strong tie might be more helpful than one single weak tie (Gee, Jones, & Burke, 2017; Gee, Jones, Fariss, et al., 2017) appears important.

Strong ties may act as a bridge to positive outcomes in the subjective well-being domain. In general, social relations can be assumed to be beneficial for the individual's well-being given three major benefits that they bring (Amati et al., 2018; van der Horst & Coffé, 2012 on friendships). First, relationships provide positive affirmation (Amati et al., 2018) and relatedness or belonging (R. M. Ryan & Deci, 2004). Up to a certain degree, subjective well-being can be expected to increase with the number of people the individual is close to, or can trust, discuss problems with, and so forth (Amati et al., 2018). Thus, in a situation in which most of a person's ties no longer live close by, family members or other strong ties who moved with the migrant appear especially important for the individual's well-being. Further, the effect on positive affirmation might be particularly true for partners and friends: individuals chose these ties and are in turn chosen by them, suggesting that the individual's attitudes or qualities are valued by the other person (Lee & Ishii-Kuntz, 1987). With respect to belonging, strong ties appear crucial in the migration context. For example, the feeling of belonging to the destination country was found to depend on the number of friends in the destination country and the subjective development of the friendship network compared to the situation prior to migration (Décieux & Murdock, 2021; but note that Erlinghagen, 2021c found only a weak association between friendship networks and the feeling of belonging). By providing an "alternative space of belonging" (Viruell-Fuentes & Schulz, 2009, p. 2,171), contact with those staying in the origin country has been found to have this function with respect to identity and belonging (Torres, Lee, et al., 2016). Second, relationships positively affect both mental and physical health. With migrants being particularly prone to loneliness (Sawir et al., 2008; van den Broek

& Grundy, 2017), positive impact on health appears to be a crucial function of social ties after migration. Moreover, social networks (Teodorescu et al., 2012) and social participation (Lecerof et al., 2016) have been shown to be associated with migrants' mental health. Third, relationships can be considered a "resource pool," providing different kinds of support that are conducive to subjective well-being (Amati et al., 2018, p. 3) and may help coping with stressful events (Myers, 2000) such as migration. Given the potential disruption of migrants' social networks, and the fact that they can rely less on host country services (Sime & Fox, 2015) and institutions (Lancee, 2012), the "resource pool" provided by strong ties may be particularly important.

3.4 *Concluding theoretical remarks*

The aim of this chapter was to provide a theoretical framework for analysing patterns within the family-migration nexus. Migrants are assumed to be bounded rational actors and the life course approach provides a helpful framework to study the family-migration nexus. The life course approach emphasizes three interdependencies: in terms of time, among different life domains, and between the micro and the macro-level. Patterns of migration, the family, and the family-migration nexus were analysed paying attention to these interdependencies. Migration in particular is conceptualized as a process, building an adjusted four-stage model of voluntary migration that consists of a no contemplation stage, a considering stage, a planning stage, the actual border crossing, and the integration stage. To better understand the consequences of migration, the integration stage appeared of special importance and was thus considered in more detail, outlining the DOM-approach (Erlinghagen, Ette, et al., 2021). This framework proposes three reference points along which migration outcomes could be studied: compared to the destination country, compared to the origin country, and within the individual's life course. Most existing research has focussed on the destination perspective, but this dissertation builds on the latter two. Comparisons to non-migrants in the origin country allow assessment of the actual effect of migration on different dimensions of the life course, and the temporal reference point provides the framework for applying the life course approach and investigating the outlined interdependencies.

In a last step, the two major relations that are being assessed in this dissertation, (1) the effect of migration on family patterns (and other social relations) and (2) the role of the family (and other social relations) in shaping outcomes in different life domains in the integration stage, were outlined. From a theoretical perspective, the first relation can be broken down into two competing hypotheses, namely a disruption of family patterns (and other social networks) vs.

an interrelation of migration and certain family patterns. These considerations on the effect of migration on family patterns emphasize that interdependencies also exist within certain life domains, here the family domain and more specifically patterns of partnership stability and fertility. They also illustrate the importance of paying attention to the migration decision when interested in the outcomes of migration and, more generally, migrants' heterogeneity. With respect to the second relation, the focus of the theoretical considerations was on the formation of new social networks, consequences in the occupational domain, and subjective well-being. Arguments regarding the extent to which family members and other strong ties represent a barrier or bridge to successful outcomes in these dimensions were outlined. These considerations demonstrate the benefits of focussing not only on one (generally the occupational) domain when analysing the consequences of migration, as taking different dimensions into account provides a broader picture of the migrants' experience and allows the analysis of potential interdependencies between the different outcomes of migration.

4 RESEARCH GAPS AND THEIR IMPLICATIONS

In the context of the aforementioned theoretical considerations of the family-migration nexus, relevant research gaps are identified in the current chapter, focussing primarily on quantitative studies. These research gaps provide the starting point for the four articles that build the core of this dissertation.

The first major research gap (RG) refers to a lack of studies assessing causal effects of migration on family patterns (*RG1: effect on family patterns*). This gap stems from a lack of analyses using the non-mobile population at origin as the counterfactual of the migrant population, which is a basic requirement to conduct such analyses (Beauchemin, 2014; Lübke, 2015). Instead, the majority of studies rely on a so-called destination perspective (see subchapter 3.2.2 providing a detailed description of the distinct perspectives; Erlinghagen, Ette, et al., 2021). More specifically, they tend to rely on immigrant samples and compare migrants to non-migrants at destination or apply comparisons between different migrant groups in the same destination (see e.g., Adserà & Ferrer, 2016; Guarín Rojas et al., 2018; Hannemann et al., 2020; Kreyenfeld & Krapf, 2017; Kulu et al., 2019; Wilson, 2020). This approach allows answering some important questions (such as about adaption processes), but not questions about the effect of migration on individual outcomes. Furthermore, the dominant reliance on immigrant samples is associated with the pooling of migrants with different durations of stay, hampering the analysis of short-term effects and, more generally, timing patterns. It also implies problems of selectivity (see subchapter 5.2).

The second major research gap relates to the distribution of benefits (and costs) of migration within families or partnerships (*RG2: distribution of benefits*). A large body of research on the economic consequences of migration exists, however, most of these articles focus on individual-level outcome measures such as employment status or income levels (e.g., Boyle et al., 2009; Cooke, 2001; Cooke et al., 2009; Kogan, 2011; Nilsson, 2001). In contrast, less is known about household-level economic outcomes (but see De Jong & Graefe, 2008; Geist & McManus, 2012; Preston & Grimes, 2019). As the consequences of migration might differ between individuals (e.g., one partner might benefit while the other might not), the consequences at the individual- and the household-level are not necessarily the same. Given that potential discrepancy, considering individual-level economic outcomes in combination with household-level economic outcomes allows for investigation of distributional patterns within households. A better understanding of these patterns would also enhance our understanding of the preceding migration-decision. Why do individuals decide to migrate when anticipating individual economic losses? To what extent are they compensated by household-level gains or gains in other areas (e.g., in terms of subjective well-being)? Should emigration decisions be seen as only the first part of a longer migration plan including subsequent re- or onmigration (see discussion by Erlinghagen, 2021a, on so-called package-deals)?

The third major research gap refers to the role of family patterns in shaping the just mentioned economic consequences of migration (*RG3: role of family patterns*). Acknowledging that migration shapes individual economic outcomes, it might do so differently depending on family constellations and the experience of family changes. For example, different consequences of migration might be assumed for married women who just gave birth to a child than for single and childless women. Even though some knowledge on the role of family and partnership status in the migratory context exists (e.g., Boyle et al., 2009; Khoudja & Platt, 2018), not much is known about the effect of family and partnership status changes, life course events such as union dissolution, union formation, or the birth of a child (but see De Jong & Graefe, 2008) on economic outcomes after migration. To better understand short-term consequences of migration, however, the latter appear particularly relevant.

The fourth major research gap refers to a lack of knowledge regarding the role of migrations' and migrants' characteristics in shaping the outcomes of migration in the different life domains (*RG4: migrants' heterogeneity*). With the majority of studies on the family-migration nexus making use of immigrant samples (see above) and given selective remigration (Caron & Ichou, 2020; Wahba, 2015), our knowledge is primarily based on a selective group of immigrants,

namely those who stayed (long). However, the consequences of migration should not be assumed to be universal, and effects may vary between those who return (remigrants) and those who remain in the country of destination (immigrants or emigrants, depending on the perspective). Studies assessing such differences rarely exist (but see Baykara-Krumme et al., 2021 assessing differences in partnership stability). Along with migration direction (emigration vs. remigration), migration characteristics include for example the underlying migration motives (Delli Paoli & Maddaloni, 2021; Gillespie et al., 2021) as well as the process of migration decision-making (please note that contrary to this general research gap, there is quite a lot of research on the economic consequences of tied migration, see e.g., Boyle et al., 2009; Cooke, 2001; Krieger, 2020; Taylor, 2007; Vidal & Huinink, 2019). With respect to socio-demographic characteristics, differences may exist for example regarding gender: It appears plausible that migration affects the timing of family formation or subsequent births differently for women and men, but, so far, most analyses focus on female migrants' fertility timing (but see Cantalini & Panichella, 2019; Kraus, 2019; Milewski & Baykara-Krumme, 2021; Mussino & Cantalini, 2022).

The fifth major research gap refers not to the family directly but to social relations more broadly, and especially cross-border friendships (*RG5: cross-border friendships*). So far, not many quantitative studies on cross-border social relations exist (Baykara-Krumme, 2020, referring to families). This holds for its determinants (but see Iarmolenko et al., 2016; O'Flaherty et al., 2007; Soehl & Waldinger, 2010) as well as its implications for the integration stage, for example, in terms of subjective well-being or mental health (Torres, Alcántara, et al., 2016; see subchapter 3.2.1 on the different stages of the migration process). Furthermore, most existing studies assess different types of contacts jointly (e.g., Torres, Lee, et al., 2016) or focus on parent-children relationships (e.g., Dito et al., 2017). They tend to not compare different types of relationships such as children, partners, friends, and so forth. Especially friendships have largely been ignored by migration research (Décieux, 2021; Décieux & Mörchen, 2021). This inattention to friendship is surprising, as friendships have generally been found to correlate with individuals' well-being (Amati et al., 2018; Elmer et al., 2017) and friendship networks can be assumed to shrink and be transformed in the course of migration (Guveli et al., 2016).

Against the background of these research gaps referring to what is being analysed, a last research gap needs to be mentioned – one that refers to the context in which these analyses are carried out (*RG6: context*). Most research on the family-migration nexus considers the context of either internal migration or international migration from rather less privileged source

countries (see subchapter 2.1 on the understanding of privileged migration). For example, assessing the effect of migration on partnership stability, studies have tended to focus on either internal migration (e.g., Boyle et al., 2008; Shapira et al., 2019), or international migration in the Latin American context (e.g., Davis & Jennings, 2018; Lindstrom et al., 2021). The same holds true regarding the economic consequences of migration (e.g., Boyle et al., 2009; Cooke et al., 2009 Gillespie et al., 2022 assessing internal migration, and Bevelander & Groeneveld, 2012; Kogan, 2011 studying international migration with highly developed countries primarily being considered as destination countries). Similarly studies assessing cross-border relationships of migrants have tended to focus on international migration from rather less privileged source countries (see e.g., Apitzsch, 2014; Benítez, 2012; Madianou & Miller, 2011; Torres, Alcántara, et al., 2016; Torres, Lee, et al., 2016, exceptions in the German context being Décieux & Mörchen, 2021; Mau & Mewes, 2007).

To what extent findings from these contexts are transferable to the context of privileged international migration, that is, migration from highly industrialized welfare states (which make up somewhat more than 25% of global movements, Pison, 2019), is questionable. First, internal migration can be assumed to involve fewer stressors than international migration. Thus, potential effects might be weaker for internal compared to international migration. Focussing on internal migration, differences exist already between short- and long-distance moves (e.g., Boyle et al., 2008; Shapira et al., 2019), and such differences may be even more marked for international migration. More specifically, internal migration can be assumed to be less costly (cf. Krieger, 2020). Costs may not only include economic costs associated with, for example, travelling, visa proceedings, and so forth, but also non-monetary costs. These non-monetary costs include, for example, language acculturation (Hou et al., 2018) and cultural adaption stress (Helms et al., 2014). Furthermore, migration motives may differ between internal and international migrants (and migration motives have been argued to affect the consequences of migration, see research gap four: migrants' heterogeneity).

Second, international migration from less privileged source countries can be assumed to involve more stressors than international migration from more privileged countries. Thus, potential consequences might be stronger for international migration from less privileged countries compared to international migration from more privileged countries. In this case, due to income differences between countries, the relative costs of migration from less privileged countries can be assumed to be higher. In fact, it has been shown that family patterns of more privileged individuals appear to be less affected by migration compared to family patterns of more

disadvantaged individuals (Castro Torres & Gutierrez-Vazquez, 2022). Furthermore, migrating from more privileged countries might be more plannable, and the adverse effects of migration on mental health outcomes was found to decrease with adequate planning of migration (Gong et al., 2011). As with respect to potential differences between internal and international migration, the underlying migration motives may differ between migration from more and less privileged source countries. Whether these different migration motives strengthen or weaken potential effects, however, is unclear so far. In sum, the consequences of international migration from a highly industrialized welfare state on the individual may well differ from the consequences of internal migration or international migration from less privileged contexts, emphasizing the need for studies in this context.

5 DATA TO STUDY THE FAMILY-MIGRATION NEXUS

5.1 *General data requirements for studying the posed research questions*

In order to assess the above research gaps, appropriate data are required. In particular, potential datasets need to fulfil the following four criteria. The data need to be

- (1) longitudinal and
- (2) representative;
- (3) have adequately large sample sizes for emigrants, remigrants, and non-migrants; and
- (4) provide sufficient information on both migration processes and family patterns.

First, to model dynamic processes and study the consequences of migration on the individual from a life course perspective, longitudinal data are required. Longitudinal data facilitate causal inferences (Pforr & Schröder, 2015; Schnell et al., 2023), providing several advantages over cross-sectional data (Brüderl, 2010). In particular, Wooldridge (2013) emphasized two such advantages: First, longitudinal data allow controlling for individuals' unobservable characteristics and thereby facilitate causal inference. Second, the consequences of behaviour or decision-making can be studied considering time lags. Thus, longitudinal data allow studying, for example, how migration affects family formation and how potential effects vary over time.

Second, the data need to be representative. Random samples are the only way to make inferences from variable distributions within a sample to variable distributions in the population (cf. Schnell et al., 2023). Still, random selection of individuals from a certain sampling frame does not ensure that the sample is representative. Techniques to assure representation of different population subgroups are required (Groves et al., 2009). For example, a random

sample based on telephone directories would not be representative of the whole population, but only of the part of the population with landline telephones listed in these registers. In this sense, appropriate sampling frames are crucial to provide representative data about migrants, and particular attention will be paid to undercoverage and (unit) non-response, which represent major problems for migration data collection (cf. Erlinghagen, 2011). In the migration context, undercoverage implies that certain migrant subgroups would have zero selection probabilities (cf. Biemer & Lyberg, 2003, pp. 64–66). (Unit) Non-response refers to a situation in which no information can be gathered for a sampled unit (here: migrants; cf. Biemer & Lyberg, 2003; Lynn, 2009). Non-response is a problem especially in longitudinal study designs (Haunberger, 2011), because as non-response rates increase over time, the risk of bias also increases (Kalton et al., 1989, pp. 250–251).

Third, samples need to be sufficiently large to study the consequences of migration among certain migrant subgroups (here especially emigrants and remigrants). Furthermore, when evaluating the effect of migration on different outcomes, migrants need to be compared to non-migrants at origin (Beauchemin, 2014; Lübke, 2015; also “context-of-origin-perspective,” Baykara-Krumme & Milewski, 2017; Milewski & Baykara-Krumme, 2021; and “origin perspective” in the DOM-framework, Erlinghagen, Ette, et al., 2021). Thus, for consistent estimators (Fahrmeir et al., 2011), sufficiently large sample sizes are required not only for migrant subgroups, but also non-migrants at origin.

Fourth, to study migration in relation to family patterns, survey questionnaires need to include the relevant measurement items. For migration, information must be collected on both migration and integration processes as well as the preceding decision-making (Erlinghagen & Hank, forthcoming-b). With respect to family patterns, often not only “standard” information on, for example, partnership and fertility patterns (status and status change) is required, but also migration-specific aspects such as whether such a status change took place prior to or after migration (see e.g., De Jong & Graefe, 2008), or information on social relations both in the country of origin and the country of destination (to study e.g., “global householding,” Douglass, 2013, or transnational family relations more generally).

5.2 *Problems of existing data sources*

Quantitative studies on the family-migration nexus already exist. Examining this literature, two types of data sources that are commonly used for analyses can be identified. First, general population surveys, census and register data can be summarized as general data sources. Such data sources aim at covering the whole resident population of a specific geographical area,

mostly countries, and do not focus on migration or migrants in particular. Second, specific migrant surveys do focus on migration and certain types of migrants. In fact, most of these data sources are immigrant samples. The following two subchapters show that neither of the two types of data sources simultaneously fulfil all of the above-mentioned data requirements. The majority of data sources discussed below refer to the German context, which serves as an example of a highly developed welfare state (see subchapter 2.1 on privileged migration) and also represents the current study context.

5.2.1 *General data sources*

General population surveys that are **longitudinal** in design do exist. In the current context, these include primarily the German Socio-Economic Panel Study (SOEP) and the German Family Panel (pairfam). Similarly, even though censuses are generally conducted only about every 10 years (Willekens et al., 2016), longitudinal analyses can be conducted with the German microcensus since 2012 (Herter-Eschweiler & Schimpl-Neimanns, 2018).

General data sources such as the ones mentioned in the previous paragraph claim **representativity** of residents in a certain geographical area, generally a country (including restrictions regarding e.g., age or having to live in a private household; see e.g., Goebel et al., 2019; Huinink et al., 2011; Statistisches Bundesamt, 2023). With this focus on resident populations, such data sources also cover immigrants. Due to selective remigration (Caron & Ichou, 2020; Wahba, 2015) and the tendency to record neither remigration nor onmigration (Willekens et al., 2016), such data sources are in danger of being biased (Ette et al., 2020; Rallu, 2008). Put differently, such data sources may be representative of immigrants living in that certain geographical area at that certain point of time but not of immigrants who initially left their country of origin. Furthermore, certain sampling frames systematically exclude immigrants, such as sampling frames using voter registers (Erens, 2013; Lynn & Taylor, 1995) or telephone directories (Andreß & Careja, 2018; van Goor & Rispen, 2004). Once sampled, lower response rates of immigrants compared to the non-migrant resident population arise (Blohm & Diehl, 2001; Deding et al., 2013; Feskens et al., 2006), possibly due to questionnaires being designed in the language of the respective survey country and immigrants possessing insufficient language skills (Baykara-Krumme, 2010; Feskens et al., 2006). In particular, it could be assumed that especially recently arrived immigrants – with potentially worse host country language skills – will be underrepresented (Erlinghagen, 2011).

Analyses of immigrants whose data are compiled in general data sources may be limited due to low **numbers of observations** of these subgroups. Immigrants represent a minority in the

general population (see also “rare populations,” Kalton & Anderson, 1986), and thus general data sources can be argued to not be able to provide sufficiently large sample sizes (El-Menouar, 2022, but see Font & Méndez, 2013 arguing that e.g., the European Union Labour Force Survey (EULFS) and the International Social Survey Programme (ISSP) have sufficiently large sample sizes). Furthermore, the number of observations may be decreased due to undercoverage and non-response problems (e.g., El-Menouar, 2022; Erlinghagen, 2011; Lynn et al., 2018; Rendall et al., 2003). In addition to these small sample sizes for immigrants, general data sources tend to also fail including emigrants and identifying remigrants and onmigrants (Willekens et al., 2016). Emigrants (citizens who moved abroad to another country) are no longer part of the resident population of their country of origin and thus not included in the data sources (Ette et al., 2020). Thus, they are only observable in the data prior to emigration (Erlinghagen & Hank, forthcoming-b). Even though emigrants could theoretically be tracked and surveyed in their destination countries, such attempts have proven difficult, especially with respect to sample sizes (Schupp et al., 2008). The same logic would apply to onmigrants, or previous immigrants who migrated again. Remigrants (prior emigrants who returned to their country of origin), in contrast, are part of the resident population of their country of origin. However, most data sources fail to identify them as remigrants. Due to shortcomings in questions about previous migration experiences, remigrants are often counted as non-migrants (Ette et al., 2020). Exceptions are censuses and the EULFS, which ask about previous places of residence (Martí & Ródenas, 2007; Rendall et al., 2003).

Typically, surveys provide more **information on migration patterns** than population censuses do (Rendall et al., 2003). Most of the time, national population censuses do not even include the year of or age at migration (Willekens et al., 2016), making it impossible to analyse migration patterns in detail. Still, analyses of immigrants in general population surveys may also be limited due to a lack of information regarding migration histories (Kraler & Reichel, 2010), as “questions about migration and integration processes reaching beyond citizenship and the time of immigration are hardly ever asked” (Erlinghagen & Hank, forthcoming-b). For example, such data sources only rarely include information on migration motives or migration decision-making. Such information, however, would be crucial, especially given considerable heterogeneity among immigrants, for example regarding when and under what circumstances they migrated. In contrast, depending on the thematic focus of the specific data source, sufficient information on general **family patterns** may be collected (e.g., especially with pairfam), but information about migration-specific family characteristics may still be lacking.

Still, analyses based on general data sources appear to be restricted by a lack of information on migration rather than family patterns.

5.2.2 *Specific migrant surveys*

Certain national surveys, such as the SOEP (Brücker et al., 2023; Brücker et al., 2014; Brücker et al., 2016), include specific **longitudinal** immigrant subsamples, allowing for life course analyses of integration processes. Similarly, the Children of Immigrants Longitudinal Survey in Four European Countries (CILS4EU, for Germany see Kalter et al., 2019) and the Refugees in the German Educational System (ReGES, Steinhauer et al., 2019), are panel studies that focus on student integration. The studies Socio-Cultural Integration Processes among New Immigrants in Europe (SCIP, Diehl et al., 2016) and Job Mobilities and Family Life in Europe (Skora et al., 2013) consist of two waves and have particular thematic foci. Other approaches, however, are not designed in a longitudinal way. These include compilations of immigrants to certain destination countries (primarily countries of the Organisation for Economic Co-operation and Development, OECD) based on administration or census data (Beine et al., 2007; OECD, 2015), the EULFS (Ette & Sauer, 2010) or the European Social Survey (ESS, Erlinghagen, 2011). Similarly, the 2000 Families study (Guveli et al., 2017), the European Internal Movers' Social Survey (EIMSS, Santacreu Fernandez et al., 2006), the study Forced Migration and Transnational Family Arrangements – Eritrean and Syrian Refugees in Germany (TransFar, Sauer et al., 2022), and the National Immigrant Survey of Spain (Reher & Requena, 2009) were not designed as longitudinal studies.

Appropriate sampling frames are necessary to ensure coverage, with non-coverage of certain subpopulations being a threat to the **representativeness** of the sample. Thus, in a first step, sampling strategies for immigrant samples need to identify immigrants (see Lynn et al., 2018, for a detailed overview on sampling frames for migrant samples). To do so, some surveys make use of characteristics such as nationality or country of origin observable in registers (“merkmalsbasierte Stichprobenziehung,” e.g., the IAB-BAMF-SOEP Refugee Survey, Brücker et al., 2016; the IAB-BiB/FReDA-BAMF-SOEP-Survey, Brücker et al., 2023; and TransFAR Sauer et al., 2022). Others, such as specific SOEP samples (samples I and J, Brücker et al., 2014; Liebau & Tucci, 2015) and the Austrian Immigrant Survey 2016 (Prandner & Weichbold, 2019), apply onomastic (name-based) methods (Humpert & Schneiderheinze, 2000; Schnell et al., 2013). Third, screening interviews (Schnell et al., 2023, pp. 270–271) can be used to identify specific immigrant subgroups (see e.g., samples D and F in the SOEP, Brücker et al., 2014). Thus, identifying the target population does not appear to be the problem.

Nonetheless, most studies sampling immigrants in selected destination countries are subject to major selectivity problems. First, many of these samples tend to be selective with regards to the length of stay (most participants lived there for several years already, see Erlinghagen, 2011; Ette et al., 2020). Furthermore, surveys assessing specific target groups such as students, university graduates, or published scholars apply highly selective sample frames (Akbaritabar et al., 2023; Grotheer et al., 2012; Mol, 2014). The same is true of studies focussing on certain types of mobilities, such as job-related mobility (e.g., Skora et al., 2013). Similarly, immigrant surveys often focus on specific countries of origin, and thus immigration motives and conditions (Erlinghagen & Hank, forthcoming-b). For example, in the case of immigration to Germany, studies have tended to focus on labour migration in the 1960s and 1970s, ethnic Germans, and more recent refugee inflows, thereby ignoring the actual heterogeneity among immigrants (e.g., immigration from other countries of the European Union or Asia, Erlinghagen & Hank, forthcoming-b, but see Butsch, 2020, assessing Indians in Germany). Similarly, the approach of studying emigration from one country by using immigration data from certain destination countries bears the problems of (1) major emigration countries not being covered by the respective data source and (2) problems of both over- and undercoverage of immigrants in certain destination countries (Erlinghagen, 2011). Still, focussing on certain origin countries also bears the potential for increased response rates due to easier implementation of bilingual questionnaires. For example, the European Internal Movers' Social Survey (EIMSS, part of the PIONEUR project) worked with interviewers fluent in both the home and host country languages (Santacreu Fernandez et al., 2006). This study, however, conducted sampling using telephone directories. With migrants being less likely to have landline telephones and to appear in telephone directories (e.g., Lipps & Kissau, 2012), this sampling methodology implies an additional problem in terms of undercoverage.

The major aim of immigrant samples is to provide a solid database for studying immigrants in certain destination countries, and they do provide **sufficiently large samples** for this purpose. However, as can be seen from the above elaborations, the focus of such studies has tended to be on specific source countries. Considering Germany as destination country, these include source countries of labour migration (Brücker et al., 2014; Guveli et al., 2017), ethnic Germans (Salentin, 2007), and more recently, refugees (Brücker et al., 2023; Brücker et al., 2016; Sauer et al., 2022). In general, highly developed countries such as Germany tend to be approached as a destination rather than source countries of migration (but see Erlinghagen, 2011). Consequently, few datasets exist that would allow analysis of the context of migration from highly developed and welfare-state source countries (cf. Ette et al., 2020). As with general data

sources outlined above, migrant surveys have tended to cover neither emigrants (but see Guveli et al., 2017) nor remigrants (but see Groenewold & Bilsborrow, 2008).

With this focus on integration of many immigrant samples, other aspects such as the process leading to **migration or family patterns** have not been the major point of interest in previous surveys. Consequently, information on such aspects has tended to be missing (cf. Erlinghagen & Hank, forthcoming-b, mentioning CILS4EU as an example lacking information on family relationships). Similarly, the above-mentioned compiled datasets (e.g., based on the EULFS, Ette & Sauer, 2010, or the ESS, Erlinghagen, 2011) provide detailed information on socio-economic background and the situation in the destination country, but lack important information about the situation prior to migration and the migration process itself (Ette et al., 2020). Without such information, it is not possible to investigate the causes or the consequences of migration (Groenewold & Bilsborrow, 2008). Fortunately, according to Ette et al. (2020), more recent approaches to surveying migrants have collected more of this relevant information (e.g., SCIP, Diehl et al., 2016; the National Immigrant Survey of Spain, Reher & Requena, 2009; and the Austrian Immigrant Survey 2016, Prandner & Weichbold, 2019).

In conclusion, neither general data sources nor specific migrant surveys satisfy all data requirements outlined above. There remains a lack of representative, longitudinal data about emigrants and remigrants that enables comparisons to non-mobiles at origin to assess consequences of migration on the individual. Furthermore, most data sources have focussed on migration from less developed countries, and patterns from more developed countries may well be different, for example, due to different underlying migration motives and migration costs.

5.3 *Internationally mobile population: GERPS*

The German Emigration and Remigration Panel Study (GERPS; Erlinghagen, Schneider, & Ette, 2021) departed from these shortcomings, using Germany as an example of a developed country and a source country of migration (and destination country of remigration). Except for providing data on German non-migrants (see the next paragraph on data of internationally non-mobile Germans that can be combined), the before-mentioned data requirements were largely fulfilled.

GERPS was a **longitudinal** study. It comprised five waves, starting about one year after migration (the actual border crossing) in 2017/2018. The first four waves were used in the articles of this dissertation. Waves 1 to 3 were conducted in half-year intervals; waves 4 and 5 followed in one-year intervals. Therefore, with wave 1 taking place on average one year after (r)emigration, the first four waves of the panel study covered an observation period of about

three years after migration. This panel character in combination with retrospective biographical data (referring to the situation three months prior to migration, *wave 0*) allowed comparison of individuals' lives before and after migration (Ette et al., 2020).

GERPS aimed to be **representative** of internationally mobile Germans. An “origin-based” sampling design was used (Ghimire et al., 2019; Hugo, 2014) and address-based register random sampling was applied (Ette et al., 2020). GERPS was designed as a both-ways migration survey design (Ette, Décieux, et al., 2021), which helped to avoid biases due to missing different types of migrants (e.g., remigrants; Rallu, 2008). Acknowledging that both emigration (Birgier et al., 2022; Chiquiar & Hanson, 2005; Parey et al., 2017) and remigration (Caron & Ichou, 2020; Wahba, 2015; but note that remigration appears less selective than emigration, Ette & Witte, 2021) are selective processes, GERPS was representative not of the German resident population, but of internationally mobile Germans. The multi-site design (Amelina & Faist, 2012; Beauchemin, 2014; FitzGerald, 2012) ensured that the survey was not selective in terms of destination countries for emigrants or previous host countries for remigrants. In fact, migration movements from and back to more than 100 countries were covered, and respondents took part in the survey from wherever they lived. By sampling only individuals from registers who indicated that their emigration or remigration took place within the 12 months prior to sampling, the problem of selective remigration could be further reduced (Ette, Décieux, et al., 2021). This restriction also allowed comparison of individuals who migrated under similar conditions and restrictions. Applying a so-called “push-to-web design” or “web-push survey methods” (Dillman, 2017) in wave 1 and a “web-only design” from wave 2 onwards, response rates similar to (or better than) other European probability-based online surveys were achieved (Ette et al., 2020, table 6.2).

The **sample sizes** of both emigrants and remigrants covered in GERPS can be deemed sufficiently large to assess the posed research questions. In wave 1, data on 4,545 emigrants and 6,465 remigrants are available. Even in wave 4, 2,463 emigrants and 3,091 remigrants remained in the sample (see number of observations by migrant status and interview wave in table 1). The both-way design of the study implies that not only recent emigrants but also recent return migrants (remigrants) were included (Ette et al., 2020). Including remigrants as a separate group facilitates seeing a broader picture of the consequences of migration on the individual (Fawcett & Arnold, 1987) and understanding “migration processes from both ends, namely regarding the time before and after emigration, and before and after remigration” (Ette et al., 2020, p. 21). GERPS did not include a sample of German non-migrants but was constructed in

a way that enabled comparisons to non-mobiles from general population surveys such as the SOEP (via its construction as a SOEP-related study, Ette et al., 2020) and pairfam (see articles one and two of this dissertation).

Table 1: Number of observations by migrant status and survey wave.

Internationally mobile Germans (GERPS)				
Survey wave	1	2	3	4
Emigrants	4,545	2,994	2,553	2,463
Remigrants	6,465	3,995	3,241	3,091
Migrants (all)	11,010	6,989	5,794	5,554
Internationally non-mobile Germans (pairfam)				
Survey wave	10		11	12
Non-migrants	4,750		4,414	4,095

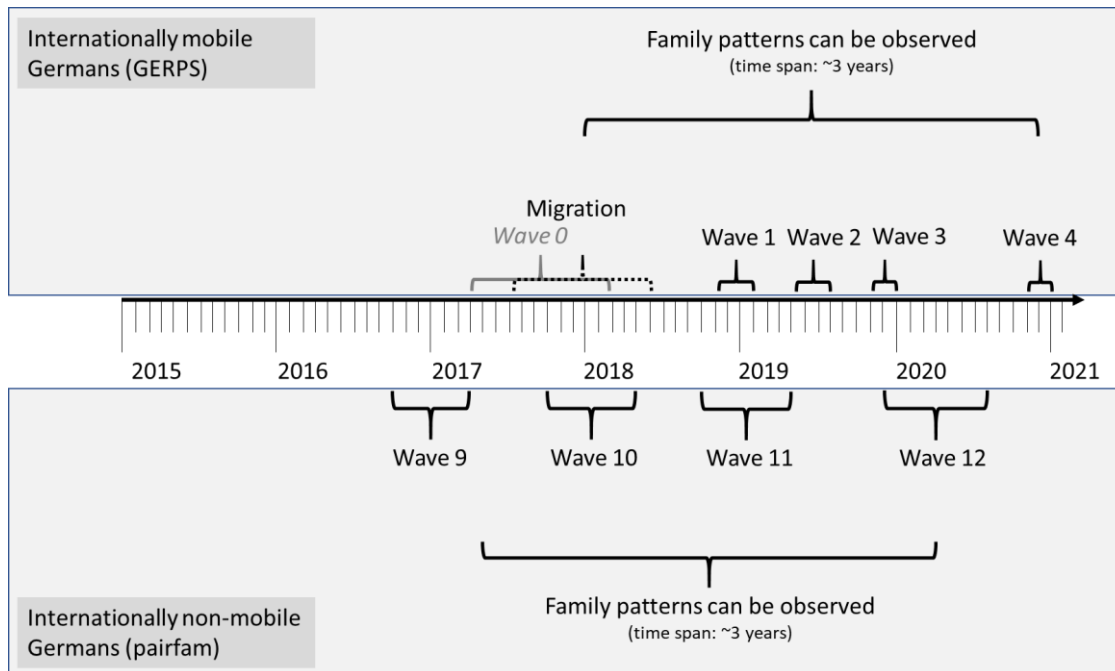
Note: GERPS: Number of observations refers to those respondents who completed the questionnaire. Pairfam: without observations from refreshment sample in wave 11. No further restrictions applied. Table provides information on four GERPS and three pairfam waves due to half-year intervals between GERPS waves 1 and 2, and waves 2 and 3. Data: GERPS wave 1 through 4. Pairfam wave 10 through 12.

GERPS provided sufficient **information on both migration and family patterns** to analyse the different research questions underlying the four articles of this dissertation. Valuable information on the migration process itself was collected using questions about migration motives, the decision-making process, and actual moving behaviour. Information on family patterns includes partnership status and status changes, family status and fertility, contact with family members and other information on social networks both at destination and origin. Inference about the timing of family changes and migration can be made. Regarding consequences of migration on the individual, subjective evaluations of different areas of life comparing the situation after migration to the situation three months prior to migration complement objective information of such changes (e.g., actual income).

5.4 *Internationally non-mobile population: pairfam*

For studying the consequences of migration on the individual, it is common to combine different data sources (e.g., Impicciatore et al., 2020; Lübke, 2015) and account for structural differences between migrants and non-migrants using appropriate techniques such as Propensity Score Matching (Rosenbaum & Rubin, 1983) or Entropy Balancing (Hainmueller, 2012). Here, to study the internationally non-mobile German population, the German Family Panel (pairfam release 12, Brüderl et al., 2023; Huinink et al., 2011) was chosen. Pairfam is a **longitudinal** study. It started in 2008/2009 and in 2024 consists of 14 waves that were conducted in one-year intervals. Analyses in this dissertation are primarily based on waves 10 through 12, the most recent available waves when the present research was being conducted (see figure 3 on how the two datasets are combined).

Figure 3: Combining GERPS and pairfam data



Regarding **representativeness**, two-stage random sampling was applied to German population registers prior to wave 1, focussing on three birth cohorts (1971-1973, 1981-1983, and 1991-1993; Brüderl et al., 2023). **Sample sizes** are sufficiently large to include internationally non-mobiles as a comparison group in the analyses (e.g., 4,750 in wave 10, see table 1). With its specific focus on **family patterns and other social relationships**, pairfam provided adequate information on these aspects. GERPS and pairfam questionnaires were designed in similar ways, such that all required variables could be constructed. Thus, combining GERPS and pairfam data, the four posed requirements for data to study family patterns in the context of migration are satisfied.

6 SUMMARY OF THE ARTICLES

6.1 Article one

Mansfeld, L. (2023). International migration and its short-term effect on partnership stability. *Population, Space and Place*, 29(4), e38.

This article presents research on the consequences of migration for partnership stability. Based on the overall research question of how international migration affects partnership stability, the research was driven by two specific empirical goals. The first goal was to examine the causal short-term effect of migration on partnership stability, distinguishing between emigration and remigration. The second goal was to illustrate further migration characteristics that potentially mediate the overall effect of (e-/re-) migration. Thereby, the research shared in article one

contributes to filling the following research gaps: effect on family patterns, migrants' heterogeneity, and context (see chapter 4).

Corresponding to the disruption arguments outlined in chapter 3.3.1, theoretical considerations point towards migration destabilizing partnerships. The primary argument is that migration implies stress (Brown, 2008; Mak et al., 2021), as migration implies “uncertainty, lack of control, and ambiguity” (Wilkinson & Singh, 2010, p. 169). This stress may increase with differences between the partners, for example, in terms of enthusiasm about the move or their economic situation. Differences in enthusiasm may originate from preexisting differences in moving desires (Coulter et al., 2012) or simply refer to post-migration differences, for example, in terms of satisfaction with the situation in the destination country (cf. Flowerdew & Al-Hamad, 2004). As far as economic consequences are concerned, migration often favors the careers of men (Cooke, 2003) while women tend to suffer disadvantages (Boyle et al., 2009). Furthermore, as emphasized by the life course perspective, migration implies changes in life domains, which in turn may affect partnership stability. Contrasting these disruption arguments, the “isolation hypothesis” (Shapira et al., 2019) poses that migrants have fewer people to rely on compared to non-migrants, and thus partnerships would become more important and separation less likely. Regarding migration characteristics, the article elaborates on potential differences between emigrants and remigrants.

Analyses in this article were based on data from GERPS waves 1 through 4 (to assess internationally mobile Germans) and pairfam waves 10 through 12 (to assess internationally non-mobile Germans), covering 2017-2020. As international migrants differ systematically from non-migrants with respect to various characteristics (e.g., Borjas et al., 2018; Lübke et al., 2021), Entropy Balancing (Hainmueller, 2012) was applied prior to estimating models assessing the effect of migration on partnership stability. Discrete Time Proportional Hazards Models (Jenkins, 1995) were estimated to account for the time structure of the dataset. Migration-time interactions were included to assess whether the effect was stable across the observation period. In a second analytical step, the sample was reduced to migrants, so that migration characteristics could be studied in more detail.

The article's general finding is that migration increases the risk of union dissolution compared to no migration. This finding corresponds to previous research on international (male) migration in Latin America (Frank & Wildsmith, 2005; Lindstrom et al., 2021) and long-distance internal migration in the United Kingdom (Shapira et al., 2019) but not Austria (Boyle et al., 2008). Considering migration characteristics, and starting with the migration direction, this finding

holds for remigration across all models but depends on the covariate choice for Entropy Balancing when assessing emigration. Thus, the stressors related to migration are found to be more important after emigration. Assessing migrants only and comparing emigrants to remigrants, being a remigrant implies a higher risk of union dissolution (consistent with findings from Baykara-Krumme et al., 2021). Furthermore, migration motives were found to shape migrants' dissolution patterns. Specifically, the risk of union dissolution decreased when the men's career was a crucial driver of the migration decision (and more so for emigrants than remigrants) and the same held true for remigrants when the women's career was important for the migration decision. Furthermore, when dissatisfaction with the previous country was crucial in shaping the migration decision, the risk of union dissolution increased. In contrast, an additional migration within the observation period, the household's economic situation, and social networks at destination were not statistically significant predictors of union dissolution.

In sum, article one provides evidence of the disruptive effect of migration on family patterns. It also shows, however, that this effect is not universal and emphasizes the importance of considering migration characteristics, and especially migration direction and motives.

6.2 *Article two*

Mansfeld, L. (n.d.). The short-term effect of international migration on family formation: fertility disruption or interrelation? [Manuscript submitted for publication to *International Migration Review*]

This article presents research on the consequences of migration with respect to family formation. Thereby, and similar to article one, it aimed to fill gaps in research about the family-migration nexus: effect on family patterns, migrants' heterogeneity, and context (see chapter 4). In particular, the research question driving this article asked to what extent migration disrupts or interrelates with first birth in the short-term. Migrations' and migrants' heterogeneity was considered with respect to migration direction, migration motives, and gender.

Theory on the effect of migration on fertility includes four main hypotheses. Two of them, the disruption and the interrelation hypothesis, refer to short-term effects and are thus of primary importance for this article and also this synopsis. Subchapter 3.3.1 already outlined these two hypotheses in detail and explained why the other hypotheses are not applicable in the current context. Starting from the disruption and the interrelation hypothesis, the article argues that interrelation appears more plausible among remigrants and those migrating for family-related motives, whereas emigrants' family formation patterns as well as family formation patterns of

people migrating for non-family motives are more likely to be disrupted after migration. Furthermore, potential differences between female and male migrants are outlined, arguing that both migration (Erlinghagen, 2021a, 2021b) and its consequences (e.g., Cooke et al., 2009), as well as the characteristics shaping family processes (e.g., Alderotti et al., 2021) would be gender-linked.

The general analytical setup of this article is quite similar to article one, combining GERPS and pairfam data from the years 2017-2020. Entropy Balancing (Hainmueller, 2012) was applied and Discrete Time Proportional Hazards Models (Jenkins, 1995) were estimated. Additionally, a variety of models were set up based on comparisons between non-migrants and different subgroups of migrants (e.g., emigrants, those migrating for family-related motives). These different comparisons enabled assessment of the effect of emigration and remigration separately as well as assessment of the effect of migration based on different migration motives. Furthermore, migration-time interactions were included and separate models were estimated by gender.

The article revealed primarily two different family formation patterns after migration. First, disruptive effects were found for women (independent of migration direction and underlying motives), emigrant men, and men migrating for their own careers. This disruption tended to be followed by a catch-up effect, which is consistent with the disruption hypothesis. Second, when assessing the whole observation period, no effect of migration on the probability of first birth was found for remigrant men and men migrating for motives other than their own careers. Still, for these men, the probability of first birth three years after migration was higher compared to immediately after migration, which can be interpreted as either a “lagged-interrelation effect” or an “indirect interrelation effect.” Lagged interrelation may be understood as interrelation arguments taking some time to manifest. Indirect interrelation means no direct interrelation between these men’s migration and their family formation, but an interrelation of their female partners’ migration (which does not necessarily coincide with these men’s migration) and family formation.

In sum, different patterns were revealed for women and men. For female migrants, migration per se appeared disruptive, and migration direction and motives did not play an important role in determining post-migration family formation. In contrast, among men they did. This emphasizes the importance of considering the combination of gender and migration characteristics when aiming to understand the complex effect of migration on family formation.

6.3 Article three

Mansfeld, L. (forthcoming). Correlations between family patterns and short-term economic outcomes of emigration. In M. Erlinghagen, & K. Hank (Eds.), *Transnational family relations of German emigrants*. Wiesbaden: Springer VS.

This article deals with the economic consequences of emigration, focussing on the role of family patterns in shaping these. By analysing how family patterns (i.e., constellations and status changes) shape emigrants' economic outcomes, and particularly paying attention to potential gender differences and different outcome levels (individual vs. household level), four of the outlined research gaps were addressed: distribution of benefits, role of family patterns, migrants' heterogeneity, and context (see chapter 4).

Regarding theoretical considerations, this paper starts from the notion of social capital (Granovetter, 1973; Lin, 2001). In particular, the first part of the theoretical section elaborates on the extent to which family members and changing family constellations may affect the building of additional social capital. Representing a barrier or bridge to social capital, family patterns may worsen or improve emigrants' individual-level economic outcomes. The second part of the theoretical section builds on these considerations but focuses more directly on potentially different economic outcomes for female and male emigrants. Here, considerations of New Home Economics (Becker, 1974; Mincer, 1978; Samuelson, 1956; Sandell, 1977), gender-role approaches (Bielby & Bielby, 1992; Duncan & Perrucci, 1976; Jürges, 2006), and bargaining theory (Abraham et al., 2010; Lundberg & Pollak, 1996; Ott, 1992) are combined.

Analyses presented in this article focussed on emigrants, using GERPS wave 1, with the aim of assessing economic outcomes shortly after migration. Due to the "state dependence" (Boyle et al., 2009; Heckman, 2001) of economic outcomes, a two-part analytical strategy (Farewell et al., 2017; Madden, 2008; Puhani, 2000) was followed. The regressions of interest are two-level logistic regression models (Hox et al., 2018; Snijders & Bosker, 2012) on different economic outcome measures. Multilevel regressions were run to account for the fact that destination-country characteristics may also influence economic outcomes.

Findings reveal female emigrants' economic outcomes to depend crucially on family constellations and family changes. Female emigrants living with their spouses suffered worse individual-level economic outcomes after migration but benefited at the household-level. Furthermore, female emigrants with children and especially shortly after childbirth suffered worse individual economic outcomes (but did not benefit at the household-level), and female partnered but unmarried emigrants benefited at the household-level (but did not suffer worse

individual outcomes). These patterns, and especially the simultaneous worse individual economic outcomes but improved household-level economic outcomes among female emigrants living with their spouses, were coined “retraditionalization” in the article. The patterns were interpreted as being in line with a similar retraditionalization of gender-roles in the course of emigration (Erlinghagen, 2021a). One explanation for this “retraditionalization” could be that these family patterns might act as relationship-specific investments, which would decrease the problem of non-binding contracts in bargaining decisions (Abraham et al., 2010) and raise the loss in bargaining power that might be agreed upon (Ott, 1992).

In contrast to female emigrants, male emigrants’ economic outcomes were found to depend less on family patterns. Thus, family patterns appeared to represent neither a bridge nor a barrier in terms of social capital for most emigrant men. Consistent with arguments from New Home Economics and gender-role approaches, these findings could be explained with couples migration decisions being asymmetric in favour of the men’s career (Abraham et al., 2010).

In sum, separately assessing female and male emigrants’ economic outcomes and considering individual and household-level outcomes jointly allowed for the development of insights into distributional patterns within emigrant families and painted a broader picture of the economic consequences of family patterns in the context of emigration. In fact, economic outcomes after emigration turned out to be highly gender-linked, and emigration tended to lead to more traditional work-family arrangements with respect to some family patterns.

6.4 Article four

Mansfeld, L. (2021). Out of sight, out of mind? Frequency of emigrants’ contact with friends in Germany and its impact on subjective well-being. In M. Erlinghagen, A. Ette, N. F. Schneider, N. Witte, (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course* (pp. 229–246). Springer. https://doi.org/10.1007/978-3-030-67498-4_13

Article four focused on one specific type of non-family relationships: friendships. Against the background that migration may in general lead to the loss of social capital (Lesage & Ha, 2012; Wahba & Zenou, 2012), this research provides an explorative analysis of the quality of German emigrants’ friendships with friends living in Germany. Three aspects of these cross-border ties were studied: (1) their quality compared to the quality of other relationships after emigration, (2) their relation to socio-demographic and socio-economic characteristics, and (3) the link between friendship quality and subjective well-being. Through studying these topics, two of the outlined research gaps, specifically cross-border friendships and context (see chapter 4),

were addressed within this article. Notably, even though this article is placed fourth in this dissertation, it should be noted that it was chronologically the first to be developed and completed.

The theoretical considerations in this explorative article were expanded on in this synopsis. It was argued that friendship networks might be especially prone to disruption, as disruption appears more likely the weaker or less formal the ties (cf. Janta et al., 2015; Wahba & Zenou, 2012). With respect to determinants of friendship ties, and especially the role of the family in shaping these, it can be argued that both children (Song, 2012) and a partner (Sarkisian & Gerstel, 2016) can be expected to represent barriers rather than bridges to these friendship ties. Furthermore, friendship patterns can be assumed to differ between men and women (Altmann, 2020). Lastly, considerations about associations between cross-border friendship ties and subjective well-being were outlined in detail in subchapter 3.3.2, providing arguments in both directions (i.e., enhancing and worsening subjective well-being).

Similar to article three, this article was based on GERPS wave 1 and focused on emigrants. Different associations of cross-border friendships with socio-demographic and socio-economic characteristics were identified through generalized ordered logit models (R. Williams, 2006), whereas “simple” ordered logistic models were used to estimate associations between contact frequency and different measures of subjective well-being. As with relationship quality in general (Bauernschuster et al., 2010; Blömers & Letschert, 2011), friendship quality was operationalized using contact frequency.

Referring to the title of the paper, out of sight did not mean out of mind – at least in the short term. German emigrants had less contact with their friends in Germany compared to contact with their partner, children, or parents, but more contact compared to contact with their siblings, grandchildren, grandparents, or other relatives. Different statistically significant associations of this contact frequency with socio-demographic and socio-economic characteristics were found. As family patterns and gender differences are the core of this dissertation, only those aspects are outlined here. The findings regarding partnership status and household constellations were consistent with the argumentation that family obligations would decrease visits home (L. Ryan et al., 2015) and thus also decrease contact frequency. Specifically, emigrants who had a partner and those who did not live alone had less contact with their friends in Germany. Regarding gender differences, men were found to have less contact with their friends in Germany. This patterns corresponded to the finding that female immigrants in Australia did more visits home

than their male counterparts and may be explained by traditional gender roles expecting women to be the caregivers and to provide emotional support (O’Flaherty et al., 2007).

The article also revealed first evidence of a link between contact with friends in Germany and different measures of subjective well-being. First, more contact corresponded to weaker feelings of loneliness and higher general life satisfaction. Thus, the positive impact of friendships in general (Amati et al., 2018) appeared to manifest also in light of geographical separation. Second, cross-border friendships were associated with the perception that the situation with friends and neighbors in the destination country was worse compared to the situation prior to migration. This can be interpreted as emigrants trying to compensate for the unsatisfying situation regarding friends and neighbors at destination by relying on their friends back in Germany. This interpretation appears plausible but yields the question of direction of the association between contact frequency and measures of subjective well-being. Even though this question could not be answered within this article, the article expands our knowledge on cross-border friendships with respect to the extent of such friendships, their determinants, and the psychosocial consequences of emigration by assessing the link between these friendships and different measures of subjective well-being.

7 CONCLUSION

Keeping in mind the summaries of the individual articles in the previous chapter, in this concluding chapter, the articles are brought together and discussed in the broader context of consequences of migration on the individual and the family-migration nexus. In particular, this chapter consists of five subchapters, including discussions of key findings (subchapter 7.1), theoretical implications of these findings (subchapter 7.2), major limitations of the articles (subchapter 7.3), potential directions for future research (subchapter 7.4), and the societal relevance of the findings (subchapter 7.5).

7.1 *Summary and discussion of key findings*

Considering the first major research question posed in this dissertation, articles one and two provide important insights into the effect of migration on family patterns, namely partnership stability and family formation. In the theoretical chapter of this synopsis (subchapter 3.3.1), two opposing hypotheses, namely the disruption and the interrelation hypotheses, were discussed. These hypotheses suggested a delay or disruption of family processes (*disruption hypothesis*), or an acceleration of family processes (*interrelation hypothesis*). The current results revealed that – even in the context of privileged migration (see subchapter 2.1) – migration appears to

have a disruptive effect, that is, it was found to trigger union dissolution and decrease the probability of family formation shortly after migration. Thus, even though lives of less advantaged individuals may be more vulnerable to migration (cf. Castro Torres & Gutierrez-Vazquez, 2022), international migration from and back to a highly industrialized country (Germany) appears to involve sufficient stressors to disrupt family patterns. Notably, and in line with the theoretical arguments of the disruption hypothesis, assessing family formation also provided some evidence that the stressors associated with migration are strongest shortly after migration, with some catch-up behaviour being observable already about three years after migration. Alongside family relations, it has been argued that migration might disrupt social networks outside the family, including friendship networks. Even though the assessment of the disruption hypothesis regarding friendship networks would have required a comparison between the frequency of contacts prior to and after migration, article four still shows that not all contacts to friends back in Germany were disrupted after migration as emigrants were still in contact with friends who remained in Germany. Thus, even though migration has been shown to be disruptive in the family context, it might not necessarily be disruptive with respect to friendships.

In line with the prior claim that these effects cannot be expected to be the same for all migrants, this effect of migration on family patterns was indeed found to depend on migrants' and migrants' characteristics. Especially relevant in shaping the effects on partnership stability and family formation were the direction of migration (emigration vs. remigration), the underlying migration motives, gender, and the combination of gender with these two migration characteristics. Analyses revealed that emigration and remigration have partly different consequences in the family domain: Remigration was more detrimental than emigration to partnership stability, but among men only emigration was found to delay family formation. Thus, emigration and remigration must be considered separately when assessing the consequences of migration, because there may not be a "general" effect of migration. Emigration and remigration being (at least partly) different processes further adds to the threat of unobserved remigration for the representativity of widely used immigrant samples (see subchapter 5.2.1 on problems of existing general data sources): It appears implausible that this unobserved process of remigration would not affect the structure of (im)migrants remaining in a particular country.

Along with the migration direction shaping the effect of migration on family formation among men, migration motives also play a role. Thus, in shaping family formation, these migration

characteristics – and, following the disruption hypothesis, the stress associated with these migration characteristics – appear relevant to male migrants. In contrast, among women, migration per se appeared disruptive for family formation. This does not necessarily imply that among female migrants, the varying migration characteristics (migration direction and motives) do not play a role. Rather, it could be argued that migration itself already involves enough stressors for it to be disruptive for women. The overall disruptive effect of migration on family formation among female migrants might be explained by female migrants' anticipating changes in other life domains that will happen after migration or that would happen if family formation were not postponed, which might lead them to adjust family formation plans. One such example will be outlined when considering in detail the consequences of the interplay of family and migration for the occupational domain (in this subchapter).

Turning to the second major research question of this dissertation, articles three and four advance our understanding of how family patterns and other social relations relate to the consequences of emigration in different life domains. In particular, the two articles focused on the occupational domain and subjective well-being, and the theory chapter of this synopsis (more precisely subchapter 3.3.2) emphasized how these two domains might be affected directly by strong ties or indirectly via building new social networks (referring to Granovetter's, (1973, 1983) arguments regarding weak and strong ties). In particular, attention was paid to the different channels via which strong ties may represent either a barrier or a bridge to successful post-migration outcomes in terms of the occupational domain and subjective well-being.

Similar to the above gender differences in the effect of migration on family formation, article three also revealed gendered consequences of migration. Specifically, women's economic outcomes after emigration were found to depend on family patterns, but men's less so. Female emigrants in certain family constellations or experiencing certain family status changes (living with their spouses, having children, and after childbirth) were found to suffer individual-level economic losses while partly benefiting at the household-level. At the same time, male emigrants' economic outcomes after migration appeared to be less driven by family constellations and changes. Thus, for female emigrants, some family constellations and changes appear to be barriers to their own careers, but for male emigrants the same family constellations and changes appear to be neither clearly bridge nor barrier. Emphasizing these differences between female and male emigrants, the outlined pattern among female emigrants was coined "retraditionalization," implying more traditional work-family arrangements after emigration than before. Relating this "retraditionalization" to the findings on the effect of migration on

family formation, it could be argued that some women might anticipate these worse individual-level economic outcomes. This anticipation could provide a rationale for delaying family formation (the finding of article two).

Given its explorative nature, article four does not consider potential gender differences but still adds first evidence of ties to friends in Germany enhancing subjective well-being after emigration. Thus, referring back to the theoretical arguments of barrier vs. bridge, cross-border friendships can be considered a bridge to successful post-migration outcomes. Linking these findings to the findings of other articles, these friendship ties were found to depend on both family constellations and the occupational domain. Coupled emigrants (compared to singles and independent of parenthood) had less contact with friends in Germany, as did emigrants who were employed (compared to those who were not active). Alongside the argument that obligations negatively relate to visits home (L. Ryan et al., 2015) and thus cross-border contacts, it could also be argued that emigrants may maintain these cross-border friendships especially in light of the lack of a partner or children. In this sense, the associations between family constellations and cross-border friendships plus the fact that cross-border friendships were associated positively with certain measures of subjective well-being suggest that even this specific type of friendship might fulfil certain emotional needs that are often being satisfied by both emotionally and geographically close ties. In terms of subjective well-being, cross-border friendships might thus (partially) compensate for the absence of such ties, which – referring back to the disruptive effect of migration on family patterns – might be induced by migration.

In sum, the four articles of this dissertation provide important insights into different aspects of the family-migration nexus, focussing on two perspectives: the consequences of migration in terms of the family as well as the role of the family in shaping migration's consequences in other life domains. The findings reveal that these patterns are interconnected and emphasize a complex and gender-linked interplay of the different life course domains in the context of migration – even in the context of migration from and back to a rather egalitarian and highly developed welfare state.

7.2 *Theoretical implications*

In light of migration only rarely being conceptualized as a process and considered from a life course perspective (but see Erlinghagen, 2021c; Kley, 2011; Tabor & Milfont, 2011), “different perspectives on the family-migration-nexus largely remain disconnected” (Erlinghagen & Hank, forthcoming-b). This dissertation, and especially this synopsis, primarily aimed at connecting two perspectives of this nexus: family patterns being shaped by migration, and

family patterns shaping other outcomes in the integration stage. As should have become apparent in the theoretical chapter (chapter 3), additional perspectives can be included in these considerations. For example, the consequences of migration may be anticipated, influencing (and potentially explaining) the preceding migration decision. This dissertation is far from laying out a complete picture of the family-migration nexus. Still, it provides empirical findings and first theoretical considerations for connections between previously disconnected perspectives, and it might be used as a starting point for further theory development.

Starting from the life course perspective, it was possible to build such connections by combining theoretical approaches and considerations. Regarding the effect of migration on family patterns (research question one), it appeared straightforward to apply the arguments of the disruption and interrelation hypotheses known from the effect of migration on fertility, to partnership stability. Similarly, two opposing lines of arguments were developed with respect to the role of family patterns in shaping outcomes in the integration stage (research question two). The family may be either a barrier or a bridge to successful outcomes after migration. For these two lines of arguments, however, a bulk of different strands of theoretical considerations had to be combined. This was especially the case for considerations about the role of family patterns in shaping the economic consequences of emigration (article three). Here, social capital arguments, New Home Economics, gender roles, and bargaining approaches had to be combined to be able to explain differences between female and male emigrants, and individual- and household-level outcomes.

Combining these different approaches made it apparent that we still lack nuanced theoretical considerations of migrations' and migrants' characteristics in shaping the effects of migration on different outcomes. This became clear as some empirical findings were not completely in line with theoretical considerations, or such considerations were simply lacking. Findings about differences by migration direction provide an example of new empirical findings that are not completely consistent with theory: Assessing family formation among women, disruption was found for both emigration and remigration, even though for remigration an interrelation of patterns was expected (cf. Kreyenfeld & Vatterrott, 2018's "salmon hypothesis"). Among men, emigration but not remigration was found to delay family formation. These findings emphasize the need for disruption and interrelation arguments to be expanded to gender inequalities, including considerations of how disruption and interrelation depend on migration characteristics. Theoretical considerations were lacking with respect to the role of migration and migrant characteristics in shaping associations between cross-border friendships and

subjective well-being. For example, while it has been established that female and male friendship patterns differ (Altmann, 2020), it appears unclear – from a theoretical point of view – how certain friendships relate to female vs. male migrants’ subjective well-being. Thus, additional theory building and expansions of existing considerations appear necessary.

7.3 *Limitations*

As should have become apparent in the previous two subchapters of this conclusion, this dissertation enhances our knowledge of the family-migration nexus in various ways. Still, some limitations need to be mentioned. This subchapter focuses on three such limitations. Additional (minor) limitations, which are specific to the individual articles and not deemed of major importance for this synopsis, are outlined in more detail in the respective articles.

Acknowledging that migration might be selective with respect to characteristics that shape family patterns (see e.g., Baykara-Krumme & Milewski, 2017; Lindstrom et al., 2021), Entropy Balancing (Hainmueller, 2012) was applied when assessing the effect of migration on family patterns (articles one and two). This, however, only allowed control for selectivity of observable characteristics. Unobserved characteristics, such as partnership quality before the observation period, partnership duration, or fertility intentions could not be accounted for. In the individual articles, the extent to which each of these characteristics might be critical for the estimated effects is argued in detail.

Article three, assessing the role of family patterns in shaping the economic consequences of emigration, aimed at comparing individual- with household-level economic outcomes. Household-level income data, however, were not provided within GERPS. Therefore, the article makes use of subjective outcome measures, asking respondents to compare their current situation to their situation prior to migration (considering individual income, household income, and living standard). Objective and subjective measures highly correlate (V. F. Williams et al., 2017), and relying on subjective measures has the advantage of lower inaccuracy caused by destination country differences. Still, the paper also argues that – due to differences in individual economic outcomes – men and women might rely to different extents on household income, and thus might potentially perceive changes differently. To test this argument, data about both objective and subjective income (changes) would be required.

Article four, assessing associations between emigrants’ contact with friends who stayed in the origin country and subjective well-being is only of explorative nature. It requires further theoretical considerations (that have been partially provided within the theory chapter of this

synopsis, see chapter 3) as well as a more elaborated modelling. Directions for future research, taking this article as a starting point, are included in the following subchapter.

7.4 *Directions for future research*

Even though our knowledge of the family-migration nexus has been expanded by this dissertation, six directions of future research that may further increase our understanding are presented in the current subchapter. The majority of these directions can be deduced from the new insights that have been gained in this dissertation: New knowledge implies new questions. Additionally, directions for research that were not at the focus of this dissertation but could expand the view on the family-migration nexus are outlined.

Articles one through three revealed highly gendered patterns in the effect of migration on family patterns and the relation of family patterns and economic consequences of migration. Referring to the effect of migration on family patterns, gender differences might be explained by non-synchronized migrations, other aspects of tied migration, and within-couple processes. Although there is some evidence regarding the role of tied migration for partnership stability (Baykara-Krumme et al., 2021, lacking, however, a comparison to non-migrants at origin), such analyses appear to be also a promising avenue for enhancing our understanding of post-migration family formation.

Referring to the gender-linked role of family patterns in shaping the economic consequences of migration, it might be the case that individual economic losses are not only compensated by household level economic gains, but also by individual-level gains in other life domains, for example, in terms of subjective well-being. Thus, it may be informative to expand on the findings from article four investigating post-migration subjective well-being, in particular considering gender, family patterns, and migration characteristics while making use of the panel character of GERPS and applying appropriate methods to make causal interference.

Furthermore, the potential “retraditionalization” in the course of emigration might motivate investigating the role of family patterns in shaping the economic outcomes of remigration (see subchapter 7.5 on the societal relevance of this topic). Whether similar, more, or less pronounced patterns can be expected appears unclear so far. Applying bargaining arguments (cf. Abraham et al., 2010; Ott, 1992), changes in bargaining power associated with emigration might imply even more traditional patterns after remigration. In contrast with this argument, remigration has been shown to be more female-led (Amcoff & Niedomysl, 2015; Erlinghagen, 2021b), suggesting that economic outcomes might also be more egalitarian after remigration.

Another potentially informative avenue for future research would be the investigation of family patterns prior to migration, which might represent anticipatory consequences of migration (e.g., Lübke, 2015 regarding family formation), or be assessed in their role of influencing migration decisions. In this manner, the focus of analysis would be shifted from the integration stage to the considering or planning stage of the adjusted four-stages model of voluntary migration (see subchapter 3.2.1). Making use of migration intentions and planned length of stay as well as observed subsequent migrations within GERPS, the data for such analyses does already exist.

Referring back to the introduction, important differences between internal and international migration were outlined, and this thesis focussed on international migration. Still, in a life course perspective, international migration is often followed or preceded by internal moves (Bernard & Vidal, 2023). King and Skeldon (2010, p. 1619) set out to build a “‘grand theory’ of migration which incorporates all types of migration, in all places and at all times.” Building on this, a more complete picture would include assessment of the family-migration nexus considering international, internal, and no migration jointly.

Lastly, looking at social relationships outside of the family, article four provided first evidence of a relation between friends and subjective well-being. The findings in this article might not only provide a starting point for investigations of the relation of family patterns and subjective well-being (as outlined above), but also analysing friendships in the context of migration in more detail. Several research questions appear potentially enlightening in this sense: To what extent do migrants differ from non-migrants in their friendships? How do friendships change over the course of migration? And how and with whom are new friendships build over the course of migration?

7.5 *Societal relevance*

Having outlined these directions for future research, it becomes apparent that many questions regarding the family-migration nexus remain unanswered. Nonetheless, this dissertation provides important and new insights into (a) the effect of migration on family patterns, and (b) the role of family patterns (and friendships) in shaping migration outcomes, specifically in the context of emigration from and remigration to a highly developed welfare state. With these new insights taken into account, the current (and last) subchapter outlines the societal relevance of these findings. First, the implications of the current findings for the individuals’ lives and social inequalities are elaborated. In a second step, societal relevance in terms of both origin and destination societies are discussed.

7.5.1 Relevance of findings for migrants

Referring back to the introduction of this synopsis, it was posed that studying the consequences of migration and focussing on the family-migration nexus would allow us to learn about the interdependencies of different life domains, and how migration influences the opportunities in life of certain groups. Studying the consequences from a life course or migration perspective (cf. Erlinghagen, Ette, et al., 2021) provides an understanding of migrants' successes in different life domains as compared to the situation prior to migration or had migration not taken place. In fact, the four articles showed that migration, family patterns, and outcomes in other life domains appear to be highly interconnected, with the benefits of migration not being equally distributed. This interrelatedness appears crucial when considering the societal relevance of these findings, as will become apparent below.

Considering the consequences of migration for the family domain (research question one), the first relevant finding was that partnership stability decreased with migration (article one), implying that migrants were more likely than non-migrants to suffer union dissolution. Union dissolution generally relates negatively to subjective well-being (Johnson, Neyer, & Finn, 2021; Soons et al., 2009; Switek & Easterlin, 2018). Acknowledging that migration already entails losing social networks by leaving them behind (cf. Guveli et al., 2016), union dissolution might be especially harmful for migrants. Migrants experiencing union dissolution might thus more heavily rely on other social ties. Notably, significant social relations were maintained across borders – especially among emigrants without a partner – and cross-border friendships were positively associated with subjective well-being (article four). This association of cross-border friendships and subjective well-being might counteract the negative impact that migration has via its effect on partnership stability.

Turning to the effect of migration on family formation patterns, the major finding was fertility disruption (article two). On the one hand, postponing family formation plans may also imply a postponement of other life plans such as moving into a bigger apartment or a house. On the other hand, postponing family formation might imply that other life course events take place earlier, as they might be prioritized as steps to complete sooner. For example, migrants might want to establish security in the occupational domain before family formation. Thus, postponing family formation can be assumed to also imply changes in the timing of other life course domains. An additional aspect emphasizing the relevance of this finding refers to age at family formation. In light of already relatively high maternal average ages at first birth in many highly industrialized countries (including Germany, Eurostat, 2022), an additional family formation

postponement might lead to problems in fulfilling fertility intentions (cf. Casterline & Han, 2017; Morgan & Rackin, 2010). In sum, the finding of family formation postponement appears relevant in terms of adjusting (and potentially not fulfilling) life plans, including not only the family sphere but also other life domains such as the occupational domain.

Considering the consequences of the interplay of migration and the family in terms of the occupational domain and subjective well-being (research question two) further allows for exploration of how migrants' lives are structured and where social inequalities emerge. The already outlined "retraditionalization" implies that female emigrants in certain family constellations or experiencing certain family changes suffer worse individual-level economic outcomes compared to their situation before migration. Thus, the gains from migration are not distributed equally and social inequalities emerge within the group of female emigrants (depending on their family patterns) as well as between female and male emigrants. Alongside the direct relevance of worse individual-level economic outcomes for female emigrants living in these particular family patterns, increased reliance on the partner may appear especially problematic in light of higher union dissolution rates after migration (the finding of article one).

Considering subjective well-being after migration offers an additional dimension to assess gains and thus social inequalities after migration. Those migrants who do not gain economically might be compensated in terms of subjective well-being, which might be a promising avenue of future research as outlined in the previous subchapter. In this thesis, however, subjective well-being was assessed in its relation to cross-border friendships. The finding that cross-border friendship ties are positively associated with subjective well-being implies that – even in light of the majority of social networks being lost in the course of migration (cf. Guveli et al., 2016) and potential isolation in the destination country (*isolation hypothesis*, see Shapira et al., 2019) – significant ties are maintained and are beneficial for migrants. At least shortly after migration, these cross-border ties might compensate for a lack of geographically close, strong ties.

7.5.2 *Relevance of findings for origin and destination societies*

Having elaborated on the relevance of the present findings for the individuals' life courses and the emergence of social inequalities, the current subchapter focuses on the relevance of these findings in the respective societies. In the context of international migration, this relevance can refer to two sets of societies (generally assessed referring to nation states): the societies from which migrants leave (origin societies) and the societies to which migrants move (destination societies). Most of the time, the latter perspective – that is, the perspective of destination societies – is focused on, with a bulk of research (as well as public debate) on immigrants'

integration emphasizing a dominant concern about how immigrants fare compared to non-migrants or other immigrants at destination.

Origin countries can be considered destination countries if emigrants decide to return, that is if remigration takes place. In fact, this return appears quite prevalent in the German context (Ette, Sauer, & Fauser, 2021; Ette & Witte, 2021). With return being likely, the consequences of emigration might also become relevant for the origin society. One example would be labour shortages, which is a problem in many highly developed welfare states, including Germany (cf. Erlinghagen, Ette, et al., 2021). Starting from the notion that most emigrants will return, at first glance, emigration does not appear relevant to labour shortages: If those people return who left, these movements can be assumed to not have relevant effects on the labour market. However, considering article three's findings, emigration might indeed become relevant. Specifically, the potentially evolving more traditional work-family arrangements in the course of emigration (i.e., women dropping out of the labour market) might imply an aggravation of labour shortages if no counteracting patterns unfold in the course of remigration.

Furthermore, even without remigration, the present findings are relevant to the origin societies. As emphasized by transnational approaches, migrants' integration takes place not only in the destination society, but also with reference to the society of origin (cf. Berry, 2001; Erlinghagen, 2021c; FitzGerald, 2012). In this sense, interdependencies between migration and other life domains also appear relevant for origin societies. Transnational ties remain (cf. Baldassar et al., 2014; Douglass, 2013), including both family and friendship ties that potentially relate to the emigrants' well-being. First evidence of such relations was provided by article four, referring to friendships and emigrants' subjective well-being. Furthermore, and emphasizing the concept of "linked lives" (Elder & Johnson, 2003), migration also affects the lives of those "staying behind," or the non-migrant origin society, including their social networks, subjective and economic well-being (see e.g., Echevoyén Nava, 2017; Ivlevs et al., 2019; Marchetti-Mercer, 2012; Mazzucato & Schans, 2011).

In sum, the current findings appear of societal relevance for the individuals' opportunities in life as well as both origin and destination societies. The findings expand our understanding of the complex interdependencies of migration and its consequences in different life domains, focussing particularly on the family-migration nexus. This knowledge might prove helpful when promoting migration or aiming at mitigating its consequences.

REFERENCES

- Abraham, M., Auspurg, K., & Hinz, T. (2010). Migration Decisions Within Dual-Earner Partnerships: A Test of Bargaining Theory. *Journal of Marriage and Family*, *72*(4), 876–892. <https://doi.org/10.1111/j.1741-3737.2010.00736.x>
- Adserà, A., & Ferrer, A. (2016). The Fertility of Married Immigrant Women to Canada. *International Migration Review*, *50*(2), 475–505. <https://doi.org/10.1111/imre.12114>
- Ajrouch, K. J., Hu, R. X., Webster, N. J., & Antonucci, T. C. (2024). Friendship trajectories and health across the lifespan. *Developmental Psychology*, *60*(1), 94–107. <https://doi.org/10.1037/dev0001589>
- Akbaritabar, A., Theile, T., & Zagheni, E. (2023). *Scholarly Migration Database: Methods and Documentation* (2022_V1). <https://www.ScholarlyMigration.org>
- Alcántara, C., Chen, C.-N., & Alegría, M. (2015). Transnational ties and past-year major depressive episodes among Latino immigrants. *Cultural Diversity & Ethnic Minority Psychology*, *21*(3), 486–495. <https://doi.org/10.1037/a0037540>
- Alderotti, G., Vignoli, D., Baccini, M., & Matysiak, A. (2021). Employment Instability and Fertility in Europe: A Meta-Analysis. *Demography*, *58*(3), 871–900. <https://doi.org/10.1215/00703370-9164737>
- Allan, G., & Adams, R. G. (2007). The Sociology of Friendship. In C. D. Bryant & D. L. Peck (Eds.), *21st Century Sociology: A Reference Handbook* (123-131). Sage Publications, Inc. <https://doi.org/10.4135/9781412939645.n72>
- Altmann, T. (2020). Distinctions in friendship research: Variations in the relations between friendship and the Big Five. *Personality and Individual Differences*, *154*, 109727. <https://doi.org/10.1016/j.paid.2019.109727>
- Amati, V., Meggiolaro, S., Rivellini, G., & Zaccarin, S. (2018). Social relations and life satisfaction: The role of friends. *Genus*, *74*(1), 1–18. <https://doi.org/10.1186/s41118-018-0032-z>
- Amcoff, J., & Niedomysl, T. (2015). Is the Tied Returnee Male or Female? The Trailing Spouse Thesis Reconsidered. *Population, Space and Place*, *21*(8), 872–881. <https://doi.org/10.1002/psp.1969>
- Amelina, A., & Faist, T. (2012). De-naturalizing the national in research methodologies: key concepts of transnational studies in migration. *Ethnic and Racial Studies*, *35*(10), 1707–1724. <https://doi.org/10.1080/01419870.2012.659273>

- Andersson, G. (2004). Childbearing after Migration: Fertility Patterns of Foreign-born Women in Sweden. *International Migration Review*, 38(2), 747–774.
<https://doi.org/10.1111/j.1747-7379.2004.tb00216.x>
- Andreß, H.-J., & Careja, R. (2018). Sampling migrants in six European countries: How to develop a comparative design? *Comparative Migration Studies*, 6(33), 1–21.
<https://doi.org/10.1186/s40878-018-0099-x>
- Annis, D. B. (1987). The Meaning, Value, and Duties of Friendship. *American Philosophical Quarterly*, 24(4), 349–356.
- Apitzsch, U. (2014). Tarnsnationale Familienkooperation. In T. Geisen, T. Studer, E. Yildiz, & E. Yıldız (Eds.), *Migration, Familie und Gesellschaft: Beiträge zu Theorie, Kultur und Politik* (pp. 13–26). Springer VS.
- Arránz Becker, O., Hank, K., & Steinbach, A. (Eds.). (2023). *Handbuch Familiensoziologie* (2nd ed.). Springer Fachmedien Wiesbaden GmbH.
<https://ebookcentral.proquest.com/lib/kxp/detail.action?docID=7248521>
- Baham, M. E., Weimer, A. A., Braver, S. L., & Fabricius, W. V. (2008). Sibling Relationships in Blended Families. In J. Pryor (Ed.), *The International Handbook of Stepfamilies* (pp. 175–207). Wiley. <https://doi.org/10.1002/9781118269923.ch8>
- Baizán, P., Aassve, A., & Billari, F. C. (2004). The Interrelations Between Cohabitation, Marriage and First Birth in Germany and Sweden. *Population and Environment*, 25(6), 531–561. <https://doi.org/10.1023/B:POEN.0000039064.65655.3b>
- Baizán, P., Assave, A., & Billari, F. C. (2003). Cohabitation, Marriage, and First Birth: The Interrelationship of Family Formation Events in Spain. *European Journal of Population*, 19(2), 147–169. <https://doi.org/10.1023/A:1023343001627>
- Baldassar, L., Kilkey, M., Merla, L., & Wilding, R. (2014). Transnational Families. In J. Treas, J. Scott, & M. Richards (Eds.), *The Wiley Blackwell Companion to the Sociology of Families* (pp. 155–175). Wiley.
<https://doi.org/10.1002/9781118374085.ch8>
- Barcus, H. R., & Brunn, S. D. (2010). Place elasticity: exploring a new conceptualization of mobility and place attachment in rural america. *Geografiska Annaler: Series B, Human Geography*, 92(4), 281–295. <https://doi.org/10.1111/j.1468-0467.2010.00353.x>
- Bauernschuster, S., Falck, O., & Wößmann, L. (2010). Schadet Internetnutzung dem Sozialkapital? *Ifo Schnelldienst*, 63(21), 11–17.

- Baykara-Krumme, H. (2010). *Interviewereffekte in Bevölkerungsumfragen: ein Beitrag zur Erklärung des Teilnahme- und Antwortverhaltens von Migranten* (Arbeitspapier des Beziehungs- und Familienpanels (pairfam) No. 19). pairfam - Das Beziehungs- und Familienpanel. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-369512>
- Baykara-Krumme, H. (2020). Migration und Familie. In A. Röder & D. Zifonun (Eds.), *Handbuch Migrationssoziologie* (pp. 1–33). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-20773-1_12-1
- Baykara-Krumme, H., Erlinghagen, M., & Mansfeld, L. (2021). Disruption of Family Lives in the Course of Migration: 'Tied Migrants' and Partnership Break-up Patterns among German (R)emigrants. In M. Erlinghagen, A. Ette, N. F. Schneider, & N. Witte (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course* (pp. 173–188). Springer. https://doi.org/10.1007/978-3-030-67498-4_10
- Baykara-Krumme, H., & Fokkema, T. (2019). The impact of migration on intergenerational solidarity types. *Journal of Ethnic and Migration Studies*, 45(10), 1707–1727. <https://doi.org/10.1080/1369183X.2018.1485203>
- Baykara-Krumme, H., & Milewski, N. (2017). Fertility Patterns Among Turkish Women in Turkey and Abroad: The Effects of International Mobility, Migrant Generation, and Family Background. *European Journal of Population*, 33(3), 409–436. <https://doi.org/10.1007/s10680-017-9413-9>
- Beauchemin, C. (2014). A Manifesto for Quantitative Multi-sited Approaches to International Migration. *International Migration Review*, 48(4), 921–938. <https://doi.org/10.1111/imre.12157>
- Becker, G. S. (1965). A Theory of the Allocation of Time. *The Economic Journal*, 75(299), 493–517. <https://doi.org/10.2307/2228949>
- Becker, G. S. (1974). A Theory of Marriage: Part II. *Journal of Political Economy*, 82(2), Article 2, 11-26. <https://doi.org/10.1086/260287> (S11–S26).
- Becker, G. S. (1981). *A treatise on the family*. Harvard University Press.
- Beine, M., Docquier, F., & Rapoport, H. (2007). Measuring International Skilled Migration: A New Database Controlling for Age of Entry. *The World Bank Economic Review*, 21(2), 249–254. <https://doi.org/10.1093/wber/lhm007>
- Benítez, J. L. (2012). Salvadoran Transnational Families: ICT and Communication Practices in the Network Society. *Journal of Ethnic and Migration Studies*, 38(9), 1439–1449. <https://doi.org/10.1080/1369183X.2012.698214>

- Bernard, A., & Vidal, S. (2023). Linking internal and international migration over the life course: A sequence analysis of individual migration trajectories in Europe. *Population Studies*, 77(3), 515–537. <https://doi.org/10.1080/00324728.2023.2231913>
- Bernardi, L., Huinink, J., & Settersten, R. A. (2019). The life course cube: A tool for studying lives. *Advances in Life Course Research*, 41, 100258. <https://doi.org/10.1016/j.alcr.2018.11.004>
- Bernardi, L., & Klaerner, A. (2014). Social networks and fertility. *Demographic Research*, 30(22), 641–670. <https://doi.org/10.4054/DemRes.2014.30.22>
- Berry, J. W. (2001). A Psychology of Immigration. *Journal of Social Issues*, 57(3), 615–631. <https://doi.org/10.1111/0022-4537.00231>
- Bevelander, P., & Groeneveld, S. (2012). How many hours do you have to work to be integrated? Full-time and part-time employment of native and ethnic minority women in the Netherlands. *International Migration*, 50(s1), e117-e131. <https://doi.org/10.1111/j.1468-2435.2010.00622.x>
- Bielby, W. T., & Bielby, D. D. (1992). I Will Follow Him: Family Ties, Gender-Role Beliefs, and Reluctance to Relocate for a Better Job. *American Journal of Sociology*, 97(5), 1241–1267.
- Biemer, P. P., & Lyberg, L. (2003). *Introduction to survey quality. Wiley series in survey methodology*. Wiley-Interscience. <https://doi.org/10.1002/0471458740>
- Bilecen, B., & Cardona, A. (2018). Do transnational brokers always win? A multilevel analysis of social support. *Social Networks*, 53, 90–100. <https://doi.org/10.1016/j.socnet.2017.03.001>
- Birgier, D. P., Lundh, C., Haberfeld, Y., & Elldér, E. (2022). Movers and Stayers: A Study of Emigration from Sweden 1993-2014. *European Journal of Population*, 38(5), 1033–1064. <https://doi.org/10.1007/s10680-022-09634-3>
- Blau, P. M. (1977). A Macrosociological Theory of Social Structure. *American Journal of Sociology*, 83(1), 26–54. <https://doi.org/10.1086/226505>
- Blieszner, R., & Roberto, K. A. (2009). Friendship across the Life Span: Reciprocity in Individual and Relationship Development. In F. R. Lang & K. L. Fingerman (Eds.), *Growing Together* (pp. 159–182). Cambridge University Press. <https://doi.org/10.1017/CBO9780511499852.007>
- Blohm, M., & Diehl, C. (2001). Wenn Migranten Migranten befragen: Zum Teilnahmeverhalten von Einwanderern bei Bevölkerungsbefragungen. *Zeitschrift für*

- Soziologie*, 30(3), 223–242. <https://www.degruyter.com/document/doi/10.1515/zfsoz-2001-0304/html>
- Blömers, B., & Letschert, S. (2011). Flüchtige Bekannte, Freunde in der Ferne: Nutzerbefragung III: StudiVZ im Vergleich mit anderen Kommunikationskanälen. In C. Neuberger & V. Gehrau (Eds.), *StudiVZ: Diffusion, Nutzung und Wirkung eines sozialen Netzwerks im Internet* (pp. 140–161). VS Verl. für Sozialwiss.
- Blossfeld, H.-P., & Huinink, J. (2001). Lebensverlaufsforshung als sozialwissenschaftliche Forschungsperspektive: Themen, Konzepte, Methoden und Probleme. *BIOS – Zeitschrift Für Biographieforschung, Oral History Und Lebensverlaufsanalysen*, 14(2), 5–31.
- Bogic, M., Ajdukovic, D., Bremner, S., Franciskovic, T., Galeazzi, G. M., Kucukalic, A., Lecic-Tosevski, D., Morina, N., Popovski, M., Schützwohl, M., Wang, D., & Priebe, S. (2012). Factors associated with mental disorders in long-settled war refugees: Refugees from the former Yugoslavia in Germany, Italy and the UK. *The British Journal of Psychiatry*, 200(3), 216–223. <https://doi.org/10.1192/bjp.bp.110.084764>
- Bonjour, S., & Kraler, A. (2015). Introduction: family migration as an integration issue? Policy perspectives and academic insights. *Journal of Family Issues*, 36(11), 1407–1432. <https://doi.org/10.1177/0192513X14557490>
- Borell, K., Rask, E., & Warsame, M. (2014). Gendered Family Roles and Expectations in Transnational Somali Refugee Families: An Exploratory Multiple-site Study. *International Journal of Child, Youth and Family Studies*, 5(2), 296–307. <https://doi.org/10.18357/ijcyfs.borellk.522014>
- Borjas, G. J., Kauppinen, I., & Poutvaara, P. (2018). Self-selection of Emigrants: Theory and Evidence on Stochastic Dominance in Observable and Unobservable Characteristics. *The Economic Journal*, 129(617), 143–171. <https://doi.org/10.1111/eoj.12585>
- Bowlby, S. (2011). Friendship, co-presence and care: neglected spaces. *Social & Cultural Geography*, 12(6), 605–622. <https://doi.org/10.1080/14649365.2011.601264>
- Boyle, P., Feng, Z., & Gayle, V. (2009). A New Look at Family Migration and Women's Employment Status. *Journal of Marriage and Family*, 71(2), 417–431.
- Boyle, P., Kulu, H., Cooke, T., Gayle, V., & Mulder, C. H. (2008). Moving and union dissolution. *Demography*, 45(1), 209–222.

- Brown, R. J. (2008). Dominant stressors on expatriate couples during international assignments. *The International Journal of Human Resource Management*, 19(6), 1018–1034. <https://doi.org/10.1080/09585190802051303>
- Brücker, H., Ette, A., Grabka, M. M., Kosyakova, Y., Niehues, W., Rother, N., Spieß, C. K., Zinn, S., Bujard, M., Cardozo, A., Décieux, J. P., Maddox, A., Milewski, N., Naderi, R., Sauer, L., Schmitz, S., Schwanhäuser, S., Siegert, M., Tanis, K., & Steinhauer, H. W. (2023). *Geflüchtete aus der Ukraine in Deutschland: Ergebnisse der ersten Welle der IAB-BiB/FReDA-BAMF-SOEP-Befragung* (Forschungsbericht des Forschungszentrums des Bundesamtes No. 41). Bundesamt für Migration und Flüchtlinge. <https://doi.org/10.48570/BAMF.FZ.FB.41.D.2023.UKRLANGBERICHT.1.0>
- Brücker, H., Kroh, M., Bartsch, S., Goebel, J., Kühne, S., Liebau, E., Trübswetter, P., Tucci, I., & Schupp, J. (2014). *The new IAB-SOEP Migration Sample: an introduction into the methodology and the contents* (SOEP Survey Series 216. Series C). DIW/SOEP. https://doku.iab.de/fdz/iab_soep/surveypaper_en.pdf
- Brücker, H., Rother, N., Schupp, J., Gostomski, C. B. von, Böhm, A., Fendel, T., Friedrich, M., Giesselmann, M., Kosyakova, Y., Kroh, M., Kühne, S., Liebau, E., Richter, D., Romiti, A., Schacht, D., Scheible, J. A., Schmelzer, P., Siegert, M., Sirries, S., . . . Vallizadeh, E. (2016). Forced migration, arrival in Germany, and first steps toward integration. *DIW Economic Bulletin*, 6(48), 541–556. <https://www.econstor.eu/handle/10419/148611>
- Brüderl, J. (2010). Kausalanalyse mit Paneldaten. In C. Wolf & H. Best (Eds.), *Handbuch der sozialwissenschaftlichen Datenanalyse* (pp. 963–994). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-531-92038-2_36
- Brüderl, J., Schmiedeberg, C., Castiglioni, L., Arránz Becker, O., Buhr, P., Fuß, D., Ludwig, V., Schröder, J., & Schumann, N. (2023). *The German Family Panel: Study Design and Cumulated Field Report (Waves 1 to 14)* (pairfam Technical Paper 01.). <https://doi.org/10.5282/ubm/epub.104749>
- Bushin, N. (2009). Researching family migration decision-making: A children-in-families approach. *Population, Space and Place*, 15(5), 429–443. <https://doi.org/10.1002/psp.522>
- Butsch, C. (2020). Financial engagement of the Indian diaspora in Germany: Remitting to India. *Population, Space and Place*, 26(4), e2290. <https://doi.org/10.1002/psp.2290>

- Cantalini, S., & Panichella, N. (2019). The fertility of male immigrants: a comparative study on six Western European countries. *European Societies*, 21(1), 101–129.
<https://doi.org/10.1080/14616696.2018.1511820>
- Carling, J., & Schewel, K. (2018). Revisiting aspiration and ability in international migration. *Journal of Ethnic and Migration Studies*, 44(6), 945–963.
<https://doi.org/10.4324/9780429281181-2>
- Caron, L., & Ichou, M. (2020). High Selection, Low Success: The Heterogeneous Effect of Migrants' Access to Employment on Their Remigration. *International Migration Review*, 54(4), 1104–1133. <https://doi.org/10.1177/0197918320904925>
- Casterline, J., & Han, S. (2017). Unrealized fertility: Fertility desires at the end of the reproductive career. *Demographic Research*, 36(14), 427–454.
<https://doi.org/10.4054/DemRes.2017.36.14>
- Castro Torres, A. F., & Gutierrez-Vazquez, E. Y. (2022). Gendered and Stratified Family Formation Trajectories in the Context of Latin American Migration, 1950 to 2000. *International Migration Review*, 56(4), 1107–1140.
<https://doi.org/10.1177/01979183211067768>
- Chiquiar, D., & Hanson, G. H. (2005). International Migration, Self-Selection, and the Distribution of Wages: Evidence from Mexico and the United States. *Journal of Political Economy*, 113(2), 239–281. <https://doi.org/10.1086/427464>
- Constant, A. F. (2021). Return, Circular, and Onward Migration Decisions in a Knowledge Society. In K. Kourtit, B. Newbold, P. Nijkamp, & M. Partridge (Eds.), *Springer eBook Collection. The Economic Geography of Cross-Border Migration* (pp. 133–156). Springer International Publishing. https://doi.org/10.1007/978-3-030-48291-6_7
- Cooke, T. J. (2001). 'Trailing Wife' or 'Trailing Mother'? The Effect of Parental Status on the Relationship between Family Migration and the Labor-Market Participation of Married Women. *Environment and Planning a: Economy and Space*, 33(3), 419–430.
<https://doi.org/10.1068/a33140>
- Cooke, T. J. (2003). Family Migration and the Relative Earnings of Husbands and Wives. *Annals of the Association of American Geographers*, 93(2), 338–349.
<https://doi.org/10.1111/1467-8306.9302005>
- Cooke, T. J. (2008). Migration in a family way. *Population, Space and Place*, 14(4), 255–265.
<https://doi.org/10.1002/psp.500>

- Cooke, T. J., Boyle, P., Couch, K., & Feijten, P. (2009). A longitudinal analysis of family migration and the gender gap in earnings in the United States and Great Britain. *Demography*, *46*(1), 147–167. <https://doi.org/10.1353/dem.0.0036>
- Coulter, R., Ham, M., & Feijten, P. (2012). Partner (dis)agreement on moving desires and the subsequent moving behaviour of couples. *Population, Space and Place*, *18*(1), 16–30. <https://doi.org/10.1002/psp.700>
- Davis, J., & Jennings, E. A. (2018). Spatial and Temporal Dimensions of Migration on Union Dissolution. *International Migration*, *56*(6), 136–152. <https://doi.org/10.1111/imig.12513>
- De Jong, G. F. (2000). Expectations, gender, and norms in migration decision-making. *Population Studies*, *54*(3), 307–319. <https://doi.org/10.1080/713779089>
- De Jong, G. F., & Graefe, D. R. (2008). Family life course transitions and the economic consequences of internal migration. *Population, Space and Place*, *14*(4), 267–282. <https://doi.org/10.1002/psp.506>
- Décieux, J. P. P. (2021). Personality Traits and Self-Perceived Development of Friendship in the Course of Migration. In T. Altmann (Ed.), *Social psychology research progress. Friendship in cultural and personality psychology: International perspectives* (pp. 361–384). Nova Science Publishers. <https://doi.org/10.52305/IJVV4250>
- Décieux, J. P. P., & Mörchen, L. (2021). Emigration, Friends, and Social Integration: The Determinants and Development of Friendship Network Size After Arrival. In M. Erlinghagen, A. Ette, N. F. Schneider, & N. Witte (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course* (pp. 247–264). Springer. https://doi.org/10.1007/978-3-030-67498-4_14
- Décieux, J. P. P., & Murdock, E. (2021). Sense of Belonging: Predictors for Host Country Attachment Among Emigrants. In M. Erlinghagen, A. Ette, N. F. Schneider, & N. Witte (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course* (pp. 265–285). Springer. https://doi.org/10.1007/978-3-030-67498-4_15
- Deding, M., Fridberg, T., & Jakobsen, V. (2013). Non-Response Among Immigrants in Denmark. In J. Font & M. Méndez (Eds.), *IMISCOE Research. Surveying ethnic minorities and immigrant populations: Methodological challenges and research strategies* (pp. 173–192). Amsterdam University Press. <https://doi.org/10.1017/9789048519187.009>

- Delbaere, I., Verbiest, S., & Tydén, T. (2020). Knowledge about the impact of age on fertility: A brief review. *Upsala Journal of Medical Sciences*, *125*(2), 167–174.
<https://doi.org/10.1080/03009734.2019.1707913>
- Della Puppa, F. (2018). Ambivalences of the emotional logics of migration and family reunification: Emotions, experiences and aspirations of Bangladeshi husbands and wives in Italy. *Identities*, *25*(3), 358–375.
<https://doi.org/10.1080/1070289X.2016.1238381>
- Delli Paoli, A., & Maddaloni, D. (2021). Conceptualizing Motives for Migration: a Typology of Italian Migrants in the Athens Area. *Journal of International Migration and Integration*, *22*(4), 1465–1484. <https://doi.org/10.1007/s12134-021-00818-0>
- Di Giulio, P., Impicciatore, R., & Sironi, M. (2019). The changing pattern of cohabitation: A sequence analysis approach. *Demographic Research*, *40*(42), 1211–1248.
<https://doi.org/10.4054/DemRes.2019.40.42>
- Di Nallo, A., Lipps, O., Oesch, D., & Voorpostel, M. (2022). The effect of unemployment on couples separating in Germany and the UK. *Journal of Marriage and Family*, *84*(1), 310–329. <https://doi.org/10.1111/jomf.12803>
- Diehl, C., Lubbers, M., Mühlau, P., & Platt, L. (2016). Starting out: New migrants' socio-cultural integration trajectories in four European destinations. *Ethnicities*, *16*(2), 157–179. <https://doi.org/10.1177/1468796815616158>
- Dillman, D. A. (2017). The promise and challenge of pushing respondents to the web in mixed-mode surveys. *Survey Methodology*, *43*(1), 3–30.
- Dito, B. B., Mazzucato, V., & Schans, D. (2017). The Effects of Transnational Parenting on the Subjective Health and Well-Being of Ghanaian Migrants in the Netherlands. *Population, Space and Place*, *23*(3), e2006. <https://doi.org/10.1002/psp.2006>
- Djajić, S. (2008). Immigrant Parents and Children: An Analysis of Decisions Related to Return Migration. *Review of Development Economics*, *12*(3), 469–485.
<https://doi.org/10.1111/j.1467-9361.2008.00441.x>
- Dobruszkes, F. (2009). New Europe, new low-cost air services. *Journal of Transport Geography*, *17*(6), 423–432. <https://doi.org/10.1016/j.jtrangeo.2009.05.005>
- Douglass, M. (2013). Global Householding and Social Reproduction in Migration Research. *Ewha Journal of Social Sciences*, *29*(2), 5–68.
- Duncan, R. P., & Perrucci, C. C. (1976). Dual Occupation Families and Migration. *American Sociological Review*, *41*(2), 252–261. <https://doi.org/10.2307/2094472>

- Duplan, K., & Cranston, S. (2023). Towards geographies of privileged migration: An intersectional perspective. *Progress in Human Geography*, 47(2), 333–347. <https://doi.org/10.1177/03091325231156927>
- Echegoyén Nava, G. (2017). That's how Life is over there, Isn't it? Family Life Changes among Mexican Non-Migrants who Stayed behind. *Migraciones Internacionales*, 6(24). <https://doi.org/10.17428/rmi.v6i24.708>
- Elder, G. H. (1998). The Life Course as Developmental Theory. *Child Development*, 69(1), 1–12. <https://doi.org/10.1111/j.1467-8624.1998.tb06128.x>
- Elder, G. H., & Johnson, M. K. (2003). The Life Course and Aging: Challenges, Lessons, and New Directions. In R. Settersten (Ed.), *Invitation to the Life Course: Towards new understandings of later life* (49–81). Routledge.
- Elder, G. H., Johnson, M. K., & Crosnoe, R. (2003). The Emergence and Development of Life Course Theory. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbooks of Sociology and Social Research. Handbook of the life course* (pp. 3–19). Springer. https://doi.org/10.1007/978-0-306-48247-2_1
- El-Menouar, Y. (2022). Befragung von Migranten. In N. Baur & J. Blasius (Eds.), *Handbuch Methoden der empirischen Sozialforschung* (3rd fully revised and expanded edition, pp. 943–956). Springer VS.
- Elmer, T., Boda, Z., & Stadtfeld, C. (2017). The co-evolution of emotional well-being with weak and strong friendship ties. *Network Science*, 5(3), 278–307. <https://doi.org/10.1017/nws.2017.20>
- Emirbayer, M., & Mische, A. (1998). What Is Agency? *American Journal of Sociology*, 103(4), 962–1023. <https://doi.org/10.1086/231294>
- Erens, B. (2013). Designing high-quality surveys of ethnic minority groups in the United Kingdom. In J. Font & M. Méndez (Eds.), *IMISCOE Research. Surveying ethnic minorities and immigrant populations: Methodological challenges and research strategies* (pp. 45–68). Amsterdam University Press.
- Erlinghagen, M. (2011). Nowhere Better Than Here? The Subjective Well-Being of German Emigrants and Remigrants. *Comparative Population Studies*, 36(4), 899–925. <https://doi.org/10.4232/10.CPOS-2011-15EN>
- Erlinghagen, M. (2021a). Love in motion: Migration patterns of internationally mobile couples. *Population, Space and Place*, 27(2), e2382. <https://doi.org/10.1002/psp.2382>
- Erlinghagen, M. (2021b). Migration Motives, Timing, and Outcomes of Internationally Mobile Couples. In M. Erlinghagen, A. Ette, N. F. Schneider, & N. Witte (Eds.), *The*

- Global Lives of German Migrants: Consequences of International migration Across the Life Course* (pp. 157–171). Springer.
- Erlinghagen, M. (2021c). The transnational life course: an integrated and unified theoretical concept for migration research. *Ethnic and Racial Studies*, 44(8), 1–28.
<https://doi.org/10.1080/01419870.2021.1880014>
- Erlinghagen, M., Ette, A., Schneider, N. F., & Witte, N. (2021). Between Origin and Destination: German Migrants and the Individual Consequences of Their Global Lives. In M. Erlinghagen, A. Ette, N. F. Schneider, & N. Witte (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course* (pp. 3–20). Springer. https://doi.org/10.1007/978-3-030-67498-4_1
- Erlinghagen, M., Ette, A., Schneider, N., Witte, N., & Decieux, J. P. P. (2019). Internationale Migration zwischen hochentwickelten Staaten und ihre Konsequenzen für den Lebensverlauf. In N. Burzan (Ed.), *Komplexe Dynamiken globaler und lokaler Entwicklungen. Verhandlungen des 39. Kongresses der Deutschen Gesellschaft für Soziologie in Göttingen 2018*. Deutsche Gesellschaft für Soziologie.
<https://orbilu.uni.lu/handle/10993/41028>
- Erlinghagen, M., & Hank, K. (forthcoming-a). Heterogeneities and dynamics in couples' relationship satisfaction after migration: A study of recent German emigrants and remigrants. In M. Erlinghagen & K. Hank (Eds.), *Transnational family relations of German emigrants*. Springer VS.
- Erlinghagen, M., & Hank, K. (forthcoming-b). Studying the family-migration-nexus: State of research, knowledge gaps, and empirical perspectives. In M. Erlinghagen & K. Hank (Eds.), *Transnational family relations of German emigrants*. Springer VS.
- Erlinghagen, M., Schneider, N., & Ette, A. (2021). *German Emigration and Remigration Panel Study (GERPS) 2018*. <https://doi.org/10.4232/1.13750>
- Esser, H., & Kroneberg, C. (2015). An Integrative Theory of Action: The Model of Frame Selection. In E. J. Lawler, S. R. Thye, & J. Yoon (Eds.), *Order on the edge of chaos: Social psychology and the problem of social order* (pp. 63–85). Cambridge University Press. <https://doi.org/10.1017/CBO9781139924627.005>
- Ette, A., Décieux, J. P., Erlinghagen, M., Auditor, J. G., Schneider, N. F., & Witte, N. (2021). Surveying across borders: the experience of the German Emigration and Remigration Panel Study. In M. Erlinghagen, A. Ette, N. F. Schneider, & N. Witte (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course* (pp. 21–39). Springer.

- Ette, A., Décieux, J. P. P., Erlinghagen, M., Genoni, A., Auditor, J. G., Knirsch, F., Kühne, S., Mörchen, L., Sand, M., Schneider, N. F., & Witte, N. (2020). *German Emigration and Remigration Panel Study (GERPS): Methodology and Data Manual of the Baseline Survey (Wave 1)* (BiB Daten- und Methodenberichte No. 1). Bundesinstitut für Bevölkerungsforschung. <https://doi.org/10.13140/RG.2.2.25013.42720>
- Ette, A., & Sauer, L. (2010). *Auswanderung aus Deutschland: Daten und Analysen zur internationalen Migration deutscher Staatsbürger*. VS Verlag.
- Ette, A., Sauer, L., & Fauser, M. (2021). Settlement or return? The intended preformance of emigration from Germany across the life course. In M. Erlinghagen, A. Ette, N. F. Schneider, & N. Witte (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course* (pp. 101–118). Springer.
- Ette, A., & Witte, N. (2021). Brain drain or brain circulation? Economic and non-economic factors driving the international migration of German citizens. In M. Erlinghagen, A. Ette, N. F. Schneider, & N. Witte (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course* (pp. 65–84). Springer.
- Eurostat. (2022). *Fertility indicators*. https://doi.org/10.2908/demo_find
- Facchini, G., Patacchini, E., & Steinhardt, M. F. (2015). Migration, Friendship Ties, and Cultural Assimilation. *Scandinavian Journal of Economics*, 117(2), 619–649. <https://doi.org/10.1111/sjoe.12096>
- Fahrmeir, L., Künstler, R., Pigeot, I., & Tutz, G. (2011). *Statistik: Der Weg zur Datenanalyse* (7th edition, corrected reprint). Springer. <http://d-nb.info/994908962/04>
- Farewell, V. T., Long, D. L., Tom, B. D. M., Yiu, S., & Su, L. (2017). Two-Part and Related Regression Models for Longitudinal Data. *Annual Review of Statistics and Its Application*, 4, 283–315. <https://doi.org/10.1146/annurev-statistics-060116-054131>
- Fasang, A. E., & Aisenbrey, S. (2022). Uncovering Social Stratification: Intersectional Inequalities in Work and Family Life Courses by Gender and Race. *Social Forces*, 101(2), 575–605. <https://doi.org/10.1093/sf/soab151>
- Fasang, A. E., & Zagel, H. (2023). Lebensverlauf. In O. Arránz Becker, K. Hank, & A. Steinbach (Eds.), *Handbuch Familiensoziologie* (2nd ed., pp. 37–55). Springer Fachmedien Wiesbaden GmbH.
- Fauser, M. (2020). Emigrant citizenship, privileged local belonging and the option to return: Germans on the Turkish coast. *Comparative Migration Studies*, 8(1), 1–17. <https://doi.org/10.1186/s40878-019-0155-1>

- Fawcett, J. T., & Arnold, F. (1987). The Role of Surveys in the Study of International Migration: An Appraisal. *International Migration Review*, 21(4), 1523–1540. <https://doi.org/10.1177/019791838702100427>
- Feld, S. L. (1981). The Focused Organization of Social Ties. *American Journal of Sociology*, 86(5), 1015–1035. <https://doi.org/10.1086/227352>
- Feskens, R., Hox, J., Lensvelt-Mulders, G., & Schmeets, H. (2006). Collecting Data among Ethnic Minorities in an International Perspective. *Field Methods*, 18(3), 284–304. <https://doi.org/10.1177/1525822X06288756>
- FitzGerald, D. (2012). A comparativist manifesto for international migration studies. *Ethnic and Racial Studies*, 35(10), 1725–1740. <https://doi.org/10.1080/01419870.2012.659269>
- Flowerdew, R., & Al-Hamad, A. (2004). The relationship between marriage, divorce and migration in a British data set. *Journal of Ethnic and Migration Studies*, 30(2), 339–351. <https://doi.org/10.1080/1369183042000200731>
- Foner, N., & Dreby, J. (2011). Relations Between the Generations in Immigrant Families. *Annual Review of Sociology*, 37(1), 545–564. <https://doi.org/10.1146/annurev-soc-081309-150030>
- Font, J., & Méndez, M. (2013). Introduction: The methodological challenges of surveying populations of immigrant origin. In J. Font & M. Méndez (Eds.), *IMISCOE Research. Surveying ethnic minorities and immigrant populations: Methodological challenges and research strategies* (pp. 11–41). Amsterdam University Press.
- Frank, R., & Wildsmith, E. (2005). The Grass Widows of Mexico: Migration and Union Dissolution in a Binational Context. *Social Forces*, 83(3), 919–948.
- Fukuda, S., Raymo, J. M., & Yoda, S. (2020). Revisiting the Educational Gradient in Marriage in Japan. *Journal of Marriage and Family*, 82(4), 1378–1396. <https://doi.org/10.1111/jomf.12648>
- Ganong, L., & Coleman, M. (2017). *Stepfamily Relationships: Development, Dynamics, and Interventions*. Springer US. <https://doi.org/10.1007/978-1-4899-7702-1>
- Gee, L. K., Jones, J., & Burke, M. (2017). Social Networks and Labor Markets: How Strong Ties Relate to Job Finding on Facebook’s Social Network. *Journal of Labor Economics*, 35(2), 485–518. <https://doi.org/10.1086/686225>
- Gee, L. K., Jones, J. J., Fariss, C. J., Burke, M., & Fowler, J. H. (2017). The paradox of weak ties in 55 countries. *Journal of Economic Behavior & Organization*, 133, 362–372. <https://doi.org/10.1016/j.jebo.2016.12.004>

- Geist, C., & McManus, P. A. (2012). Different reasons, different results: Implications of migration by gender and family status. *Demography*, *49*(1), 197–217.
<https://doi.org/10.1007/s13524-011-0074-8>
- Ghimire, D. J., Williams, N. E., Thornton, A., Young-DeMarco, L., & Bhandari, P. (2019). Strategies for origin-based surveying of international migrants. *Journal of Ethnic and Migration Studies*, *45*(7), 1185–1206.
<https://doi.org/10.1080/1369183X.2017.1394178>
- Gillespie, B. J., Mulder, C. H., & Eggleston, C. M. (2021). Measuring migration motives with open-ended survey data: Methodological and conceptual issues. *Population, Space and Place*, *27*(6), e2448. <https://doi.org/10.1002/psp.2448>
- Gillespie, B. J., Mulder, C. H., & Reichert, C. von (2022). The Role of Family and Friends in Return Migration and Its Labor Market Outcomes. *Population Research and Policy Review*, *41*(1), 115–138. <https://doi.org/10.1007/s11113-021-09650-x>
- Goebel, J., Grabka, M. M., Liebig, S., Kroh, M., Richter, D., Schröder, C., & Schupp, J. (2019). The German Socio-Economic Panel (SOEP). *Jahrbücher Für Nationalökonomie Und Statistik*, *239*(2), 345–360. <https://doi.org/10.1515/jbnst-2018-0022>
- Goldstein, S., & Goldstein, A. (1981). The Impact of Migration on Fertility: an 'Own Children' Analysis for Thailand. *Population Studies*, *35*(2), 265–284.
<https://doi.org/10.1080/00324728.1981.10404967>
- Gong, F., Xu, J., Fujishiro, K., & Takeuchi, D. T. (2011). A life course perspective on migration and mental health among Asian immigrants: The role of human agency. *Social Science & Medicine* (1982), *73*(11), 1618–1626.
<https://doi.org/10.1016/j.socscimed.2011.09.014>
- Granovetter, M. (1973). The Strength of Weak Ties. *American Journal of Sociology*, *78*(6), 1360–1380. <https://doi.org/10.1016/B978-0-12-442450-0.50025-0>
- Granovetter, M. (1974). *Getting a Job. A Study of Contacts and Careers*. (2nd ed.). University of Chicago Press. <https://doi.org/10.1017/S0770451800030773>
- Granovetter, M. (1983). The Strength of Weak Ties: A Network Theory Revisited. *Sociological Theory*, *1*, 201–233. <https://doi.org/10.2307/202051>
- Groenewold, G., & Bilsborrow, R. (2008). Design of samples for international migration surveys: Methodological considerations and lessons learned from a multi-country study in Africa and Europe. In C. Bonifazi, M. Okólski, J. Schoorl, & P. Simon (Eds.), *IMISCOE Research. International Migration in Europe: New Trends and New*

- Methods of Analysis* (pp. 293–312). Amsterdam University Press.
<https://library.oapen.org/bitstream/handle/20.500.12657/35242/1/340088.pdf#page=294>
- Grotheer, M., Isleib, S., Netz, N., & Briedis, K. (2012). *Hochqualifiziert und gefragt: Ergebnisse der zweiten HIS-HF Absolventenbefragung des Jahrgangs 2005* (HIS: Forum Hochschule No. 14). HIS Hochschul-Innovations-System GmbH. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-81158-8>
- Groves, R. M., Fowler, F. J., Couper, M., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2009). *Survey Methodology* (2nd ed (Online-Ausg.)). *EBL-Schweitzer: v.561*. Wiley. <http://swb.eblib.com/patron/FullRecord.aspx?p=819140>
- Guarin Rojas, E. A., Bernardi, L., & Schmid, F. (2018). First and second births among immigrants and their descendants in Switzerland. *Demographic Research*, 38(11), 247–286. <https://doi.org/10.4054/DemRes.2018.38.11>
- Guveli, A., Ganzeboom, H. B. G., Baykara-Krumme, H., Platt, L., Eroğlu, Ş., Spierings, N., Bayrakdar, S., Nauck, B., & Sozeri, E. K. (2017). 2,000 Families: Identifying the research potential of an origins-of-migration study. *Ethnic and Racial Studies*, 40(14), 2558–2576. <https://doi.org/10.1080/01419870.2016.1234628>
- Guveli, A., Ganzeboom, H. B. G., Platt, L., Nauck, B., Baykara-Krumme, H., Eroğlu, Ş., Bayrakdar, S., Sözeri, E. K., & Spierings, N. (2016). *Intergenerational consequences of migration: Socio-economic, family and cultural patterns of stability and change in Turkey and Europe*. Palgrave Macmillan.
<https://ebookcentral.proquest.com/lib/kxp/detail.action?docID=4185097>
- Hagan, J. M., & Thomas Wassink, J. (2020). Return Migration Around the World: An Integrated Agenda for Future Research. *Annual Review of Sociology*, 46(1), 533–552. <https://doi.org/10.1146/annurev-soc-120319-015855>
- Hainmueller, J. (2012). Entropy Balancing for Causal Effects: A Multivariate Reweighting Method to Produce Balanced Samples in Observational Studies. *Political Analysis*, 20(1), 25–46. <https://doi.org/10.1093/pan/mpr025>
- Hamplová, D., Le Bourdais, C., & Legendre, B. (2021). Partners' Relative Income and the Risk of Union Dissolution in Two Institutional Contexts. *European Sociological Review*, 37(4), 525–540. <https://doi.org/10.1093/esr/jcaa074>
- Hank, K., & Steinbach, A. (2019). Families and Their Institutional Contexts: the Role of Family Policies and Legal Regulations. *Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, 71, 375–398. <https://doi.org/10.1007/s11577-019-00603-z>

- Hank, K., & Steinbach, A. (2021). The virus changed everything, didn't it? Couples' division of housework and childcare before and during the Corona crisis. *Journal of Family Research*, 33(1), 99–114. <https://doi.org/10.20377/jfr-488>
- Hannemann, T., Kulu, H., González-Ferrer, A., Pailhé, A., Rahnu, L., & Puur, A. (2020). Partnership dynamics among immigrants and their descendants in four European countries. *Population, Space and Place*, 26(5), e2315. <https://doi.org/10.1002/psp.2315>
- Hartung, A., Vandezande, V., Phalet, K., & Swyngedouw, M. (2011). Partnership preferences of the Belgian second generation: Who lives with whom? *Advances in Life Course Research*, 16(4), 152–163. <https://doi.org/10.1016/j.alcr.2011.09.001>
- Haug, S., & Pointner (2007). Sozialkapital und Migration. *Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, 47, 367–396. https://www.researchgate.net/profile/sonja-haug/publication/228648051_sozialkapital_und_migration/links/53eb2ca70cf28f342f451791/sozialkapital-und-migration.pdf
- Haunberger, S. (2011). *Teilnahmeverweigerung in Panelstudien*. VS Verl. für Sozialwissenschaften. <https://doi.org/10.1007/978-3-531-17710-6>
- Heckman, J. J. (2001). Micro Data, Heterogeneity, and the Evaluation of Public Policy: Nobel Lecture. *Journal of Political Economy*, 109(4), 673–748. <https://doi.org/10.1086/322086>
- Heinz, W. R., Huinink, J., Swader, C., & Weymann, A. (2009). General introduction. In W. R. Heinz, J. Huinink, & A. Weymann (Eds.), *The life course reader: Individuals and societies across time* (pp. 15–30). Campus-Verlag.
- Hellstrand, J., Nisén, J., & Myrskylä, M. (2022). Less Partnering, Less Children, or Both? Analysis of the Drivers of First Birth Decline in Finland Since 2010. *European Journal of Population*, 38(2), 191–221. <https://doi.org/10.1007/s10680-022-09605-8>
- Helms, H. M., Supple, A. J., Su, J., Rodriguez, Y., Cavanaugh, A. M., & Hengstebeck, N. D. (2014). Economic pressure, cultural adaptation stress, and marital quality among Mexican-origin couples. *Journal of Family Psychology*, 28(1), 77–87. <https://doi.org/10.1037/a0035738>
- Herter-Eschweiler, R., & Schimpl-Neimanns, B. (2018). *Möglichkeiten der Verknüpfung von Mikrozensus- Querschnitterhebungen ab 2012 zu Panels*. https://www.forschungsdatenzentrum.de/sites/default/files/mz_suf_panelbildg_ab_2012.pdf

- Heu, L. C., van Zomeren, M., & Hansen, N. (2020). Far away from home and (not) lonely: Relational mobility in migrants' heritage culture as a potential protection from loneliness. *International Journal of Intercultural Relations*, 77, 140–150. <https://doi.org/10.1016/j.ijintrel.2020.05.005>
- Hofhuis, J., Hanke, K., & Rutten, T. (2019). Social network sites and acculturation of international sojourners in the Netherlands: The mediating role of psychological alienation and online social support. *International Journal of Intercultural Relations*, 69, 120–130. <https://doi.org/10.1016/j.ijintrel.2019.02.002>
- Horn, V., & Fokkema, T. (2020). Transnational ties: Resource or stressor on Peruvian migrants' well-being? *Population, Space and Place*, 26(8), e2356. <https://doi.org/10.1002/psp.2356>
- Hou, Y., Neff, L. A., & Kim, S. Y. (2018). Language Acculturation, Acculturation-Related Stress, and Marital Quality in Chinese American Couples. *Journal of Marriage and Family*, 80(2), 555–568. <https://doi.org/10.1111/jomf.12447>
- Hox, J. J., Moerbeek, M., & van Schoot, R. de. (2018). *Multilevel analysis: Techniques and applications* (Third edition). *ProQuest Ebook Central*. Routledge Taylor & Francis. <https://ebookcentral.proquest.com/lib/kxp/detail.action?docID=5046900>
- Hsu, C.-H. (2021). Parity-specific motherhood penalties: Long-term impacts of childbirth on women's earnings in Japan. *Advances in Life Course Research*, 50, 100435. <https://doi.org/10.1016/j.alcr.2021.100435>
- Hugo, G. (2014). A Multi Sited Approach to Analysis of Destination Immigration Data: An Asian Example. *International Migration Review*, 48(4), 998–1027. <https://doi.org/10.1111/imre.12149>
- Huinink, J., Brüderl, J., Nauck, B., Walper, S., Castiglioni, L., & Feldhaus, M. (2011). Panel Analysis of Intimate Relationships and Family Dynamics (pairfam): Conceptual framework and design. *Journal of Family Research*, 23(1), 77–101. <https://doi.org/10.20377/jfr-235>
- Huinink, J., & Feldhaus, M. (2009). Family Research from the Life Course Perspective. *International Sociology*, 24(3), 299–324. <https://doi.org/10.1177/0268580909102910>
- Huinink, J., & Schröder, T. (2019). *Sozialstruktur Deutschlands* (3rd, updated and revised version). *UTB Sozialwissenschaften, Wirtschaftswissenschaften: Vol. 3146*. UVK Verlag; utb. <https://elibrary.utb.de/doi/book/10.36198/9783838552019>
<https://doi.org/10.36198/9783838552019>

- Humpert, A., & Schneiderheinze, K. (2000). Stichprobenziehung für telefonische Zuwandererumfragen: Einsatzmöglichkeiten der Namenforschung. *ZUMA Nachrichten*, 24(47), 36–63. <https://www.ssoar.info/ssoar/handle/document/20805>
- Huschek, D., Valk, H. A. G. de, & Liefbroer, A. C. (2012). Partner Choice Patterns Among the Descendants of Turkish Immigrants in Europe. *European Journal of Population*, 28(3), 241–268. <https://doi.org/10.1007/s10680-012-9265-2>
- Iarmolenko, S., Titzmann, P. F., & Silbereisen, R. K. (2016). Bonds to the homeland: Patterns and determinants of women's transnational travel frequency among three immigrant groups in Germany. *International Journal of Psychology*, 51(2), 130–138. <https://doi.org/10.1002/ijop.12141>
- Impicciatore, R., Gabrielli, G., & Paterno, A. (2020). Migrants' Fertility in Italy: A Comparison Between Origin and Destination. *European Journal of Population*, 36(4), 799–825. <https://doi.org/10.1007/s10680-019-09553-w>
- International Organization for Migration. (2024). *About Migration*. <https://www.iom.int/about-migration>
- Ivlevs, A., Nikolova, M., & Graham, C. (2019). Emigration, remittances, and the subjective well-being of those staying behind. *Journal of Population Economics*, 32(1), 113–151. <https://doi.org/10.1007/s00148-018-0718-8>
- Janta, H., Cohen, S. A., & Williams, A. M. (2015). Rethinking Visiting Friends and Relatives Mobilities. *Population, Space and Place*, 21(7), 585–598. <https://doi.org/10.1002/psp.1914>
- Jenkins, S. P. (1995). Easy Estimation Methods for Discrete-Time Duration Models. *Oxford Bulletin of Economics and Statistics*, 57(1), 129–138.
- Johnson, M. D., Galambos, N. L., & Krahn, H. J. (2021). Family context, life transitions, and subjective well-being from age 18 to 50 years. *Developmental Psychology*, 57(11), 1968–1980. <https://doi.org/10.1037/dev0001243>
- Johnson, M. D., Neyer, F. J., & Finn, C. (2021). Subjective well-being across partnerships. *Journal of Family Psychology*, 35(4), 546–551. <https://doi.org/10.1037/fam0000793>
- Jürges, H. (2006). Gender ideology, division of housework, and the geographic mobility of families. *Review of Economics of the Household*, 4(4), 299–323. <https://doi.org/10.1007/s11150-006-0015-2>
- Kahnemann, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, 47(2), 263–292. https://doi.org/10.1142/9789814417358_0006

- Kalmijn, M. (2007). Explaining cross-national differences in marriage, cohabitation, and divorce in Europe, 1990-2000. *Population Studies*, 61(3), 243–263.
<https://doi.org/10.1080/00324720701571806>
- Kalter, F., Kogan, I., & Dollmann, J. (2019). Studying Integration from Adolescence to Early Adulthood: Design, Content, and Research Potential of the CILS4EU-DE Data. *European Sociological Review*, 35(2), 280–297. <https://doi.org/10.1093/esr/jcy051>
- Kalton, G., & Anderson, D. W. (1986). Sampling Rare Populations. *Journal of the Royal Statistical Society. Series a (General)*, 149(1), 65–82. <https://doi.org/10.2307/2981886>
- Kalton, G., Kasprzyk, D., & Mc Millen, D. B. (1989). Nonsampling Errors in Panel Surveys. In D. Kasprzyk, G. J. Duncan, G. Kalton, & M. P. Singh (Eds.), *Wiley series in probability and mathematical statistics Applied section. Panel surveys* (pp. 249–270). Wiley.
- Kersting, L., & Feldhaus, M. (2016). Die Qualität von Geschwisterbeziehungen im jungen und mittleren Erwachsenenalter in Abhängigkeit des Verwandtschaftsstatus. *Zeitschrift Für Soziologie Der Erziehung & Sozialisation*, 36(4), 382–401.
- Khoudja, Y., & Platt, L. (2018). Labour market entries and exits of women from different origin countries in the UK. *Social Science Research*, 69, 1–18.
<https://doi.org/10.1016/j.ssresearch.2017.10.003>
- Kim, M., & Fernandez, R. M. (2023). What Makes Weak Ties Strong? *Annual Review of Sociology*, 49(1), 177–193. <https://doi.org/10.1146/annurev-soc-030921-034152>
- King, R., & Skeldon, R. (2010). ‘Mind the Gap!’ Integrating Approaches to Internal and International Migration. *Journal of Ethnic and Migration Studies*, 36(10), 1619–1646.
<https://doi.org/10.1080/1369183X.2010.489380>
- Kley, S. (2011). Explaining the Stages of Migration within a Life-course Framework. *European Sociological Review*, 27(4), 469–486. <https://doi.org/10.1093/esr/jcq020>
- Kley, S. (2012). Gefährdet Pendelmobilität die Stabilität von Paarbeziehungen? Einflüsse von Erwerbskonstellationen und Haushaltsarrangements in Ost- und Westdeutschland auf die Trennungswahrscheinlichkeit von Paaren. *Zeitschrift Für Soziologie*, 41(5), 356–374.
- Kley, S. (2017). Facilitators and constraints at each stage of the migration decision process. *Population Studies*, 71(sup1), 35–49. <https://doi.org/10.1080/00324728.2017.1359328>
- Klok, J., van Tilburg, T. G., Suanet, B., Fokkema, T., & Huisman, M. (2017). National and transnational belonging among Turkish and Moroccan older migrants in the

- Netherlands: Protective against loneliness? *European Journal of Ageing*, 14(4), 341–351. <https://doi.org/10.1007/s10433-017-0420-9>
- Kogan, I. (2011). New Immigrants — Old Disadvantage Patterns? Labour Market Integration of Recent Immigrants into Germany. *International Migration*, 49(1), 91–117. <https://doi.org/10.1111/j.1468-2435.2010.00609.x>
- Konietzka, D., & Kreyenfeld, M. (2021). Life course sociology: Key concepts and applications in family sociology. In N. F. Schneider (Ed.), *Research Handbooks in Sociology series. Research Handbook on the Sociology of the Family* (pp. 73–87). Edward Elgar Publishing. <https://doi.org/10.4337/9781788975544.00012>
- Kraler, A., & Reichel, D. (2010). *Statistics on Migration, Integration and Discrimination in Europe: PROMINSTAT Final Report*. https://migrant-integration.ec.europa.eu/library-document/statistics-migration-integration-and-discrimination-europe-prominstat-final-report_en
- Krapf, S., & Wolf, K. (2015). Persisting Differences or Adaptation to German Fertility Patterns? First and Second Birth Behavior of the 1.5 and Second Generation Turkish Migrants in Germany. *KZfSS Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, 67(Suppl 1), 137–164. <https://doi.org/10.1007/s11577-015-0331-8>
- Kraus, E. K. (2019). Family formation trajectories across borders: A sequence analysis approach to Senegalese migrants in Europe. *Advances in Life Course Research*, 42, 100290. <https://doi.org/10.1016/j.alcr.2019.100290>
- Kreyenfeld, M., Geisler, E., Castro Martín, T., Hannemann, T., Heintz-Martin, V., JaloVaara, M., Kulu, H., Meggiolaro, S., Mortelmans, D., Pasteels, I., Seiz, M., & Solaz, A. (2017). Social policies, separation, and second birth spacing in Western Europe. *Demographic Research*, 37(37), 1245–1274. <https://doi.org/10.4054/DemRes.2017.37.37>
- Kreyenfeld, M., & Krapf, S. (2017). Familiengründung und Migration: Aussiedlerinnen und türkischstämmige Migrantinnen im Vergleich. In T. Mayer (Ed.), *Die transformative Macht der Demografie* (pp. 109–126). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-13166-1_8
- Kreyenfeld, M., & Vatterrott, A. (2018). Salmon migration and fertility in East Germany – An analysis of birth dynamics around German reunification. *Journal of Family Research*, 30(3), 247–268. <https://doi.org/10.3224/zff.v30i3.02>

- Krieger, M. (2020). Tied and Troubled: Revisiting Tied Migration and Subsequent Employment. *Journal of Marriage and Family*, 82(3), 934–952.
<https://doi.org/10.1111/jomf.12620>
- Kroneberg, C. (2007). Wertrationalität und das Modell der Frame-Selektion. *KZfSS Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, 59(2), 215–239.
<https://doi.org/10.1007/s11577-007-0027-9>
- Kroneberg, C., & Kalter, F. (2012). Rational Choice Theory and Empirical Research: Methodological and Theoretical Contributions in Europe. *Annual Review of Sociology*, 38(1), 73–92. <https://doi.org/10.1146/annurev-soc-071811-145441>
- Kuhnt, A.-K., Minkus, L., & Buhr, P. (2021). Uncertainty in fertility intentions from a life course perspective: Which life course markers matter? *Journal of Family Research*, 33(1), 184–208. <https://doi.org/10.20377/jfr-426>
- Kulu, H., & Milewski, N. (2007). Family change and migration in the life course. *Demographic Research*, 17, 567–590. <https://doi.org/10.4054/DemRes.2007.17.19>
- Kulu, H., Milewski, N., Hannemann, T., & Mikolai, J. (2019). A decade of life-course research on fertility of immigrants and their descendants in Europe. *Demographic Research*, 40(46), 1345–1374. <https://doi.org/10.4054/DemRes.2019.40.46>
- La Vega, N. de (2022). The differential effect of childbirth on men's and women's careers. *Labour Economics*, 78, 102249. <https://doi.org/10.1016/j.labeco.2022.102249>
- Lancee, B. (2012). *Immigrant Performance in the Labour Market: Bonding and Bridging Social Capital*. Amsterdam University Press.
<https://library.oapen.org/handle/20.500.12657/34533> <https://doi.org/27500>
- Langenheder, W. (1975). *Theorie menschlicher Entscheidungshandlungen. Sozialisation und Kommunikation: Vol. 3*. Enke.
- Lecerof, S. S., Stafström, M., Westerling, R., & Östergren, P.-O. (2016). Does social capital protect mental health among migrants in Sweden? *Health Promotion International*, 31(3), 644–652. <https://doi.org/10.1093/heapro/dav048>
- Lee, G. R., & Ishii-Kuntz, M. (1987). Social Interaction, Loneliness, and Emotional Well-Being among the Elderly. *Research on Aging*, 9(4), 459–482.
- Lesage, J. P., & Ha, C. L. (2012). The Impact of Migration on Social Capital: Do Migrants Take Their Bowling Balls with Them? *Growth and Change*, 43(1), 1–26.
<https://doi.org/10.1111/j.1468-2257.2011.00575.x>
- Letablier, M.-T., & Wall, K. (2018). Changing Lone Parenthood Patterns: New Challenges for Policy and Research. In L. Bernardi & D. Mortelmans (Eds.), *Life course research*

- and social policies: volume 8. Lone parenthood in the life course* (pp. 29–53). SpringerOpen. https://doi.org/10.1007/978-3-319-63295-7_2
- Liebau, E., & Tucci, I. (2015). *Migrations- und Integrationsforschung mit dem SOEP von 1984 bis 2012: Erhebung, Indikatoren und Potenziale* (SOEP Survey Papers No. 270). Deutsches Institut für Wirtschaftsforschung (DIW). <https://www.econstor.eu/handle/10419/111916>
- Lin, N. (2001). *Social capital: A theory of social structure and action. Structural analysis in the social sciences: Vol. 19*. Cambridge University Press.
- Lindenberg, S. (1980). Marginal utility and restraints on gain maximization: The discrimination model of rational, repetitive choice. *The Journal of Mathematical Sociology*, 7(2), 289–316. <https://doi.org/10.1080/0022250X.1980.9989912>
- Lindenberg, S. (1985). An Assessment of the New Political Economy: Its Potential for the Social Sciences and for Sociology in Particular. *Sociological Theory*, 3(1), 99–114. <https://doi.org/10.2307/202177>
- Lindstrom, D. P., & Giorguli-Saucedo, S. (2007). The interrelationship between fertility, family maintenance, and Mexico-U.S. migration. *Demographic Research*, 17(28), 821–858. <https://escholarship.org/uc/item/09z2q1f5>
- Lindstrom, D. P., Hernandez-Jabalera, A., & Giorguli Saucedo, S. (2021). Migration, Family Formation and Fertility in the Americas. *International Migration Review*, 55(1), 280–314. <https://doi.org/10.1177/0197918320923353>
- Lipps, O., & Kissau, K. (2012). Nonresponse in an Individual Register Sample Telephone Survey in Lucerne (Switzerland). In S. Häder, M. Häder, & M. Kühne (Eds.), *Telephone surveys in Europe: Research and practice* (1. ed., pp. 187–208). Springer.
- Löbel, L.-M. (2020). Family separation and refugee mental health—A network perspective. *Social Networks*, 61, 20–33. <https://doi.org/10.1016/j.socnet.2019.08.004>
- Lois, D., & Arránz Becker, O. (2014). Is fertility contagious? Using panel data to disentangle mechanisms of social network influences on fertility decisions. *Advances in Life Course Research*, 21, 123–134. <https://doi.org/10.1016/j.alcr.2013.10.001>
- Lübke, C. (2015). How Migration Affects the Timing of Childbearing: The Transition to a First Birth Among Polish Women in Britain. *European Journal of Population*, 31(1), 1–20. <https://doi.org/10.1007/s10680-014-9326-9>
- Lübke, C., Décieux, J. P., Erlinghagen, M., & Wagner, G. C. (2021). Comparing the Risk Attitudes of Internationally Mobile and Non-Mobile Germans. In M. Erlinghagen, A. Ette, N. F. Schneider, & N. Witte (Eds.), *The Global Lives of German Migrants:*

- Consequences of International migration Across the Life Course* (pp. 83–100). Springer.
- Ludwig, V., & Brüderl, J. (2018). Is There a Male Marital Wage Premium? New Evidence from the United States. *American Sociological Review*, 83(4), 744–770. <https://doi.org/10.1177/0003122418784909>
- Lundberg, S., & Pollak, R. A. (1996). Bargaining and Distribution in Marriage. *Journal of Economic Perspectives*, 10(4), 139–158. <https://doi.org/10.1257/jep.10.4.139>
- Lynn, P. (2009). The problem of nonresponse. In E. D. de Leeuw, J. J. Hox, & D. A. Dillman (Eds.), *EAM book series. International handbook of survey methodology* (Repr, pp. 35–55). Psychology Press.
- Lynn, P., Nandi, A., Parutis, V., & Platt, L. (2018). Design and implementation of a high-quality probability sample of immigrants and ethnic minorities: Lessons learnt. *Demographic Research*, 38(21), 513–548. <https://doi.org/10.4054/demres.2018.38.21>
- Lynn, P., & Taylor, B. (1995). On the Bias and Variance of Samples of Individuals: A Comparison of the Electoral Registers and Postcode Address File as Sampling Frames. *The Statistician*, 44(2), 173–194. <https://doi.org/10.2307/2348443>
- Madden, D. (2008). Sample selection versus two-part models revisited: The case of female smoking and drinking. *Journal of Health Economics*, 27(2), 300–307. <https://doi.org/10.1016/j.jhealeco.2007.07.001>
- Madianou, M., & Miller, D. (2011). Mobile phone parenting: Reconfiguring relationships between Filipina migrant mothers and their left-behind children. *New Media & Society*, 13(3), 457–470. <https://doi.org/10.1177/1461444810393903>
- Mäenpää, E., & Jalovaara, M. (2014). Homogamy in socio-economic background and education, and the dissolution of cohabiting unions. *Demographic Research*, 30(65), 1769–1792. <https://doi.org/10.4054/DemRes.2014.30.65>
- Mak, J., Roberts, B., & Zimmerman, C. (2021). Coping with Migration-Related Stressors: A Systematic Review of the Literature. *Journal of Immigrant and Minority Health*, 23(2), 389–404. <https://doi.org/10.1007/s10903-020-00996-6>
- Marchetti-Mercer, M. C. (2012). Those easily forgotten: The impact of emigration on those left behind. *Family Process*, 51(3), 376–390. <https://doi.org/10.1111/j.1545-5300.2012.01407.x>
- Martí, M., & Ródenas, C. (2007). Migration Estimation Based on the Labour Force Survey: An EU-15 Perspective. *International Migration Review*, 41(1), 101–126. <https://doi.org/10.1111/j.1747-7379.2007.00058.x>

- Mau, S., & Mewes, J. (2007). Transnationale soziale Beziehungen. Eine Kartographie der deutschen Bevölkerung. *Soziale Welt*, 58(2), 203–222. <https://doi.org/10.5771/0038-6073-2007-2-203>
- Mayer, K. U. (1990). Lebensverläufe und sozialer Wandel. Anmerkungen zu einem Forschungsprogramm. In K. U. Mayer (Ed.), *Kölner Zeitschrift für Soziologie und Sozialpsychologie Sonderhefte: Vol. 31. Lebensverläufe und sozialer Wandel* (pp. 7–21). Westdeutscher Verlag.
- Mayer, K. U. (2004). Whose lives? How history, societies, and institutions define and shape life courses. *Research in Human Development*, 1(3), 161–187.
- Mazzucato, V., & Schans, D. (2011). Transnational Families and the Well-Being of Children: Conceptual and Methodological Challenges. *Journal of Marriage and Family*, 73(4), 704–712. <https://doi.org/10.1111/j.1741-3737.2011.00840.x>
- Milewski, N. (2007). First child of immigrant workers and their descendants in West Germany. *Demographic Research*, 17(29), 859–896. <https://doi.org/10.4054/DemRes.2007.17.29>
- Milewski, N., & Baykara-Krumme, H. (2021). Fertility Behavior of Turkish Migrant Men in Europe Compared to Stayers at Origin. *Journal of International Migration and Integration*, 24(Suppl 1), 115–136. <https://doi.org/10.1007/s12134-021-00879-1>
- Mincer, J. (1978). Family Migration Decisions. *Journal of Political Economy*, 86(5), 749–773. <https://doi.org/10.1086/260710>
- Mol, C. van. (2014). Erasmus Student Mobility as a Gateway to the International Labour Market? In J. Gerhards, S. Hans, & S. Carlson (Eds.), *Springer eBook Collection. Globalisierung, Bildung und grenzüberschreitende Mobilität* (pp. 295–314). Springer VS.
- Morgan, S. P., & Rackin, H. (2010). The Correspondence Between Fertility Intentions and Behavior in the United States. *Population and Development Review*, 36(1), 91–118. <https://doi.org/10.1111/j.1728-4457.2010.00319.x>
- Moskal, M., & Tyrrell, N. (2016). Family migration decision-making, step-migration and separation: Children's experiences in European migrant worker families. *Children's Geographies*, 14(4), 453–467. <https://doi.org/10.1080/14733285.2015.1116683>
- Mulder, C. H., & Wagner, M. (1993). Migration and marriage in the life course: a method for studying synchronized events. *European Journal of Population*, 9(1), 55–76.

- Mussino, E., & Cantalini, S. (2022). Influences of origin and destination on migrant fertility in Europe. *Population, Space and Place*, 28(7), e2567.
<https://doi.org/10.1002/psp.2567>
- Mussino, E., & van Raalte, A. A. (2013). Immigrant Fertility: A Comparative Study between Italy and Russia. *International Migration*, 51(2), 148–164.
<https://doi.org/10.1111/j.1468-2435.2012.00760.x>
- Mussino, E., Wilson, B., & Andersson, G. (2021). The Fertility of Immigrants From Low-Fertility Settings: Adaptation in the Quantum and Tempo of Childbearing? *Demography*, 58(6), 2169–2191. <https://doi.org/10.1215/00703370-9476273>
- Myers, D. G. (2000). The funds, friends, and faith of happy people. *The American Psychologist*, 55(1), 56–67. <https://doi.org/10.1037//0003-066X.55.1.56>
- Myrskylä, M., & Margolis, R. (2014). Happiness: Before and after the kids. *Demography*, 51(5), 1843–1866. <https://doi.org/10.1007/s13524-014-0321-x>
- Nannestad, P., Lind Haase Svendsen, G., & Tinggaard Svendsen, G. (2008). Bridge Over Troubled Water? Migration and Social Capital. *Journal of Ethnic and Migration Studies*, 34(4), 607–631. <https://doi.org/10.1080/13691830801961621>
- Nauck, B. (2004). Familienbeziehungen und Sozialintegration von Migranten. *IMIS-Beiträge*, 23, 83–104.
- Nave-Herz, R. (2018). Familiensoziologie: Historische Entwicklung, theoretische Ansätze, aktuelle Themen. In A. Wonneberger, K. Weidtmann, & S. Stelzig-Willutzki (Eds.), *Familienwissenschaft* (pp. 119–147). Springer Fachmedien Wiesbaden.
https://doi.org/10.1007/978-3-658-17003-5_6
- Nikolov, M., & Djigunovic, J. M. (2006). Recent research on age, second language acquisition, and early foreign language learning. *Annual Review of Applied Linguistics*, 26, 234–260. <https://doi.org/10.1017/S0267190506000122>
- Nilsson, K. (2001). Migration, Gender and the Household Structure: Changes in Earnings Among Young Adults in Sweden. *Regional Studies*, 35(6), 499–511.
<https://doi.org/10.1080/00343400120065679>
- Nitsche, N., & Hayford, S. R. (2020). Preferences, Partners, and Parenthood: Linking Early Fertility Desires, Marriage Timing, and Achieved Fertility. *Demography*, 57(6), 1975–2001. <https://doi.org/10.1007/s13524-020-00927-y>
- Nowland, R., Thomson, G., McNally, L., Smith, T., & Whittaker, K. (2021). Experiencing loneliness in parenthood: A scoping review. *Perspectives in Public Health*, 141(4), 214–225. <https://doi.org/10.1177/17579139211018243>

- O’Flaherty, M., Skrbis, Z., & Tranter, B. (2007). Home Visits: Transnationalism among Australian Migrants. *Ethnic and Racial Studies*, 30(5), 817–844.
<https://doi.org/10.1080/01419870701491820>
- OECD. (2015). *Connecting with emigrants: A global profile of diasporas 2015*. OECD Publishing. <https://doi.org/10.1787/9789264239845-en>
- Ott, N. (1992). *Intrafamily Bargaining and Household Decisions*. *Microeconomic Studies*. Springer Berlin / Heidelberg.
- Ottonelli, V., & Torresi, T. (2013). When is Migration Voluntary? *International Migration Review*, 47(4), 783–813. <https://doi.org/10.1111/imre.12048>
- Parey, M., Ruhose, J., Waldinger, F., & Netz, N. (2017). The Selection of High-Skilled Emigrants. *Review of Economics and Statistics*, 99(5), 776–792.
https://doi.org/10.1162/REST_a_00687
- Pfarr, K., & Schröder, J. (2015). *Warum Panelstudien* (GESIS Survey Guidelines). GESIS Leibniz-Institut für Sozialwissenschaften. https://doi.org/10.15465/sdm-sg_007
- Pink, S., Leopold, T., & Engelhardt, H. (2014). Fertility and social interaction at the workplace: Does childbearing spread among colleagues? *Advances in Life Course Research*, 21, 113–122. <https://doi.org/10.1016/j.alcr.2013.12.001>
- Pison, G. (2019). The number and proportion of immigrants in the population: International comparisons. *Population Societies*, 563(2), 1–4.
<https://doi.org/10.3917/popsoc.563.0001>
- Poortman, A.-R., & Voorpostel, M. (2009). Parental Divorce and Sibling Relationships. *Journal of Family Issues*, 30(1), 74–91. <https://doi.org/10.1177/0192513X08322782>
- Prandner, D., & Weichbold, M. (2019). Building a Sampling Frame for Migrant Populations via an Onomastic Approach – Lesson learned from the Austrian Immigrant Survey 2016. *Survey Methods: Insights from the Field*, 1–20. <https://doi.org/10.13094/SMIF-2019-00006>
- Preston, K., & Grimes, A. (2019). Migration, Gender, Wages and Wellbeing: Who Gains and in Which Ways? *Social Indicators Research*, 144(3), 1415–1452.
<https://doi.org/10.1007/s11205-019-02079-y>
- Pries, L. (2010). *Transnationalisierung: Theorie und Empirie grenzüberschreitender Vergesellschaftung*. VS Verlag für Sozialwissenschaften.
- Puhani, P. (2000). The Heckman Correction for Sample Selection and Its Critique. *Journal of Economic Surveys*, 14(1), 53–68. <https://doi.org/10.1111/1467-6419.00104>

- Rallu, J. L. (2008). One-way or both-ways migration surveys. In C. Bonifazi, M. Okólski, J. Schoorl, & P. Simon (Eds.), *IMISCOE Research. International Migration in Europe: New Trends and New Methods of Analysis* (pp. 273–292). Amsterdam University Press.
- Recchi, E., Deutschmann, E., Gabrielli, L., & Kholmatova, N. (2021). The global visa cost divide: How and why the price for travel permits varies worldwide. *Political Geography*, *86*, 102350. <https://doi.org/10.1016/j.polgeo.2021.102350>
- Reher, D., & Requena, M. (2009). The National Immigrant Survey of Spain. A new data source for migration studies in Europe. *Demographic Research*, *20*, 253–278. <https://doi.org/10.4054/demres.2009.20.12>
- Rendall, M. S., Tomassini, C., & Elliot, D. J. (2003). Estimation of annual international migration from the Labour Force Surveys of the United Kingdom and the continental European Union. *Statistical Journal of the United Nations Economic Commission for Europe*, *20*(3-4), 219–234. <https://doi.org/10.3233/SJU-2003-203-402>
- Rosenbaum, P. R., & Rubin, D. B. (1983). The central role of the propensity score in observational studies for causal effects. *Biometrika*, *70*(1), 41–55.
- Rözer, J. J., Mollenhorst, G., & Volker, B. (2015). Romantic relationship formation, maintenance and changes in personal networks. *Advances in Life Course Research*, *23*, 86–97. <https://doi.org/10.1016/j.alcr.2014.12.001>
- Rumbaut, R. G. (1997). Ties That Bind: Immigration and Immigrant Families in the United States. In A. Booth, A. C. Crouter, & N. Landale (Eds.), *Immigration and the family: Research and policy on U.S. immigrants* (pp. 3–46). Lawrence Erlbaum Associates.
- Ryan, L. (2011). Migrants' Social Networks and Weak Ties: Accessing Resources and Constructing Relationships Post-Migration. *The Sociological Review*, *59*(4), 707–724. <https://doi.org/10.1111/j.1467-954X.2011.02030.x>
- Ryan, L., Klekowski von Koppenfels, A., & Mulholland, J. (2015). 'The distance between us': a comparative examination of the technical, spatial and temporal dimensions of the transnational social relationships of highly skilled migrants. *Global Networks*, *15*(2), 198–216.
- Ryan, L., & Sales, R. (2013). Family Migration: The Role of Children and Education in Family Decision-Making Strategies of Polish Migrants in London. *International Migration*, *51*(2), 90–103. <https://doi.org/10.1111/j.1468-2435.2010.00652.x>

- Ryan, R. M., & Deci, E. L. (2004). Overview of Self-Determination Theory: An Organismic Dialectic Perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 3–33). University of Rochester Press.
- Salentin, K. (2007). Die Aussiedler-Stichprobenziehung. *Methoden, Daten, Analysen (mda)*, *1*(1), 25–44. <https://www.ssoar.info/ssoar/handle/document/12643>
- Samuelson, P. A. (1956). Social Indifference Curves. *The Quarterly Journal of Economics*, *70*(1), 1–22. <https://doi.org/10.2307/1884510>
- Sandell, S. H. (1977). Women and the Economics of Family Migration. *Review of Economics and Statistics*, *59*(4), 406–414. <https://doi.org/10.2307/1928705>
- Santacreu Fernandez, O., Rother, N., & Braun, M. (2006). Stichprobenziehung für Migrantenpopulationen in fünf Ländern: eine Darstellung des methodischen Vorgehens im PIONEUR-Projekt. *ZUMA Nachrichten*, *30*(59), 72–88. <https://www.ssoar.info/ssoar/handle/document/20749>
- Sarkisian, N., & Gerstel, N. (2016). Does singlehood isolate or integrate? Examining the link between marital status and ties to kin, friends, and neighbors. *Journal of Social and Personal Relationships*, *33*(3), 361–384. <https://doi.org/10.1177/0265407515597564>
- Sauer, L., Kraus, E. K., Kassam, K., Schührer, S., Pupeter, M., Wolfert, S., Steinacker, G., & Schneekloth, U. (2022). *Forced Migration and Transnational Family Arrangements—Eritrean and Syrian Refugees in Germany (TransFAR): Methodology Report* (BiB Data and Technical Reports). Bundesinstitut für Bevölkerungsforschung (BiB). <https://nbn-resolving.org/urn:nbn:de:bib-dmb-2022-012>
- Sawir, E., Marginson, S., Deumert, A., Nyland, C., & Ramia, G. (2008). Loneliness and International Students: An Australian Study. *Journal of Studies in International Education*, *12*(2), 148–180. <https://doi.org/10.1177/1028315307299699>
- Schaeffer, M. (2013). Inter-Ethnic Neighbourhood Acquaintances of Migrants and Natives in Germany: On the Brokering Roles of Inter-Ethnic Partners and Children. *Journal of Ethnic and Migration Studies*, *39*(8), 1219–1240. <https://doi.org/10.1080/1369183X.2013.778147>
- Schmid, S., & Kohls, M. (2011). *Generatives Verhalten und Migration: Eine Bestandsaufnahme des generativen Verhaltens von Migrantinnen in Deutschland* (Forschungsbericht 978-3-9812115-8-0). DEU; Nürnberg. <https://www.ssoar.info/ssoar/handle/document/68142>

- Schnell, R., Gramlich, T., Bachteler, T., reiher, j., Trappmann, M., Smid, M., & Becher, I. (2013). A New Name-Based Sampling Method for Migrants. *MDA - Methoden, Daten, Analysen*, 7(1), 5–33. <https://doi.org/10.12758/mda.2013.001>
- Schnell, R., Hill, P. B., & Esser, E. (2023). *Methoden der empirischen Sozialforschung* (12th edition). *De Gruyter Studium*. De Gruyter Oldenbourg. <https://www.degruyter.com/isbn/9783110752991>
- Schupp, J., Siegel, N. A., Erlinghagen, M., Stegmann, T., & Wagner, G. G. (2008). Leben außerhalb Deutschlands: eine Machbarkeitsstudie zur Realisierung von Auslandsbefragungen auf Basis des Sozio-oekonomischen Panels (SOEP). *SOEPpapers on Multidisciplinary Panel Data Research*, 120. <https://www.econstor.eu/handle/10419/150668>
- Schwartz, C. R., & Han, H. (2014). The Reversal of the Gender Gap in Education and Trends in Marital Dissolution. *American Sociological Review*, 79(4), 605–629. <https://doi.org/10.1177/0003122414539682>
- Seltzer, J. A. (2019). Family Change and Changing Family Demography. *Demography*, 56(2), 405–426. <https://doi.org/10.1007/s13524-019-00766-6>
- Shapira, M., Gayle, V., & Graham, E. (2019). Moving on and moving out: The implications of socio-spatial mobility for union stability. *Population, Space and Place*, 25(2), e2180. <https://doi.org/10.1002/psp.2180>
- Sime, D., & Fox, R. (2015). Migrant Children, Social Capital and Access to Services Post-Migration: Transitions, Negotiations and Complex Agencies. *Children & Society*, 29(6), 524–534. <https://doi.org/10.1111/chso.12092>
- Simon, H. A. (1993). *Homo rationalis: Die Vernunft im menschlichen Leben*. Campus-Verlag.
- Skora, T., Rüger, H., & Schneider, N. F. (2013). *Job Mobilities and Family Lives in Europe: Documentation of the Panel Dataset* (BiB Daten- und Methodenberichte No. 1). Federal Institute for Population Research.
- Smith, R. A., & Khawaja, N. G. (2011). A review of the acculturation experiences of international students. *International Journal of Intercultural Relations*, 35(6), 699–713. <https://doi.org/10.1016/j.ijintrel.2011.08.004>
- Snijders, T. A. B., & Bosker, R. J. (2012). *Multilevel analysis: An introduction to basic and advanced multilevel modeling* (2nd edition). Sage.

- Soehl, T., & Waldinger, R. (2010). Making the connection: Latino immigrants and their cross-border ties. *Ethnic and Racial Studies*, *33*(9), 1489–1510.
<https://doi.org/10.1080/01419871003624050>
- Song, L. (2012). Raising network resources while raising children? Access to social capital by parenthood status, gender, and marital status. *Social Networks*, *34*(2), 241–252.
<https://doi.org/10.1016/j.socnet.2011.12.005>
- Soons, J. P. M., Liefbroer, A. C., & Kalmijn, M. (2009). The Long-Term Consequences of Relationship Formation for Subjective Well-Being. *Journal of Marriage and Family*, *71*(5), 1254–1270. <https://doi.org/10.1111/j.1741-3737.2009.00667.x>
- Statistisches Bundesamt. (2023). *Mikrozensus: Qualitätsbericht 2022*.
https://www.destatis.de/DE/Methoden/Qualitaet/Qualitaetsberichte/Bevoelkerung/mikrozensus-2022.pdf?__blob=publicationFile
- Steinbach, A., & Hank, K. (2018). Full-, Half-, and Step-Sibling Relations in Young and Middle Adulthood. *Journal of Family Issues*, *39*(9), 2639–2658.
<https://doi.org/10.1177/0192513X18757829>
- Steinbach, A., Kopp, J., & Lazarevic, P. (2019). Divergent perceptions of intergenerational relationships: what implications, if any? *Journal of Family Studies*, *25*(4), 368–384.
<https://doi.org/10.1080/13229400.2016.1269659>
- Steinbach, A., Kuhnt, A.-K., & Knüll, M. (2016). The prevalence of single-parent families and stepfamilies in Europe: can the Hajnal line help us to describe regional patterns? *The History of the Family*, *21*(4), 578–595.
<https://doi.org/10.1080/1081602X.2016.1224730>
- Steinbach, A., Mahne, K., Klaus, D., & Hank, K. (2020). Stability and Change in Intergenerational Family Relations Across Two Decades: Findings From the German Ageing Survey, 1996-2014. *The Journals of Gerontology: Series B*, *75*(4), 899–906.
<https://doi.org/10.1093/geronb/gbz027>
- Steinbach, A., & Silverstein, M. (2020). Step-Grandparent–Step-Grandchild Relationships: Is There a “Grand Step-Gap” in Emotional Closeness and Contact? *Journal of Family Issues*, *41*(8), 1137–1160. <https://doi.org/10.1177/0192513X19886638>
- Steinhauer, H. W., Zinn, S., & Will, G. (2019). Sampling Refugees for an Educational Longitudinal Survey. *Survey Methods: Insights from the Field*, 1–16.
<https://doi.org/10.13094/SMIF-2019-00007>
- Strasser, E., Kraler, A., Bonjour, S., & Bilger, V. (2009). Doing family. *The History of the Family*, *14*(2), 165–176. <https://doi.org/10.1016/j.hisfam.2009.02.005>

- Sturm, N., Koops, J. C., & Rutigliano, R. (2023). The Influence of Partnership Status on Fertility Intentions of Childless Women and Men Across European Countries. *European Journal of Population*, 39(1), 20. <https://doi.org/10.1007/s10680-023-09664-5>
- Sutin, A. R., Stephan, Y., & Terracciano, A. (2018). Parental Educational Attainment and Offspring Subjective Well-being and Self-Beliefs in Older Adulthood. *Personality and Individual Differences*, 128, 139–145. <https://doi.org/10.1016/j.paid.2018.01.023>
- Svarer, M., & Verner, M. (2008). Do children stabilize Danish marriages? *Journal of Population Economics*, 21(2), 395–417.
- Switek, M., & Easterlin, R. A. (2018). Life Transitions and Life Satisfaction During Young Adulthood. *Journal of Happiness Studies*, 19(1), 297–314. <https://doi.org/10.1007/s10902-016-9817-y>
- Tabor, A. S., & Milfont, T. L. (2011). Migration change model: Exploring the process of migration on a psychological level. *International Journal of Intercultural Relations*, 35(6), 818–832. <https://doi.org/10.1016/j.ijintrel.2010.11.013>
- Tanskanen, A. O., Danielsbacka, M., Jokela, M., David-Barrett, T., & Rotkirch, A. (2016). Diluted Competition? Conflicts between Full- and Half-Siblings in Two Adult Generations. *Frontiers in Sociology*, 1(6), 1–11. <https://doi.org/10.3389/fsoc.2016.00006>
- Taylor, M. P. (2007). Tied Migration and Subsequent Employment: Evidence from Couples in Britain. *Oxford Bulletin of Economics and Statistics*, 69(6), 795–818. <https://doi.org/10.1111/j.1468-0084.2007.00482.x>
- Teodorescu, D.-S., Heir, T., Hauff, E., Wentzel-Larsen, T., & Lien, L. (2012). Mental health problems and post-migration stress among multi-traumatized refugees attending outpatient clinics upon resettlement to Norway. *Scandinavian Journal of Psychology*, 53(4), 316–332. <https://doi.org/10.1111/j.1467-9450.2012.00954.x>
- Therborn, G. (2014). Family Systems of the World. In J. Treas, J. Scott, & M. Richards (Eds.), *The Wiley Blackwell Companion to the Sociology of Families* (pp. 1–19). Wiley. <https://doi.org/10.1002/9781118374085.ch1>
- Theunis, L., Schnor, C., Willaert, D., & van Bavel, J. (2018). His and Her Education and Marital Dissolution: Adding a Contextual Dimension. *European Journal of Population*, 34(4), 663–687. <https://doi.org/10.1007/s10680-017-9448-y>

- Thomas, R. J. (2019). Sources of Friendship and Structurally Induced Homophily across the Life Course. *Sociological Perspectives*, 62(6), 822–843.
<https://doi.org/10.1177/0731121419828399>
- Thomson, E., Winkler-Dworak, M., Spielauer, M., & Prskawetz, A. (2012). Union instability as an engine of fertility? A microsimulation model for France. *Demography*, 49(1), 175–195. <https://doi.org/10.1007/s13524-011-0085-5>
- Torres, J. M., Alcántara, C., Rudolph, K. E., & Viruell-Fuentes, E. A. (2016). Cross-border Ties as Sources of Risk and Resilience: Do Cross-border Ties Moderate the Relationship between Migration-related Stress and Psychological Distress for Latino Migrants in the United States? *Journal of Health and Social Behavior*, 57(4), 436–452. <https://doi.org/10.1177/0022146516667534>
- Torres, J. M., Lee, A., González, H. M., Garcia, L., & Haan, M. N. (2016). A longitudinal analysis of cross-border ties and depression for Latino adults. *Social Science & Medicine*, 160, 111–119. <https://doi.org/10.1016/j.socscimed.2016.04.018>
- Treviño, E., Miranda, C., Hernández, M., & Villalobos, C. (2021). Socioeconomic Status, Parental Involvement and Implications for Subjective Well-Being During the Global Pandemic of Covid-19. *Frontiers in Education*, 6, 762780.
<https://doi.org/10.3389/feduc.2021.762780>
- van den Broek, T., & Grundy, E. (2017). Loneliness among Polish migrants in the Netherlands: The impact of presence and location of partners and offspring. *Demographic Research*, 37(23), 727–742. <https://doi.org/10.4054/DemRes.2017.37.23>
- van der Horst, M., & Coffé, H. (2012). How Friendship Network Characteristics Influence Subjective Well-Being. *Social Indicators Research*, 107(3), 509–529.
<https://doi.org/10.1007/s11205-011-9861-2>
- van Goor, H., & Rispens, S. (2004). A Middle Class Image of Society. *Quality & Quantity*, 38(1), 35–49. <https://doi.org/10.1023/B:QUQU.0000013237.59150.ff>
- van Landschoot, L., Willaert, D., Valk, H. A. G. de, & van Bavel, J. (2018). Partner Choice and the Transition to Parenthood for Second-Generation Women of Turkish and Moroccan Origin in Belgium. *European Journal of Population*, 34(4), 579–608.
<https://doi.org/10.1007/s10680-017-9438-0>
- van Tilburg, M., & Vingerhoets, A. J. (Eds.). (2021). *Psychological Aspects of Geographical Moves: Homesickness and acculturation stress*. Amsterdam University Press.
<https://doi.org/10.1017/9789048504169>

- VanderWeele, T. J., Hawkey, L. C., & Cacioppo, J. T. (2012). On the reciprocal association between loneliness and subjective well-being. *American Journal of Epidemiology*, *176*(9), 777–784. <https://doi.org/10.1093/aje/kws173>
- Vidal, S., & Huinink, J. (2019). Introduction to the special collection on spatial mobility, family dynamics, and gender relations. *Demographic Research*, *41*(21), 593–616. <https://doi.org/10.4054/DemRes.2019.41.21>
- Viruell-Fuentes, E. A., & Schulz, A. J. (2009). Toward a dynamic conceptualization of social ties and context: Implications for understanding immigrant and Latino health. *American Journal of Public Health*, *99*(12), 2167–2175. <https://doi.org/10.2105/AJPH.2008.158956>
- Völker, B. (2022). 'birds of a feather' - forever? Homogeneity in adult friendship networks through the life course. *Advances in Life Course Research*, *53*, 100498. <https://doi.org/10.1016/j.alcr.2022.100498>
- Wahba, J. (2015). Selection, selection, selection: The impact of return migration. *Journal of Population Economics*, *28*(3), 535–563. <https://doi.org/10.1007/s00148-015-0541-4>
- Wahba, J., & Zenou, Y. (2012). Out of sight, out of mind: Migration, entrepreneurship and social capital. *Regional Science and Urban Economics*, *42*(5), 890–903. <https://doi.org/10.1016/j.regsciurbeco.2012.04.007>
- White, M. J., Moreno, L., & Guo, S. (1995). The Interrelation of Fertility and Geographic Mobility in Peru: A Hazards Model Analysis. *The International Migration Review*, *29*(2), 492–514. <https://doi.org/10.1177/019791839502900207>
- Whyte, B. (2008). Visa-free Travel Privileges: An Exploratory Geographical Analysis. *Tourism Geographies*, *10*(2), 127–149. <https://doi.org/10.1080/14616680801999984>
- Wilkinson, A., & Singh, G. (2010). Managing stress in the expatriate family: a case study of the state department of the United States of America. *Public Personell Management*, *39*(2), 169–181.
- Willekens, F., Massey, D., Raymer, J., & Beauchemin, C. (2016). International migration under the microscope. *Science*, *352*(6288), 897–899. <https://doi.org/10.1126/science.aaf6545>
- Williams, R. (2006). Generalized Ordered Logit/Partial Proportional Odds Models for Ordinal Dependent Variables. *The Stata Journal*, *6*(1), 58–82. <https://doi.org/10.1177/1536867X0600600104>
- Williams, V. F., Smith, A. A., Villanti, A. C., Rath, J. M., Hair, E. C., Cantrell, J., Teplitskaya, L., & Vallone, D. M. (2017). Validity of a Subjective Financial Situation

- Measure to Assess Socioeconomic Status in US Young Adults. *Journal of Public Health Management and Practice*, 23(5), 487–495.
<https://doi.org/10.1097/phh.0000000000000468>
- Wilson, B. (2020). Understanding How Immigrant Fertility Differentials Vary over the Reproductive Life Course. *European Journal of Population*, 36(3), 465–498.
<https://doi.org/10.1007/s10680-019-09536-x>
- Witte, N., Ette, A., & Sander, N. (2023). How do global crises affect privileged migrants? Return migration of German emigrants one year into the Covid-19 pandemic. *Journal of Ethnic and Migration Studies*, 1–23.
<https://doi.org/10.1080/1369183X.2023.2245570>
- Wolf, K. (2016). Marriage Migration Versus Family Reunification: How Does the Marriage and Migration History Affect the Timing of First and Second Childbirth Among Turkish Immigrants in Germany? *European Journal of Population*, 32(5), 731–759.
<https://doi.org/10.1007/s10680-016-9402-4>
- Wooldridge, J. M. (2013). *Introductory econometrics: A modern approach* (5th edition). South-Western Cengage Learning.
- Wright, D. M., Rosato, M., & O'Reilly, D. (2017). Influence of Heterogamy by Religion on Risk of Marital Dissolution: A Cohort Study of 20,000 Couples. *European Journal of Population*, 33(1), 87–107. <https://doi.org/10.1007/s10680-016-9398-9>
- Wrzus, C., Wagner, J., & Neyer, F. J. (2012). The interdependence of horizontal family relationships and friendships relates to higher well-being. *Personal Relationships*, 19(3), 465–482. <https://doi.org/10.1111/j.1475-6811.2011.01373.x>
- Zubin, J., & Spring, B. (1977). Vulnerability: A new view of schizophrenia. *Journal of Abnormal Psychology*, 86(2), 103–126. <https://doi.org/10.1037//0021-843x.86.2.103>

ARTICLE ONE

INTERNATIONAL MIGRATION AND ITS SHORT-TERM EFFECT ON PARTNERSHIP STABILITY

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INTERNATIONAL MIGRATION AND ITS SHORT-TERM EFFECT ON PARTNERSHIP
STABILITY

ABSTRACT

Up to now, we know only a little about the causal effect of international migration on partnership stability, with the few existing analyses being restricted to internal migration or international migration from less developed countries to the Global North. Using longitudinal data on German citizens [the German Emigration and Remigration Panel Study plus the German Family Panel (pairfam)], this study contributes to existing literature primarily in two ways: first, by comparing international migrants to nonmigrants at origin and applying the appropriate methods (Entropy Balancing and Discrete Time Proportional Hazards Models), the causal effect of international migration was studied. Second, assessing (non-)mobile German citizens allows looking at these effects in the context of a highly industrialized welfare state. Additional to the general effect of international migration, differences between emigrants and remigrants are studied — which has not been done before, except for the Latin American context. To advance our understanding of the underlying mechanisms, the role of further migration characteristics is investigated. Findings show that international migration increases the risk of union dissolution compared to no migration and that the risk of union dissolution is higher for remigrants compared to emigrants. The underlying migration reasons play an additional role in explaining the risk of union dissolution.

INTRODUCTION

This paper considers the consequences of migration for families and family life. International migration has always been a crucial component of societies throughout the world and moving to another country implies far-reaching changes in the social context of migrants and their families. These changes could be exciting and rewarding (Ward et al., 2008), but also include ‘uncertainty, lack of control, and ambiguity’ (Wilkinson & Singh, 2010, p. 169). Consequently, even with voluntary migration, unforeseen and negative consequences of migration appear plausible.

Referring to the consequences of migration, literature has emphasized migration as a stressor (Brown, 2008; Mak et al., 2021) that might affect partnership stability negatively (Boyle et

al., 2008). Using data from German (non-) migrants, this paper assesses the effect of international migration from a highly industrialized welfare state on partnership stability for the first time. Until now, related research was primarily based on internal migration (Boyle et al., 2008; Muszynska & Kulu, 2007; Shapira et al., 2019) or international migration from the Global South (Davis & Jennings, 2018; Frank & Wildsmith, 2005; Landale & Ogena, 1995). These findings, however, may not generalize to the current context. With internal migration, the (im)material costs are lower and frequent visits appear more feasible (Krieger, 2020). Existing research has already shown that impacts differ between short- and long-distance moves (Boyle et al., 2008; Shapira et al., 2019). Thus, international migration (likely a long-distance move) might be more harmful to partnership stability than internal migration (likely shorter). Similarly, results of international migration from the Global South cannot be assumed to generalize to the current context. In particular, international migration from highly industrialized welfare states might be less harmful to partnership stability as migration appears to affect family trajectories of privileged individuals less than of more disadvantaged individuals (Castro Torres & Gutierrez-Vazquez, 2022). In the current study context, movements can be considered as voluntary and planned (Kley, 2011). Thus, the reasons underlying the migration decisions may differ between migration from the Global South and the current context, which in turn affects migration's effect on partnership stability (Shapira et al., 2019).

Partnership stability as an outcome is important to consider, given its relation to other demographic processes such as fertility (Lindstrom et al., 2021), as well as its consequences in terms of migration (Feijten & van Ham, 2013; Geist & McManus, 2008; Kulu et al., 2021; Mikolai & Kulu, 2018). Furthermore, both migration and partnership stability are connected not only to the migrants' or couples' well-being (Auditor & Erlinghagen, 2021; Soons et al., 2009; Switek & Easterlin, 2018) but also to that of their children (Amato, 2000, 2014; Dimitrova et al., 2016).

This study's empirical objectives are twofold. First, the causal effect of migration on partnership stability is investigated, considering potential differences between emigration and remigration. Emigration refers to citizens moving from their country of origin to a different country (e.g., German citizens leaving Germany), and remigration refers to citizens who previously moved away from their country of origin and then return (e.g., German citizens returning to Germany from having lived in a different country, also often referred to as return migration, e.g., Constant, 2021; Lindstrom et al., 2021). From a theoretical point of view, the stress related to migration can be assumed to correlate with the direction of migration (emigration vs.

remigration) due to differences regarding both migration patterns and situations after migration. Regarding migration patterns, differences with respect to how migration decisions are made, actual trajectories, and underlying gender patterns should be taken into consideration (Erlinghagen, 2021a, 2021b). Differences regarding the situation after migration include, for example, psychological burdens and employment (Erlinghagen, 2021b). So far, however, emigrants' and remigrants' union dissolution risks have not been separately compared to nonmigrants' risks except in the Latin American context (see Landale & Ogena, 1995; Lindstrom et al., 2021). Second, after assessing the effect of migration (and the different migration directions) on partnership stability, I take a closer look at migration characteristics that might mediate the effect of migration.

In the next section of this paper, as a starting point for this research, theoretical arguments are outlined. Second, previous empirical research is summarized. Third, I give an overview on the data and variables used and outline the methods applied in the present study. Next, estimation results are presented. Finally, the paper ends with a discussion of these findings and some concluding remarks.

THEORETICAL CONSIDERATIONS

Migration might affect partnership stability via different mechanisms. Please note that some mechanisms might not be exclusive to international migration but would also apply to (long-distance) internal migration (cf. R. King & Skeldon, 2010). To start with, migration might decrease partnership stability via stress. It has been claimed that migration comes along with 'uncertainty, lack of control, and ambiguity' requiring changes in different areas of life (Wilkinson & Singh, 2010, p. 169). Such feelings of uncertainty caused by migration often result in stress (Brown, 2008; Mak et al., 2021). And since stress has been argued to increase the risk of union dissolution (Boyle et al., 2008), it can be suggested that international migration should increase the risk of partnership dissolution. Assuming that adjustments to new living conditions are primarily required shortly after migration, it appears plausible that the negative effect on partnership stability is strongest directly after migration. Besides that, stressors can be additive (e.g., Wolfinger, 2000 on parental separation) and thus migration might be especially harmful for people migrating multiple times. Remigration (in the current context: Germans returning to Germany) is the at least second migration of a person, given that previous emigration must have taken place. Therefore, lower partnership stability of remigrants compared to emigrants can be expected.

The stress associated with migration may increase if migration leads to or enhances differences between the two partners. One such difference is enthusiasm about the situation after migration, which may be particularly important in cases of tied migration (Baykara-Krumme et al., 2021). For example, partners may have disagreed or not shared a strong desire to migrate before the move (Coulter et al., 2012), or one partner might miss the previous home or be unhappy in the couple's new situation (Flowerdew & Al-Hamad, 2004). This, in turn, could lead to remigration desires or more home visits (potentially by one partner only, implying temporary geographical separation), increasing stress and thus putting strain on the partnership. Additionally, the household's economic situation may change with migration. Not only might migration worsen the household's economic situation (Pailhé & Solaz, 2008) but potential gains from migration might not be shared equally between both partners: migration usually benefits the men's careers (Cooke, 2003) while women's careers tend to suffer (Boyle et al., 2009). Assessing tied migration, it was found that employment prospects differed between lead and tied migrants (Krieger, 2020), with women traditionally being the tied migrants (Cooke, 2008). The resulting pressures may imply higher conflict potential (Conger et al., 1999), increasing the stress associated with migration. In the current context, however, the last mechanism appears not so crucial: for German emigrants a wage increase was found independent of gender (Witte & Guedes Auditor, 2021), implying that differences between the two partners may be less likely in this respect. Patterns among remigrants might be different, however, among remigrants it is more often women who are the leading spouses (Amcoff & Niedomysl, 2015). This pattern may counteract the general finding that migration primarily benefits the male partner's career and thus decrease potential differences in the gains from migration.

Partnership stability might also be affected by changes in other life areas that happened due to or with migration. These changes include parental status, social networks and partner markets. Most recent studies have found evidence of increased fertility after migration (Lübke, 2015; Milewski & Baykara-Krumme, 2021). At the same time, several studies found evidence of higher partnership stability for couples with children (Coppola & Di Cesare, 2008; Waite & Lillard, 1991; Wu, 1995). However, accounting for selection effects, evidence of a destabilizing effect of fertility has also been found (Svarer & Verner, 2008). Thus, keeping in mind that parental status changes may challenge partnerships (cf. Twenge et al., 2003), migration may either stabilize or destabilize partnerships via its effect on fertility. Turning to the next aspect, social networks are positively related to mental health (Eibich & Liu, 2021), and mental health problems have been found to interact negatively with partnership stability (McNulty, 2015; Percheski & Meyer, 2018). Thereby, having strong and supportive social networks is

potentially beneficial to partnership stability. Migration, however, increases the distance between social network members, which may decrease both contact (Bordone, 2009; Hank, 2007; Mansfeld, 2021) and support (McNulty, 2015; Mulder & van der Meer, 2009). This distance from social networks may increase marital stress (McNulty, 2012) and, consequently, decrease partnership stability (Muszynska & Kulu, 2007). Furthermore, if there were social networks at the place of origin that hindered separation (e.g., common friends), migration may ease separation (Boyle et al., 2008). At the same time, however, if there were social networks that put pressure on partners to terminate a relationship, migration implies a freeing from that pressure and thus increases partnership stability. Considering the direction of migration, differences in the effect of social networks appear plausible given that remigrants are more likely to access previously existing social networks again. Thinking of, for example, a couple moving to one partner's previous place of residence, however, these social networks are not necessarily helpful to both partners to the same extent (see e.g., discussion in Eibich & Liu, 2021 on how to conceptualize family networks). Having one partner with a strong supportive social network while the other does not have such a network might also put a strain on partnerships. Additionally, migrants gain access to new partner markets (Boyle et al., 2008). These new partner markets — per se and depending on the number of potential partners — could decrease partnership stability.

In contrast to the channels mentioned thus far, which primarily posed negative effects of migration on partnership stability, channels suggesting a positive effect exist as well. Following the so-called 'isolation hypothesis' (Shapira et al., 2019), migration leaves couples in a potentially hostile environment with fewer people to rely on. In such a stressful situation of social isolation, family bonds and particularly partnerships become more important (Shapira et al., 2019) and thus separations appear less likely. This mechanism may be more crucial to emigrants compared to remigrants, given the argument on pre-existing social networks above plus the fact that barriers to access new social networks (e.g., due to a lack of language skills) can be assumed to be lower. Another mechanism would be the fact that migration might forge a bond between the two partners: given that migrant couples 'went through' something together and handled different types of difficulties, positive long-term consequences regarding partnership stability appear plausible. Furthermore, migration could lead to a reunification of partners who did not live in the same country before. This reunification process, however, is not synchronous: although it may compensate for the loneliness of the leading spouse (Della Puppa, 2018), it includes the stress involved with international migration for the following spouse.

In summary, from a theoretical point of view most mechanisms hint at migration destabilizing partnerships, even though mechanisms supporting an opposite effect exist and might even outweigh the mechanisms indicating destabilization. Considering the distinction of emigration and remigration, the direction of the effects appears even less clear. On the one hand, it was argued that remigrants would have a higher probability of reaccessing previous social networks, implying a stronger destabilizing effect of emigration. On the other hand, remigration is the at least second migration of a person (with stressors potentially being additive) and access to (or the utility of) remigrants' previous social networks may be unequal between the two partners, implying a stronger destabilizing effect of remigration.

STATE OF RESEARCH

Regarding the role of migration on union dissolution, several studies have compared dissolution rates between migrants and natives (at the destination) (e.g., Andersson et al., 2015; Gonzalez-Ferrer et al., 2016; Hannemann & Kulu, 2015; Hannemann et al., 2020). This approach, however, does not allow for assessment of the effect of migration itself on union dissolution (cf. Lübke, 2015). To evaluate this effect, comparisons to nonmigrants at the origin (stayers) are required. The following literature review is limited to such studies, which are sparse and show mixed results. International migration of men from different Latin American countries increased the risk of union dissolution (Frank & Wildsmith, 2005; Lindstrom et al., 2021), but a study on Nicaraguan men found elevated dissolution risks only for internal migrants or a longer migration duration (independent of the destination) (Davis & Jennings, 2018). Studies focussing on internal migration only found enhanced (Shapira et al., 2019) or similar dissolution risks (Boyle et al., 2008) among long-distance movers, but dissolution risks among short-distance movers were decreased (Boyle et al., 2008; Shapira et al., 2019).

Differences by migration direction were also found. The risk of first divorce was higher for emigrants compared to remigrants in the Latin American migration context (Lindstrom et al., 2021). Similarly, an earlier study found elevated risks of union dissolution for female Puerto Rican emigrants compared to nonmigrants but not for remigrants (Landale & Ogena, 1995). In contrast, recently, higher risk of union dissolution was found for German remigrants compared to emigrants, but no comparison to German nonmigrants was conducted (Baykara-Krumme et al., 2021).

Besides the general effect, several migration characteristics have been found to affect the risk of union dissolution. These include the length of geographic separation when assessing individual's migration (Davis & Jennings, 2018; Frank & Wildsmith, 2005), its direction (rural–

urban or different destinations) (Boyle et al., 2008; Davis & Jennings, 2018), the prevalence of migration at the community level (Frank & Wildsmith, 2005), as well as the migration decision and whether both partners moved at the same time or not (Baykara-Krumme et al., 2021). Referring to the migration characteristics of analysis in this study, multiple (internal) migrations were found to increase the risk of union dissolution (Boyle et al., 2008; Muszynska & Kulu, 2007; Shapira et al., 2019). Migration reasons differ between individuals (Thomas, 2019) and moving for reasons neither career- nor accommodation-related decreased the risk of union dissolution, but accommodation and career-related migrations had no significant effect (Shapira et al., 2019). A worsening of the economic situation of the couple (Boheim & Ermisch, 2001) or the individuals (Shapira et al., 2019) was found to increase the risk of union dissolution.

Overall, although general determinants of partnership stability have been researched quite intensively, empirical studies of the effect of migration are sparse and existing literature tends to assess either internal migration or international migration in the Latin American–US context. With the exception of Baykara-Krumme et al. (2021), no studies on partnership stability of international migrants from highly industrialized welfare states could be found. Such literature, however, is required, given that about one-fourth of global movement is due to migrants from the Global North (Pison, 2019) and existing findings from other contexts cannot, for several reasons, be assumed to generalize (see argumentation in the introductory chapter).

DATA AND METHODS

Data

Analyses are based primarily on the German Emigration and Remigration Panel Study (GERPS), which provides information on internationally mobile Germans (Erlinghagen et al., 2021). GERPS assembles longitudinal data on both German emigrants and remigrants to assess the consequences of migration in the life course. For the first wave, migrants were sampled based on population registers using two-stage sampling. Only German nationals aged 20–70 years, who either emigrated from or remigrated to Germany between July 2017 and June 2018, were included. Sampled individuals were contacted by postal mail and asked to complete an online survey (push-to-web design), resulting in a response rate of 33% for wave 1 (Ette et al., 2020). Subsequent waves were carried out online.

Additionally, to assess the effect of migration, data on the nonmobile German population is required. Unfortunately, there is no single data source covering data on mobile and nonmobile Germans. Thus, to assess the nonmobile German population, I use the German Family Panel (pairfam) (Brüderl, Drobnič, et al., 2021). Pairfam assesses people living in Germany, focusing

on family-related topics such as partnerships and fertility (Huinink et al., 2011). In the first interview wave, a cohort-sequence design covering three birth cohorts, 1971–1973, 1981–1983 and 1991–1993, was used. In general, interviews are conducted face-to-face (CAPI), with the exception of computer-assisted telephone interviews (CATI) between 24 April 2020 and July 2020 (due to social distancing requirements of the COVID-19 pandemic) (Brüderl, Schmiedeberg, et al., 2021). A detailed description of the study can be found in Huinink et al. (2011).

Although GERPS and pairfam differ in some respects (e.g., age restrictions and survey mode), they have important similarities (sampling schemes, questionnaire design) that allow the combination of the two data sources. For both datasets, sampling for the first wave was conducted using a two-step procedure, sampling municipalities first and then people within municipalities. Questionnaires are created in a way that allows for the construction of the required variables for both the mobile and nonmobile German population. Thus, using the appropriate methods, the two datasets can be claimed sufficiently comparable.

The first four existing waves from GERPS and waves 10 to 12 from pairfam are used, such that data covers the years 2017–2020. Both datasets cover an observation period of 3 years. The subsample of internationally mobile respondents includes those who were in a heterosexual cohabiting relationship before migration and whose relationships were still intact in wave 1 shortly after migration (plus noncohabiting migrants who followed their migrant partners). Similarly, the sample of internationally nonmobile Germans was limited to respondents from pairfam who were in a heterosexual cohabiting relationship 15 months before the first interview of consideration. This condition stems from the fact that the average duration between migration and first GERPS interview in the sample was 12 months and respondents were asked about their situation 3 months before migration. Furthermore, age restrictions were applied to GERPS data to account for pairfam's cohort design.

Methods

Considering the posed research question, this study was designed to gain information about the causal effect of migration on partnership stability. However, international migrants differ systematically from nonmigrants in certain aspects, for example, education and employment (Borjas et al., 2018; Eliasson et al., 2014), risk willingness (Lübke et al., 2021) and foreign roots (Ette & Erlinghagen, 2021). These differences can also be observed in the current data (Table 1). To account for these differences, a two-step procedure is implemented:

Article one

Table 1: Descriptive Statistics displaying the mean / proportion (N = 12,025).

	<u>Non-mobile</u>	<u>Emigrant</u>	<u>Remigrants</u>
<u>Part A: General characteristics</u>			
Separation during 3 years	.023	.029	.033
Age group (at start of observation)			
19 - 28 years	.121	.193	.125
29 - 38 years	.392	.590	.533
39 - 48 years	.487	.217	.341
Female	.573	.511	.490
Foreign roots (vs. no)	.118	.214	.266
Tertiary education (vs. less)	.401	.870	.827
Employment status			
Not employed	.071	.103	.111
Unemployed	.017	.021	.029
(Self)employed	.867	.767	.774
Other	.045	.106	.083
Risk aversion			
Rather unwilling to assume risks	.428	.256	.238
Indifferent	.266	.137	.120
Rather willing to assume risks	.301	.603	.638
Family status			
Living-apart-together (LAT)	.007	.122	.073
LT, not married, no children	.140	.251	.178
LT, married, no children	.101	.229	.191
LT, not married, children	.116	.043	.061
LT, married, children	.633	.323	.459
Number of previous partnerships	1.516	2.195	2.297
Previously married (vs. no)	.079	.020	.029
Parental separation (vs. no)	.210	.151	.136
<u>Time</u>			
After 1 year	.369	.450	.464
After 2 years	.335	.335	.332
After 3 years	.297	.215	.205
<u>Part B: Migration characteristics</u>			
Multiple migrations		.029	.012
Migration reasons			
Job-related: female partner		3.282	3.263
Job-related: male partner		4.645	4.049
Other partnership-related		2.526	2.145
Family-related		2.478	3.887
Financial		2.807	2.501
Education-related		1.859	1.935
Lifestyle-related		3.622	2.690
Dissatisfaction with Germany (emigrants) / migration country (remigrants)		2.311	2.485
Economic change			
Better after migration		.616	.383
About the same		.182	.224
Worse after migration		.202	.393
Friends at the destination		.571	.937

Note: Missing categories/variables included but not displayed.

in step one, weights are calculated to account for these differences. In step two, regressions of the effect of migration on union dissolution are estimated using the weights obtained in step one.

There are different methods to account for differences between treatment and control group (step 1). In contrast to propensity score matching, described as the most common approach (G. King & Nielsen, 2019), Entropy Balancing and the Stata package ebalance (Hainmueller & Xu, 2013) allow for assessment of inequalities in the covariate distributions between control and treatment groups directly: researchers can specify balance conditions based on known sample moments (Hainmueller, 2012). By balancing covariate distributions, researchers can reduce model dependency (e.g., Ho et al., 2007), which in turn decreases inefficiency and bias of the estimators (G. King & Nielsen, 2019). Treatment corresponds to the main explanatory variables comparing migrants and nonmigrants and results in three different sets of balance weights being calculated.

Given the time structure of the data set, Discrete Time Proportional Hazards Models (Jenkins, 1995) are estimated (step 2). Complementary log-log regressions are run, using the treatment variable and time-controls as explanatory variables and including the weights obtained from Entropy Balancing. This affords the opportunity to assess the causal effect of migration compared to no migration, and three types of models, based on varying samples, are estimated. They compare all migrants to nonmigrants (full sample), emigrants to nonmigrants, or remigrants to nonmigrants. Subsequently, the determinants of migrants' partnership stability are investigated in more detail to find out about potential mediators. Assessing migrants only (Table 4), no Entropy Balancing is required. Thus, complementary log-log regressions are run using the same variables previously used for Entropy Balancing plus migration characteristics as covariates.

Variables

The dependent and main explanatory variables

Separation is a dummy variable coded as '1' if a separation took place between the current and the following interview and '0' otherwise. Similarly, the main explanatory variables are dummy variables, indicating whether migration took place ('1') or not ('0'). Given varying samples are being used, the main explanatory variables differ between the models and also indicate the direction of migration (emigration, remigration).

Covariates

General determinants of partnership stability include age at union formation (Liefbroer & Dourleijn, 2006), education (de Graaf & Kalmijn, 2006; Lyngstad, 2004), employment (Anderson et al., 2021; Poortman & Kalmijn, 2002; Poortman, 2005a, 2005b), foreign roots (Gonzalez-Ferrer et al., 2016) and risk-taking behaviour (Lowenstein, 2005) at the individual level. At the partnership level, current family arrangements (cohabitation and marital status, Amato, 2010; Liefbroer & Dourleijn, 2006; and children, Svarer & Verner, 2008), as well as previous partnership experiences, including the number of previous unions (Beaujouan, 2016; Svarer & Verner, 2008), previous marriages (de Graaf & Kalmijn, 2006; Milewski & Kulu, 2014; South, 2001) and parental separation (Diekmann & Schmidheiny, 2013; Liefbroer & Dourleijn, 2006), were found to affect union stability. At the same time, these aspects are associated with differences between migrants and nonmigrants (see Tables 5–10 in the Appendix).

Given that covariate balancing should be applied to those variables simultaneously linked to treatment and outcome (Caliendo & Kopeinig, 2008), covariates examined in the present study include both individual and partnership characteristics (plus time controls). Age group is a categorical variable, indicating whether at the start of observations, the respondent was 19–28, 29–38, or 39–48 years old. Dummy variables are included to assess whether the respondent is female, has ‘foreign roots’ when living in Germany, and has tertiary education (vs. lower education). Employment is included as a categorical variable, indicating whether the respondent is not employed, unemployed, (self)employed, or other (e.g., students). ‘Not employed’ versus ‘unemployed’ are differentiated by (short-term) labour market orientation, with people who are ‘not employed’ being out of the labour force (e.g., on parental leave, homemakers) and not currently attempting to return to work, and people who are ‘unemployed’ actively seeking work. Risk tolerance indicates whether a respondent is rather willing to take risks, indifferent towards taking risks, or rather unwilling to take risks. To control for the type of the current relationship and housing situation, a categorical variable combines information on the marital status (married vs. not married), the living situation [living together vs. living-apart-together (LAT)], and whether there are children in the household (children vs. no children). This results in five categories, with one category being composed of all LAT respondents (irrespective of marital status and parenthood) due to the low number of observations within this group. Additionally, information on the respondents' previous partnerships is included using the number of previous unions as well as a dummy variable indicating whether the respondent has been married

previously. Furthermore, to capture potential transmission processes, a dummy variable indicating whether the respondent's parents were separated is included.

Two different sets of these covariates were used. First, following balancing literature (cf. Caliendo & Kopeinig, 2008; Hainmueller, 2012), only static covariates and covariates measured before the treatment (i.e., the migration event) were included. In the following sections, this approach is referred to as being based on ‘technical premigration covariates’. Second, the education, employment and family status variables were considered as time-varying. Conceptualizing migration as a process that does not start and end with the time of the actual border crossing (Erlinghagen, 2021c), I consider that certain status changes may have their origins before migration even though the actual change is being measured afterwards. Although the data allow us to confirm that partnerships survived the actual border crossing, the same does not hold for other variables, for example, employment changes. Thus, education, employment and family status were included as time-varying variables, measured also shortly after migration. In the following sections, this approach is referred to as being based on ‘migration-accompanying covariates’.¹

When assessing migrants only, migration-related characteristics were added. First, a dummy variable indicating whether the respondent migrated again in the particular observation period was included. Second, respondents were asked to indicate on a seven-point Likert scale ranging from 1 (not important at all) to 6 (very important) how important the following reasons were for the migration decision: own-career related reasons, career of the partner, other partnership-related reasons, family-related reasons, financial reasons, education-related reasons, lifestyle-related reasons and dissatisfaction with the migration country. The first two mentioned reasons were recoded to indicate whether the answer refers to the male partner's or the female partner's career. Third, respondents were asked to indicate how their household's economic situation changed with migration. The resulting variable indicates whether it got better, remained the same, or got worse. Fourth, a dummy variable indicating whether the respondent already had friends in the destination country was included. This may represent social networks at the destination and be relevant to the isolation argument made in the section entitled Theoretical

¹ Covariate distributions before and after weighting can be found in the Supporting Information Appendix (Tables 5–7 for ‘technical premigration covariates’ and Tables 8–10 for ‘migration-accompanying covariates’). In general, high weights should be adjusted if they account for more than 4%–6% of the sample (cf. Huber et al., 2010). Although this is not the case in the current data, weight trimming at the 99th percentile has been applied as a robustness check (see summary statistics of weights in Tables 11 and 12 and estimation results in Tables 13 and 14 in the Supporting Information Appendix with the latter showing that results are indeed robust).

considerations. Differences in these migration characteristics as well as the general covariates by migrant status are displayed in Table 1.

ESTIMATION RESULTS

Table 2 displays estimation results of the effect of migration on union dissolution using ‘technical premigration covariates’. As described in Section 5, all estimations assessing the effect of migration use Entropy Balancing weights to control for sample selection bias. Not distinguishing the direction of migration Model (1) assesses the general effect of migration. The coefficient of the migration variable is positive and statistically significant; thus migration (compared to no migration) increases the risk of union dissolution. The following models similarly assess the effect of migration by comparing migrants to nonmigrants, however, separately for emigrants and remigrants. The coefficient for emigration, while positive, is not statistically significant (Model 2). In contrast, the coefficient for remigration is statistically significant, implying that remigration (compared to no migration) increases the risk of union dissolution.

Table 2: Complementary log-log regression on union dissolution.

	(1)	(2)	(3)
Sample	Migrants (all) vs. non-migrants	Emigrants vs. non-migrants	Remigrants vs. non-migrants
Migration (vs. no)	0.47** (0.236)		
Emigration (vs. no)		0.44 (0.309)	
Remigration (vs. no)			0.47** (0.221)
Time = 1	0.20 (0.224)	0.33 (0.313)	0.12 (0.220)
Time = 2	-0.14 (0.240)	-0.03 (0.318)	-0.23 (0.248)
Constant	-3.97*** (0.267)	-4.09*** (0.350)	-3.87*** (0.246)
Observations	12,025	8,750	9,771

Note: Entropy Balancing based on “technical pre-migration covariates”. Standard errors in parenthesis. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. EB weights are used.

The following models use Entropy Balancing weights based on ‘migration-accompanying covariates’. As in Table 2, not distinguishing the direction of migration, Model (4) assesses the general effect of migration. Again, the coefficient of the migration variable is positive and statistically significant; thus migration (compared to no migration) increases the risk of union dissolution. In contrast to the results based on ‘technical premigration covariates’ however,

emigration (Model 5) and remigration (Model 6) compared to no migration increase the risk of union dissolution.

To find out whether the effect varies with time, interaction terms of migration and observation time are included. Interestingly, slightly different time patterns between emigration and remigration can be observed. Models 7 through 9 assess emigration compared to no migration. No additional effect of emigration about 1 year or 3 years after migration can be found. Including the interaction term of emigration and time = 2 (about 2 years after migration), however, the coefficient is positive and statistically significant while the main effect ceases to be statistically significant (Model 8). Thus, the risk of union dissolution is higher for emigrants about 2 years after migration compared to nonmigrants at the same time. In contrast, assessing remigration compared to no migration (models 10 through 12) no time effects are found. Although they trend in the same direction as in the emigration models, none of the interaction terms are statistically significant (Table 3).

To investigate mechanisms that may explain the effect of increased union dissolution risks among migrants as well as the difference by migration direction, the following section assesses migrants' risk of union dissolution in more detail. The models include all covariates as in Table 1, but due to space restrictions only those relevant to the outlined theoretical arguments are presented (Table 4). Three different models are estimated, using the same covariates but differing in the underlying sample. Model 13 is based on all migrants, and Models 14 and 15 cover only emigrants and remigrants, respectively. In addition to the model estimates, the last column of Table 4 provides p-values of testing for equal coefficients between the emigrants' and the remigrants' model.

Assessing all migrants, the coefficient of emigration is negative and statistically significant, implying a higher risk of union dissolution for remigrants compared to emigrants. In contrast, no statistically significant effect of the multiple migration measure could be found throughout the models.

Indicating that the male partner's career was important for the migration decision decreased the risk of union dissolution in all three models, but the same indicator for the female partner's career was negative and statistically significant only in the remigrants model. Thus, considering significance levels, indicating that the female partner's career was important for the migration decision decreased the risk of union dissolution only among remigrants. Interestingly, testing for equal coefficients regarding the male partner's career suggests a stronger stabilizing effect among emigrants compared to remigrants ($p = 0.03$).

Table 3: Complementary log-log regression on union dissolution.

Sample	(4) Migrants (all) vs. non- migrants	(5) Emigrants vs. non-migrants	(6) Remigrants vs. non- migrants	(7) Emigrants vs. non-migrants	(8) Emigrants vs. non-migrants	(9) Emigrants vs. non-migrants	(10) Remigrants vs. non-migrants	(11) Remigrants vs. non-migrants	(12) Remigrants vs. non-migrants
Migration (vs. no)	0.89*** (0.284)								
Emigration (vs. no)		0.78** (0.394)		1.10*** (0.355)	0.37 (0.482)	0.91* (0.505)			
Remigration (vs. no)			0.94*** (0.252)				0.97*** (0.259)	0.75** (0.328)	1.07*** (0.303)
Emigration * Time = 1				-0.73 (0.761)					
Emigration * Time = 2					1.32** (0.607)				
Emigration * Time = 3						-0.55 (0.763)			
Remigration * Time = 1							-0.07 (0.513)		
Remigration * Time = 2								0.56 (0.452)	
Remigration * Time = 3									-0.70 (0.530)
Time = 2	0.10 (0.211)	0.13 (0.333)	0.06 (0.209)	-0.36 (0.701)	-0.83 (0.612)	0.13 (0.334)	0.01 (0.472)	-0.35 (0.424)	0.06 (0.208)
Time = 3	-0.08 (0.265)	0.06 (0.387)	-0.21 (0.261)	-0.43 (0.782)	0.05 (0.392)	0.42 (0.783)	-0.26 (0.523)	-0.21 (0.262)	0.26 (0.484)
Constant	-4.36*** -0.346	-4.37*** -0.51	-4.32*** -0.288	-4.11*** (0.642)	-4.11*** (0.522)	-4.47*** (0.607)	-4.30*** (0.419)	-4.19*** (0.326)	-4.42*** (0.334)
<i>N</i>	12,025	8,750	9,771	8,750	8,750	8,750	9,771	9,771	9,771

Note: Entropy Balancing based on “migration-accompanying covariates.” Standard errors in parenthesis. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. EB weights are used.

Table 4: Complementary log-log regression on union dissolution.

	(13)	(14)	(15)	Test on equal coefficients Model (14) vs. (15) p-values
	Migrants (all)	Emigrants	Remigrants	
Emigration (vs. remigration)	-0.39* (0.209)			
Multiple migrations	-0.90 (0.569)	-0.24 (0.722)	-1.45 (1.072)	0.388
Migration reasons (importance)				
Job-related: female partner	-0.05 (0.051)	0.02 (0.085)	-0.15** (0.068)	0.132
Job-related: male partner	-0.21*** (0.050)	-0.35*** (0.089)	-0.10* (0.062)	0.027
Other partnership-related	0.05 (0.056)	0.06 (0.099)	0.08 (0.072)	0.884
Family-related	-0.10* (0.056)	-0.09 (0.106)	-0.11 (0.071)	0.851
Financial	0.09 (0.056)	0.16 (0.100)	0.09 (0.073)	0.598
Education-related	0.00 (0.054)	0.07 (0.090)	-0.06 (0.076)	0.282
Lifestyle-related	-0.01 (0.054)	-0.10 (0.092)	0.03 (0.071)	0.282
Dissatisfaction with Germany (emigrants) / migration country (remigrants)	0.14** (0.056)	0.08 (0.101)	0.17** (0.076)	0.526
Economic change				
Better after migration	-0.01 (0.230)	-0.42 (0.418)	-0.02 (0.292)	0.462
Worse after migration	0.15 (0.234)	0.12 (0.454)	0.18 (0.281)	0.922
Friends at the destination	0.21 (0.340)	-0.06 (0.389)	0.83 (1.055)	0.446
Family status (vs. LAT)				
LT, not married, no children	-0.41** (0.206)	-0.32 (0.344)	-0.54** (0.271)	0.609
LT, married, no children	-1.22*** (0.291)	-0.95* (0.491)	-1.49*** (0.371)	0.391
LT, not married, children	-1.27*** (0.429)	-0.76 (0.704)	-1.65*** (0.569)	0.319
LT, married, children	-1.52*** (0.286)	-1.07** (0.534)	-1.78*** (0.349)	0.267
Constant	-3.38*** (0.741)	-3.99*** (1.222)	-3.77*** (1.369)	
<i>N</i>	5,453	2,151	3,228	

Note: Only subsets of the data are used (see header). Further “migration-accompanying covariates” and missing dummies included but not displayed. Standard errors in parenthesis. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

In contrast, the effect of the female partner's career having been important for the migration decision might be more similar for emigrants and remigrants than suggested by the respective coefficients ($p = 0.13$). Family-related reasons have a negative coefficient in all three models, however, it is statistically significant only in the all-migrants model. Having indicated that dissatisfaction with the previous country (Germany for emigrants and the emigration country for remigrants) was an important driver for the migration decision increases the risk of union dissolution in the all-migrants as well as the remigrant's model. The remaining reasons (other partnership-related, financial, education-related and lifestyle-related) showed no statistically significant effects.

The measure of the household's economic situation as well as the measure of friends at the destination was not found to affect the risk of union dissolution. Furthermore, having argued that reunification may affect the effect of migration on union dissolution, it appears plausible to look at family arrangements. The combined family status indicator shows that there is a lower risk of union dissolution among respondents living together, independent of the two other family status dimensions (except for those living together but not married amongst emigrants: coefficients are also negative but not statistically significant).

CONCLUSION AND DISCUSSION

Migration implies far-reaching changes in the social context of migrants and their families and scholars claimed that migration should more often be conceived in terms of the family (Clerge et al., 2017; Cooke, 2008). The link between migration and partnership stability is especially interesting to look at, given the demographic implications and its relation to subjective well-being being (Auditor & Erlinghagen, 2021; Soons et al., 2009; Switek & Easterlin, 2018). There has been research on the relationship between migration and different family events or processes since the early 1990s (Vidal & Huinink, 2019), including literature comparing partnership stability of migrants to that of natives at the destination and/or migrants of other origins (e.g. Andersson et al., 2015; Furtado et al., 2013; Gonzalez-Ferrer et al., 2016; Hannemann & Kulu, 2015; Hannemann et al., 2020). This stream of literature taught us that the origin context matters in determining partnership stability, which can be attributed, for example, to cultural differences (Furtado et al., 2013). However, it did not teach us about the effect of migration on partnership stability (i.e., comparing migrants to nonmigrants in the location of origin). In fact, literature on this effect was rather sparse. This held especially true for international migration from industrialized countries, given that many studies have focussed on internal migration or international migration from the Global South. Thus, combining two

German datasets in the present study facilitated closing the outlined research gaps by assessing international migrants from an industrialized welfare state and allowed broadening our understanding of the relationship between migration and partnership stability.

In this context, the current study asked how international migration in general and emigration and remigration in particular affect partnership stability. Migration generally increased the risk of union dissolution compared to no migration (Tables 2 and 3). This is in line with findings on male migration in the Latin American context (Frank & Wildsmith, 2005; Lindstrom et al., 2021) and long-distance internal moves in the United Kingdom (Shapira et al., 2019) but not Austria, where only two or more long-distance moves increased the risk of union dissolution (Boyle et al., 2008). Thus, international migration appears to decrease partnership stability irrespective of the migration context, while internal migration appears potentially less harmful—with its effect depending on the context. At the same time, assessing emigration and remigration separately, it was found that for emigration the effect depended on whether ‘migration-accompanying covariates’ were used for Entropy Balancing, but for remigration the effect was statistically significant across the models. Consequently, stressors related to migration appeared more crucial for the effect of emigration on partnership stability than for the effect of remigration on partnership stability. Comparing emigrants and remigrants directly, the risk of union dissolution was higher for remigrants (Table 4) (for similar results see Baykara-Krumme et al., 2021). The latter finding underscores the fact that emigration and remigration are at least partly different processes, based on different migration reasons, decisions, and trajectories, and leading to different outcomes. It also corresponds to the argumentation that stressors may be additive (Wolfinger, 2000) and the ‘isolation hypothesis’ (Shapira et al., 2019) suggesting that in situations of social isolation partnerships may become more important, which applies more to emigrants than to remigrants.

Having argued that the stress associated with migration may decrease over time, I investigated whether the effect of migration changed with time (Table 3). Interestingly, although time-varying patterns were found assessing emigrants (the risk was especially high about 2 years after migration compared to nonmigrants at the same point of time), no significant time-varying effects were found when comparing remigrants to nonmigrants. Importantly, however, for both migration directions, the effect of migration on partnership stability does not vanish within the observation period of about 3 years after migration.

The last part of the analysis assessed migrants only, aiming to investigate the mechanisms behind higher dissolution risks among and differences between emigrants and remigrants.

Challenging the argument of stressors being additive, having migrated again within the observation period did not further affect the risk of union dissolution. It should, however, be noted that there was a short observation period and thus even shorter time for union dissolution after a subsequent migration. Having argued that migration reasons may differ between emigrants and remigrants and may affect partnership stability, the importance of certain migration reasons was investigated. The men's career being an important migration reason decreased the risk of union dissolution, and it did so more in the emigrants compared to the remigrants sample. At first glance, this might seem to contrast with the previous argumentation of tied migration destabilizing partnerships, but it might also be thought of in terms of gender norms and roles, indicating that couples with rather traditional gender views have a higher likelihood of migrating to improve the men's careers and that these couples are also less likely to separate. Interestingly, and challenging this argument, remigrant couples whose migration was based on the female partner's career had also a lower risk of union dissolution. In this context, research suggests that especially remigration (Amcoff & Niedomysl, 2015) and migration at later life stages (Stockdale, 2017) is often female dominated. Keeping in mind that remigration might have been planned before emigration, it appears plausible that the career of one partner was important for emigration and the career of the other partner was important for remigration. Couples having agreed on so-called 'package deals' (Erlinghagen, 2021a) might possess higher partnership stability, given that both partners knew from the beginning that neither of them will have to sacrifice their own wants or needs for an indefinite period of time. Overall, migrating for either partner's career may be seen as a sign of joint planning and agreements that work between the two partners.

Having stated that dissatisfaction with the previous country was important for the migration decision increased the risk of union dissolution. It could be argued that this dissatisfaction was not primarily due to specificities of the previous country, but at least partly due to a rather general dissatisfaction about life before migration. Realizing that migration did not enhance the situation as much as expected may put pressure on partnerships, resulting in an increased risk of union dissolution. Regarding the household's economic change, no statistically significant effect on the risk of union dissolution was found. This hints that it is not the overall economic situation affecting partnership stability, but that differences or changes between the two partners might be crucial. The measure for social networks at the destination was not statistically significant either. Looking at the theoretical arguments made earlier, it could be argued that it is rather social networks in the location of origin that affect the risk of union dissolution, for example, common friends hindering separation or providing support. This might be investigated

in future studies, making use of, for example, the frequency or mode of contact to people living in the location of origin. The finding that migrants living together with their partners have a lower risk of union dissolution, combined with Baykara-Krumme et al.'s (2021) finding that couples who did not migrate together at the same time have a higher risk of union dissolution, hints that reunification might increase partnership stability compared to a continuing transnational partnership. In sum, although this analysis allows some inferences about the potential mechanisms behind the effect of migration on partnership stability, it is of an explorative nature and does not allow for clear identification of the exact drivers of the effect.

Limitations to this study need to be mentioned. No information on partnership quality before the observation period or partnership duration could be used. Problems in partnerships might have existed before migrating with migration representing a possible solution to these problems. At the same time, migrants might be positively selected in terms of partnership quality (and thus stability) because it may make sense to migrate together only when not questioning the partnership and problems within the partnership might keep couples from migrating. If this holds true, the presented results would even underestimate the 'true' effect of migration. In this sense, it appears interesting for future research to look at couple dynamics before migration as well. Furthermore, when assessing the effect of remigration, it was not possible to control for whether the respondent was already with the same partner when emigrating. Thus, whether remigration was already the couple's second migration could not be clarified. This, however, is an important aspect to look at for future research and may become possible with a potentially increasing number of observed migrations within the GERPS observation period with the release of GERPS wave 5. Similarly, additional GERPS waves can be used to test the previous finding that the effect of (internal) migration disappeared after 5 years (Shapira et al., 2019) and investigate the effect of migration on partnership stability in the medium term.

Besides these limitations, the current paper provides important findings regarding the effect of international migration on partnership stability in the context of voluntary migration from (and to) an industrialized welfare state. International migration increases the risk of union dissolution compared to no migration and the risk of union dissolution is higher for remigrants compared to emigrants. First drivers behind the partnership stability among emigrants and remigrants could be identified. Keeping these findings in mind, scholars, as well as policy makers, should look not only at the overall effect of migration but also consider the direction of migration as well as further migration characteristics.

REFERENCES

- Amato, P. R. (2000). The Consequences of Divorce for Adults and Children. *Journal of Marriage and Family*, 62(4), 1269–1287. <https://doi.org/10.1111/j.1741-3737.2000.01269.x>
- Amato, P. R. (2010). Research on Divorce: Continuing Trends and New Developments. *Journal of Marriage and Family*, 72(3), 650–666. <https://doi.org/10.1111/j.1741-3737.2010.00723.x>
- Amato, P. R. (2014). *The consequences of divorce for adults and children: An update*. <https://hrcaj.srce.hr/file/180281>
- Amcoff, J., & Niedomysl, T. (2015). Is the Tied Returnee Male or Female? The Trailing Spouse Thesis Reconsidered. *Population, Space and Place*, 21(8), 872–881. <https://doi.org/10.1002/psp.1969>
- Anderson, L. R., Bukodi, E., & Monden, C. W. S. (2021). Double Trouble: Does Job Loss Lead to Union Dissolution and Vice Versa? *European Sociological Review*, 37(3), 379–398. <https://doi.org/10.1093/esr/jcaa060>
- Andersson, G., Obucina, O., & Scott, K. (2015). Marriage and divorce of immigrants and descendants of immigrants in Sweden. *Demographic Research*, 33, Article 2, 31–64. <https://doi.org/10.4054/demres.2015.33.2>
- Auditor, J. G., & Erlinghagen, M. (2021). Happy migrants? Consequences of migration for different dimensions of life satisfaction. In M. Erlinghagen, A. Ette, N. F. Schneider, N. Witte, & Erlinghagen (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course*. Springer.
- Baykara-Krumme, H., Erlinghagen, M., & Mansfeld, L. (2021). Disruption of Family Lives in the Course of Migration: 'Tied Migrants' and Partnership Break-up Patterns among German (R)emigrants. In M. Erlinghagen, A. Ette, N. F. Schneider, N. Witte, & Erlinghagen (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course* (pp. 177–194). Springer. https://doi.org/10.1007/978-3-030-67498-4_10
- Beaujouan, É. (2016). Second Unions Now More Stable than First? A Comparison of Separation Risks by Union Order in France. *European Journal of Population / Revue Européenne De Démographie*, 32(2), 293–321. <https://doi.org/10.1007/s10680-016-9376-2>
- Böheim, R., & Ermisch, J. (2001). Partnership Dissolution in the UK – the Role of Economic Circumstances. *Oxford Bulletin of Economics and Statistics*, 63(2), 197–208.

- Bordone, V. (2009). Contact and proximity of older people to their adult children: A comparison between Italy and Sweden. *Population, Space and Place*, 15(4), 359–380. <https://doi.org/10.1002/psp.559>
- Borjas, G. J., Kauppinen, I., & Poutvaara, P. (2018). Self-selection of Emigrants: Theory and Evidence on Stochastic Dominance in Observable and Unobservable Characteristics. *The Economic Journal*, 129(617), 143–171. <https://doi.org/10.1111/ecoj.12585>
- Boyle, P. J., Feng, Z., & Gayle, V. (2009). A New Look at Family Migration and Women’s Employment Status. *Journal of Marriage and Family*, 71(2), 417–431.
- Boyle, P. J., Kulu, H., Cooke, T., Gayle, V., & Mulder, C. H. (2008). Moving and union dissolution. *Demography*, 45(1), Article 1, 209–222.
- Brown, R. J. (2008). Dominant stressors on expatriate couples during international assignments. *The International Journal of Human Resource Management*, 19(6), 1018–1034. <https://doi.org/10.1080/09585190802051303>
- Brüderl, J., Drobníč, S., Hank, K., Neyer, F. J., Walper, S., Alt, P., Borschel, E., Bozoyan, C., Garrett, M., Geissler, S., Gonzalez Avilés, T., Gröpler, N., Hajek, K., Herzig, M., Huyer-May, B., Lenke, R., Lorenz, R., Lutz, K., Minkus, L., . . . Wetzels, M. (2021). *The German Family Panel (pairfam)*. Cologne. GESIS Data Archive. <https://doi.org/10.4232/PAIRFAM.5678.12.0.0>
- Brüderl, J., Schmiedeberg, C., Castiglioni, L., Arránz Becker, O., Buhr, P., Fuß, D., Ludwig, V., Schröder, J., & Schumann, N. (2021). *The German Family Panel: Study Design and Cumulated Field Report (Waves 1 to 12)*. Release 12.0 (01 Technical Paper). https://search.gesis.org/research_data/ZA5678?doi=10.4232/pairfam.5678.12.0.0
- Caliendo, M., & Kopeinig, S. (2008). Some practical guidelines for the implementation of propensity score matching. *Journal of Economic Surveys*(22), Article 1, 31–72.
- Castro Torres, A. F., & Gutierrez-Vazquez, E. Y. (2022). Gendered and Stratified Family Formation Trajectories in the Context of Latin American Migration, 1950 to 2000. *International Migration Review*, 019791832110677. <https://doi.org/10.1177/01979183211067768>
- Clerge, O., Sanchez-Soto, G., Song, J., & Luke, N. (2017). ‘I Would Really Like to Go Where You Go’: Rethinking Migration Decision-Making Among Educated Tied Movers. *Population, Space and Place*, 23(2), e1990. <https://doi.org/10.1002/psp.1990>

- Conger, R. D., Rueter, M. A., & Elder, G. H. (1999). Couple resilience to economic pressure. *Journal of Personality and Social Psychology*, 76(1), 54–71.
<https://doi.org/10.1037/0022-3514.76.1.54>
- Constant, A. F. (2021). Return, Circular, and Onward Migration Decisions in a Knowledge Society. In *The Economic Geography of Cross-Border Migration* (pp. 133–156). Springer, Cham. https://doi.org/10.1007/978-3-030-48291-6_7
- Cooke, T. J. (2003). Family Migration and the Relative Earnings of Husbands and Wives. *Annals of the Association of American Geographers*, 93(2), Article 2, 338–349.
- Cooke, T. J. (2008). Migration in a family way. *Population, Space and Place*, 14(4), 255–265.
<https://doi.org/10.1002/psp.500>
- Coppola, L., & Di Cesare, M. (2008). How fertility and union stability interact in shaping new family patterns in Italy and Spain. *Demographic Research*, 18, Article 4, 117–144.
- Coulter, R., Ham, M., & Feijten, P. (2012). Partner (dis)agreement on moving desires and the subsequent moving behaviour of couples. *Population, Space and Place*, 18(1), 16–30.
<https://doi.org/10.1002/psp.700>
- Davis, J., & Jennings, E. A. (2018). Spatial and Temporal Dimensions of Migration on Union Dissolution. *International Migration*, 56(6), 136–152.
<https://doi.org/10.1111/imig.12513>
- Della Puppa, F. (2018). Ambivalences of the emotional logics of migration and family reunification: Emotions, experiences and aspirations of Bangladeshi husbands and wives in Italy. *Identities*, 25(3), 358–375.
<https://doi.org/10.1080/1070289X.2016.1238381>
- Diekmann, A., & Schmidheiny, K. (2008). *The intergenerational transmission of divorce: a fifteen-country study with the fertility and family survey* (ETH Zurich Sociology Working Paper No. 4). ETH Zurich.
- Dimitrova, R., Chasiotis, A., & van de Vijver, F. (2016). Adjustment Outcomes of Immigrant Children and Youth in Europe. *European Psychologist*, 21(2), 150–162.
<https://doi.org/10.1027/1016-9040/a000246>
- Eibich, P., & Liu, C. (2021). For better or for worse mental health? The role of family networks in exogamous unions. *Population, Space and Place*, 27(6).
<https://doi.org/10.1002/psp.2437>
- Eliasson, K., Nakosteen, R., Westerlund, O., & Zimmer, M. (2014). All in the family: Self-selection and migration by couples. *Papers in Regional Sciences*, 93(1), 101–124.
<https://doi.org/10.1111/j.1435-5957.2012.00473.x>

- Erlinghagen, M. (2021a). Love in motion: Migration patterns of internationally mobile couples. *Population, Space and Place*, 27(2), e2382. <https://doi.org/10.1002/psp.2382>
- Erlinghagen, M. (2021b). Migration Motives, Timing, and Outcomes of Internationally Mobile Couples. In M. Erlinghagen, A. Ette, N. F. Schneider, N. Witte, & Erlinghagen (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course* (pp. 157–171). Springer.
- Erlinghagen, M. (2021c). The transnational life course: an integrated and unified theoretical concept for migration research. *Ethnic and Racial Studies*, 1–28.
- Erlinghagen, M., Schneider, N., & Ette, A. (2021). *German Emigration and Remigration Panel Study (GERPS) 2018*. <https://doi.org/10.4232/1.13750>
- Ette, A., Décieux, J. P. P., Erlinghagen, M., Genoni, A., Auditor, J. G., Knirsch, F., Kühne, S., Mörchen, L., Sand, M., Schneider, N. F., & Witte, N. (2020). *German Emigration and Remigration Panel Study (GERPS): Methodology and Data Manual of the Baseline Survey (Wave 1)* (BiB Daten- und Methodenberichte No. 1). Bundesinstitut für Bevölkerungsforschung. <https://doi.org/10.13140/RG.2.2.25013.42720>
- Ette, A., & Erlinghagen, M. (2021). Structures of German Emigration and Remigration: Historical Developments and Demographic Patterns. In M. Erlinghagen, A. Ette, N. F. Schneider, N. Witte, & Erlinghagen (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course* (pp. 41–62). Springer.
- Feijten, P., & van Ham, M. (2013). Die Auswirkungen von Scheidung und Trennung auf die räumliche Mobilität in Großbritannien, 38(2), 433–464. <https://doi.org/10.4232/10.CPOS-2013-10DE>
- Flowerdew, R., & Al-Hamad, A. (2004). The relationship between marriage, divorce and migration in a British dataset. *Journal of Ethnic and Migration Studies*(30), 339–351.
- Frank, R., & Wildsmith, E. (2005). The Grass Widows of Mexico: Migration and Union Dissolution in a Binational Context. *Social Forces*, 83(3), 919–948.
- Furtado, D., Marcén, M., & Sevilla, A. (2013). Does culture affect divorce? Evidence from European immigrants in the United States. *Demography*, 50(3), 1013–1038. <https://doi.org/10.1007/s13524-012-0180-2>
- Geist, C., & McManus, P. A. (2008). Geographical mobility over the life course: motivations and implications. *Population, Space and Place*, 14(4), 283–303. <https://doi.org/10.1002/psp.508>

- Gonzalez-Ferrer, A., Hannemann, T., & Castro-Martín, T. (2016). Partnership formation and dissolution among immigrants in the Spanish context. *Demographic Research*, 35, Article 1, 1–30. <https://doi.org/10.4054/DemRes.2016.35.1>
- Graaf, P. M. de, & Kalmijn, M [M.] (2006). Change and Stability in the Social Determinants of Divorce: A Comparison of Marriage Cohorts in the Netherlands. *European Sociological Review*, 22(5), 561–572. <https://doi.org/10.1093/esr/jcl010>
- Hainmueller, J. (2012). Entropy Balancing for Causal Effects: A Multivariate Reweighting Method to Produce Balanced Samples in Observational Studies. *Political Analysis*, 20(1), 25–46. <https://doi.org/10.1093/pan/mpr025>
- Hainmueller, J., & Xu, Y. (2013). ebalance: A Stata Package for Entropy Balancing. *Journal of Statistical Software*, 54(7), 1–18.
- Hank, K. (2007). Proximity and Contacts Between Older Parents and Their Children: A European Comparison. *Journal of Marriage and Family*, 69(1), 157–173. <https://doi.org/10.1111/j.1741-3737.2006.00351.x>
- Hannemann, T., & Kulu, H. (2015). Union formation and dissolution among immigrants and their descendants in the United Kingdom. *Demographic Research*, 33, Article 10, 273–312. <https://doi.org/10.4054/demres.2015.33.10>
- Hannemann, T., Kulu, H., González-Ferrer, A., Pailhé, A., Rahnu, L., & Puur, A. (2020). Partnership dynamics among immigrants and their descendants in four European countries. *Population, Space and Place*, 26(5), e2315. <https://doi.org/10.1002/psp.2315>
- Ho, D. E., Imai, K., King, G., & Stuart, E. A. (2007). Matching as Nonparametric Preprocessing for Reducing Model Dependence in Parametric Causal Inference. *Political Analysis*, 15(3), 199–236. <https://doi.org/10.1093/pan/mdl013>
- Huber, M., Lechner, M., & Wunsch, C. (2010). How to Control for Many Covariates? Reliable Estimators Based on the Propensity Score. *IZA Discussion Papers*, 5268. <https://doi.org/10.2139/ssrn.1696892>
- Huinink, J., Brüderl, J., Nauck, B., Walper, S., Castiglioni, L., & Feldhaus, M. (2011). Panel Analysis of Intimate Relationships and Family Dynamics (pairfam): Conceptual framework and design. *Journal of Family Research*, 23(1), 77–101. <https://doi.org/10.20377/jfr-235>
- Jenkins, S. P. (1995). Easy Estimation Methods for Discrete-Time Duration Models. *Oxford Bulletin of Economics and Statistics*, 57(1), 129–138.

- King, G., & Nielsen, R. (2019). Why Propensity Scores Should Not Be Used for Matching. *Political Analysis*, 75, 1–20. <https://doi.org/10.1017/pan.2019.11>
- King, R., & Skeldon, R. (2010). ‘Mind the Gap!’ Integrating Approaches to Internal and International Migration. *Journal of Ethnic and Migration Studies*, 36(10), 1619–1646. <https://doi.org/10.1080/1369183X.2010.489380>
- Kley, S. (2011). Explaining the Stages of Migration within a Life-course Framework. *European Sociological Review*, 27(4), 469–486. <https://doi.org/10.1093/esr/jcq020>
- Krieger, M. (2020). Tied and Troubled: Revisiting Tied Migration and Subsequent Employment. *Journal of Marriage and Family*, 82(3), 934–952. <https://doi.org/10.1111/jomf.12620>
- Kulu, H., Mikolaj, J., Thomas, M. J., Vidal, S., Schnor, C., Willaert, D., Visser, F. H. L., & Mulder, C. H. (2021). Separation and Elevated Residential Mobility: A Cross-Country Comparison. *European Journal of Population / Revue Européenne De Démographie*, 37(1), 121–150. <https://doi.org/10.1007/s10680-020-09561-1>
- Landale, N. S., & Ogena, N. B. (1995). Migration and Union Dissolution among Puerto Rican Women. *The International Migration Review*, 29(3), 671–692.
- Liefbroer, A. C., & Dourleijn, E. (2006). Unmarried cohabitation and union stability: Testing the role of diffusion using data from 16 European countries. *Demography*(43), Article 2, 203–221.
- Lindstrom, D. P., Hernandez-Jabalera, A., & Giorguli Saucedo, S. (2021). Migration, Family Formation and Fertility in the Americas. *International Migration Review*, 55(1), 280–314. <https://doi.org/10.1177/0197918320923353>
- Lowenstein, L. F. (2005). Causes and Associated Features of Divorce as Seen by Recent Research. *Journal of Divorce & Remarriage*, 42(3-4), 153–171. https://doi.org/10.1300/J087v42n03_09
- Lübke, C. (2015). How Migration Affects the Timing of Childbearing: The Transition to a First Birth Among Polish Women in Britain. *European Journal of Population*, 31(1), 1–20. <https://doi.org/10.1007/s10680-014-9326-9>
- Lübke, C., Décieux, J. P., Erlinghagen, M., & Wagner, G. C. (2021). Comparing the Risk Attitudes of Internationally Mobile and Non-Mobile Germans. In M. Erlinghagen, A. Ette, N. F. Schneider, N. Witte, & Erlinghagen (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course* (pp. 83–100). Springer.

- Lyngstad, T. H. (2004). The impact of parent's and spouses' education on divorce rates in Norway. *Demographic Research*, *10*(5), 121–142.
<https://doi.org/10.4054/DemRes.2004.10.5>
- Mak, J., Roberts, B., & Zimmerman, C. (2021). Coping with Migration-Related Stressors: A Systematic Review of the Literature. *Journal of Immigrant and Minority Health*, *23*(2), 389–404. <https://doi.org/10.1007/s10903-020-00996-6>
- Mansfeld, L. (2021). Out of Sight, out of Mind? Frequency of Emigrants' Contact with Friends in Germany and its Impact on Subjective Well-Being. In M. Erlinghagen, A. Ette, N. F. Schneider, N. Witte, & Erlinghagen (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course* (pp. 229–246). Springer. https://doi.org/10.1007/978-3-030-67498-4_13
- McNulty, Y. (2012). 'Being dumped in to sink or swim': an empirical study of organizational support for the trailing spouse. *Human Resource Development International*, *15*(4), 417–434. <https://doi.org/10.1080/13678868.2012.721985>
- McNulty, Y. (2015). Till stress do us part: the causes and consequences of expatriate divorce. *Journal of Global Mobility: The Home of Expatriate Management Research*, *3*(2), 106–136. <https://doi.org/10.1108/JGM-06-2014-0023>
- Mikolai, J., & Kulu, H. (2018). Divorce, Separation, and Housing Changes: A Multiprocess Analysis of Longitudinal Data from England and Wales. *Demography*, *55*(1), 83–106.
<https://doi.org/10.1007/s13524-017-0640-9>
- Milewski, N., & Baykara-Krumme, H. (2021). Fertility Behavior of Turkish Migrant Men in Europe Compared to Stayers at Origin. *Journal of International Migration and Integration*, 1–22. <https://doi.org/10.1007/s12134-021-00879-1>
- Milewski, N., & Kulu, H. (2014). Mixed Marriages in Germany: A High Risk of Divorce for Immigrant-Native Couples. *European Journal of Population*, *30*(1), 89–113.
<https://doi.org/10.1007/s10680-013-9298-1>
- Mulder, C. H., & van der Meer, M. J. (2009). Geographical distances and support from family members. *Population, Space and Place*, *15*(4), 381–399.
<https://doi.org/10.1002/psp.557>
- Muszynska, M., & Kulu, H. (2007). Migration and union dissolution in a changing socio-economic context. *Demographic Research*, *17*, Article 27, 803–820.
<https://doi.org/10.4054/DemRes.2007.17.27>

- Pailhé, A., & Solaz, A. (2008). Professional outcomes of internal migration by couples: Evidence from France. *Population, Space and Place*, 14(4), 347–363.
<https://doi.org/10.1002/psp.504>
- Percheski, C., & Meyer, J. M. (2018). Health and Union Dissolution among Parenting Couples: Differences by Gender and Marital Status. *Journal of Health and Social Behavior*, 59(4), 569–584.
- Pison, G. (2019). The number and proportion of immigrants in the population: International comparisons. *Population Societies*, 563(2), 1–4.
<https://doi.org/10.3917/popsoc.563.0001>
- Poortman, A.-R. (2005a). How Work Affects Divorce. *Journal of Family Issues*, 26(2), 168–195. <https://doi.org/10.1177/0192513X04270228>
- Poortman, A.-R. (2005b). Women’s Work and Divorce: A Matter of Anticipation? A Research Note. *European Sociological Review*, 21(3), 301–309.
<https://doi.org/10.1093/esr/jci019>
- Poortman, A.-R., & Kalmijn, M [Matthijs] (2002). Women's Labour Market Position and Divorce in the Netherlands: Evaluating Economic Interpretations of the Work Effect. *European Journal of Population*(18), 175–202.
- Shapira, M., Gayle, V., & Graham, E. (2019). Moving on and moving out: The implications of socio-spatial mobility for union stability. *Population, Space and Place*, 25(2), e2180. <https://doi.org/10.1002/psp.2180>
- Soons, J. P. M., Liefbroer, A. C., & Kalmijn, M [Matthijs] (2009). The Long-Term Consequences of Relationship Formation for Subjective Well-Being. *Journal of Marriage and Family*, 71(5), 1254–1270. <https://doi.org/10.1111/j.1741-3737.2009.00667.x>
- South, S. J. (2001). The Geographic Context of Divorce: Do Neighborhoods Matter? *Journal of Marriage and Family*, 63(3), 755–766.
- Stockdale, A. (2017). From ‘Trailing Wives’ to the Emergence of a ‘Trailing Husbands’ Phenomenon: Retirement Migration to Rural Areas. *Population, Space and Place*, 23(3), e2022. <https://doi.org/10.1002/psp.2022>
- Svarer, M., & Verner, M. (2008). Do children stabilize Danish marriages? *Journal of Population Economics*, 21(2), 395–417.
- Switek, M., & Easterlin, R. A. (2018). Life Transitions and Life Satisfaction During Young Adulthood. *Journal of Happiness Studies*, 19(1), 297–314.
<https://doi.org/10.1007/s10902-016-9817-y>

- Thomas, M. J. (2019). Employment, education, and family: Revealing the motives behind internal migration in Great Britain. *Population, Space and Place*, 25(4), e2233. <https://doi.org/10.1002/psp.2233>
- Twenge, J. M., Campbell, W. K., & Foster, C. A. (2003). Parenthood and Marital Satisfaction: A Meta-Analytic Review. *Journal of Marriage and Family*, 65(3), 574–583. <https://doi.org/10.1111/j.1741-3737.2003.00574.x>
- Vidal, S., & Huinink, J. (2019). Introduction to the special collection on spatial mobility, family dynamics, and gender relations. *Demographic Research*, 41(21), 593–616. <https://doi.org/10.4054/DemRes.2019.41.21>
- Waite, L. J., & Lillard, L. A. (1991). Children and Marital Disruption. *American Journal of Sociology*, 96(4), 930–953.
- Ward, C., Bochner, S., & Furnham, A. (2008). *The psychology of culture shock* (2. ed., reprinted.). Routledge.
- Wilkinson, A., & Singh, G. (2010). Managing stress in the expatriate family: a case study of the state department of the United States of America. *Public Personell Management*, 39(2), 169–181.
- Witte, N., & Guedes Auditor, J. (2021). Affluent Lives Beyond the Border? Individual Wage Change Through Migration. In M. Erlinghagen, A. Ette, N. F. Schneider, N. Witte, & Erlinghagen (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course*. Springer.
- Wolfinger, N. H. (2000). Beyond the Intergenerational Transmission of Divorce. *Journal of Family Issues*, 21(8), 1061–1086. <https://doi.org/10.1177/019251300021008006>
- Wu, Z. (1995). The Stability of Cohabitation Relationships: The Role of Children. *Journal of Marriage and the Family*, 57(1), 231–236. <https://doi.org/10.2307/353831>

Table 7: Entropy Balancing for treatment = remigration (“technical pre-migration covariates”)

Group	Mean		Variance		Skewness	
	Treatment	Control	Treatment	Control	Treatment	Control
Time (referring to EB)						
Age Group (ref.: 19-28)						
29-38	0.533	0.392	0.249	0.238	-0.134	0.443
39-48	0.341	0.487	0.225	0.250	0.669	0.053
Female	0.490	0.573	0.250	0.245	0.038	-0.294
Foreign roots	0.266	0.118	0.195	0.104	1.058	2.369
Tertiary Education	0.827	0.396	0.143	0.239	-1.725	0.426
Employment status (ref.: not employed)						
Unemployed	0.017	0.019	0.017	0.019	7.381	7.059
(Self)Employed	0.752	0.856	0.187	0.124	-1.166	-2.023
Other	0.102	0.048	0.092	0.046	2.630	4.220
Risk-taking (ref: neutral attitude)						
Rather unwilling to assume risks	0.238	0.428	0.181	0.245	1.231	0.289
Rather willing to assume risks	0.638	0.301	0.231	0.211	-0.574	0.867
Family status (ref: LAT)						
LT, not married, no children	0.219	0.167	0.171	0.139	1.362	1.785
LT, married, no children	0.195	0.097	0.157	0.087	1.544	2.730
LT, not married, children	0.064	0.118	0.060	0.104	3.559	2.369
LT, married, children	0.451	0.616	0.248	0.237	0.198	-0.476
Number previous partnerships	2.297	1.516	2.085	1.951	2.926	1.069
Previously married	0.029	0.079	0.028	0.073	5.613	3.111
Parental separation	0.137	0.210	0.118	0.166	2.118	1.423
Control	After	Before	After	Before	After	Before

Note: Missing categories included but not displayed.

Table 8: Entropy Balancing for treatment = international migration (“migration-accompanying covariates”)

Group	Mean		Variance		Skewness	
	Treatment	Control	Treatment	Control	Treatment	Control
Time (referring to EB)						
Age Group (ref: 19-28)						
29-38	0.557	0.392	0.247	0.238	-0.228	0.443
39-48	0.290	0.487	0.206	0.250	0.923	0.053
Female	0.499	0.573	0.250	0.245	0.005	-0.294
Foreign roots	0.245	0.118	0.185	0.104	1.186	2.369
Tertiary Education	0.844	0.401	0.132	0.240	-1.897	0.403
Employment status (ref.: not employed)						
Unemployed	0.026	0.017	0.025	0.016	5.997	7.561
(Self)Employed	0.771	0.867	0.176	0.116	-1.293	-2.156
Other	0.092	0.045	0.084	0.043	2.822	4.401
Risk-taking (ref.: neutral attitude)						
Rather unwilling to assume risks	0.245	0.428	0.185	0.245	1.184	0.289
Rather willing to assume risks	0.624	0.301	0.235	0.210	-0.511	0.867
Family status (ref: LAT)						
LT, not married, no children	0.208	0.140	0.165	0.120	1.439	2.074
LT, married, no children	0.207	0.101	0.164	0.091	1.448	2.640
LT, not married, children	0.054	0.116	0.051	0.102	3.951	2.404
LT, married, children	0.404	0.633	0.241	0.232	0.393	-0.553
Number previous partnerships	2.255	1.516	2.105	1.951	3.149	1.069
Previously married	0.025	0.079	0.025	0.073	6.067	3.111
Parental separation	0.142	0.210	0.122	0.166	2.047	1.423
Dropout after 2 years	0.292	0.041	0.207	0.039	0.915	4.653

Note: Missing categories included but not displayed.

Table 9: Entropy Balancing for treatment = emigration (“migration-accompanying covariates”)

Group	Mean		Variance		Skewness	
	Treatment	Control	Treatment	Control	Treatment	Control
Time (referring to EB)						
Age Group (ref: 19-28)						
29-38	0.590	0.392	0.242	0.238	-0.366	0.443
39-48	0.217	0.487	0.170	0.250	1.377	0.053
Female	0.511	0.573	0.250	0.245	-0.043	-0.294
Foreign roots	0.214	0.118	0.168	0.104	1.396	2.369
Tertiary Education	0.870	0.401	0.113	0.240	-2.195	0.403
Employment status (ref.: not employed)						
Unemployed	0.021	0.017	0.020	0.016	6.707	7.561
(Self)Employed	0.767	0.867	0.179	0.116	-1.264	-2.156
Other	0.106	0.045	0.094	0.043	2.567	4.401
Risk-taking (ref.: neutral attitude)						
Rather unwilling to assume risks	0.256	0.428	0.191	0.245	1.118	0.289
Rather willing to assume risks	0.603	0.301	0.239	0.210	-0.423	0.867
Family status (ref: LAT)						
LT, not married, no children	0.251	0.140	0.188	0.120	1.148	2.074
LT, married, no children	0.229	0.101	0.177	0.091	1.290	2.640
LT, not married, children	0.043	0.116	0.041	0.102	4.504	2.404
LT, married, children	0.323	0.633	0.219	0.232	0.757	-0.553
Number previous partnerships	2.195	1.516	2.128	1.951	3.478	1.069
Previously married	0.020	0.079	0.019	0.073	6.946	3.111
Parental separation	0.151	0.210	0.128	0.166	1.951	1.423
Dropout after 2 years	0.264	0.041	0.194	0.039	1.071	4.653

Note: Missing categories included but not displayed.

Table 10: Entropy Balancing for treatment = remigration (“migration-accompanying covariates”)

Group	Mean		Variance		Skewness	
	Treatment	Control	Treatment	Control	Treatment	Control
Time (referring to EB)						
Age Group (ref: 19-28)						
29-38	0.533	0.392	0.249	0.238	-0.134	0.443
39-48	0.341	0.487	0.225	0.250	0.669	0.053
Female	0.490	0.573	0.250	0.245	0.038	-0.294
Foreign roots	0.266	0.118	0.195	0.104	1.058	2.369
Tertiary Education	0.827	0.401	0.143	0.240	-1.725	0.403
Employment status (ref.: not employed)						
Unemployed	0.029	0.017	0.028	0.016	5.613	7.561
(Self)Employed	0.774	0.867	0.175	0.116	-1.313	-2.156
Other	0.083	0.045	0.076	0.043	3.029	4.401
Risk-taking (ref.: neutral attitude)						
Rather unwilling to assume risks	0.238	0.428	0.181	0.245	1.231	0.289
Rather willing to assume risks	0.638	0.301	0.231	0.210	-0.574	0.867
Family status (ref: LAT)						
LT, not married, no children	0.178	0.140	0.147	0.120	1.681	2.074
LT, married, no children	0.191	0.101	0.155	0.091	1.568	2.640
LT, not married, children	0.061	0.116	0.058	0.102	3.655	2.404
LT, married, children	0.459	0.633	0.248	0.232	0.165	-0.553
Number previous partnerships	2.297	1.516	2.085	1.951	2.926	1.069
Previously married	0.029	0.079	0.028	0.073	5.613	3.111
Parental separation	0.136	0.210	0.118	0.166	2.118	1.423
Dropout after 2 years	0.311	0.041	0.214	0.039	0.816	4.653
Control						
Before						
After						

Note: Missing categories included but not displayed.

Table 11: Summary statistics of original weights (without trimming) and after trimming at 99th percentiles for Entropy Balancing based on “technical pre-migration covariates” (N = 6,495)

Weights of control group when compared to	Mean	Standard deviation	Minimum	Maximum
Without trimming				
Migration	0.851	3.079	0.000	70.156
Emigration	0.347	1.795	0.000	53.997
Remigration	0.504	1.488	0.001	29.024
After trimming at the 99th percentile				
Migration	0.717	1.575	0.000	9.822
Emigration	0.270	0.685	0.000	4.485
Remigration	0.446	0.938	0.001	5.960

Table 12: Summary statistics of original weights (without trimming) and after trimming at 99th percentiles for Entropy Balancing based on “migration-accompanying covariates” (N = 6,495)

Weights of control group when compared to	Mean	Standard deviation	Minimum	Maximum
Without trimming				
Migration	0.851	4.966	0.000	168.805
Emigration	0.347	2.436	0.000	94.829
Remigration	0.504	2.804	0.000	109.759
After trimming at the 99th percentile				
Migration	0.640	1.944	0.000	14.628
Emigration	0.220	0.696	0.000	4.565
Remigration	0.369	0.953	0.000	6.042

Table 13: Complementary log-log regression on union dissolution using trimmed weights

	(1a)	(2a)	(3a)
Sample	Migrants (all) vs. non-migrants	Emigrants vs. non-migrants	Remigrants vs. non-migrants
Migration (vs. no)	0.36* (0.212)		
Emigration (vs. no)		0.32 (0.265)	
Remigration (vs. no)			0.36* (0.215)
Time = 1	0.18 (0.199)	0.29 (0.273)	0.11 (0.214)
Time = 2	-0.10 (0.228)	0.03 (0.298)	-0.22 (0.244)
Constant	-3.86*** (0.245)	-3.96*** (0.316)	-3.76*** (0.240)
Observations	12,025	8,750	9,771

Note: Entropy Balancing based on “technical pre-migration covariates”. Standard errors in parenthesis. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. EB weights trimmed at 99th percentiles are used.

Table 14: Complementary log-log regression on union dissolution using trimmed weights

Sample	(4a) Migrants (all) vs. non- migrants	(5a) Emigrants vs. non- migrants	(6a) Remigrants vs. non- migrants	(7a) Emigrants vs. non-migrants	(8a) Emigrants vs. non-migrants	(9a) Remigrants vs. non-migrants	(10a)	(11a)	(12a)
Migration (vs. no)	0.61** (0.274)								
Emigration (vs. no)		0.52* (0.296)		0.70** (0.335)	0.15 (0.373)	0.70* (0.361)			
Remigration (vs. no)			0.63*** (0.238)				0.72*** (0.246)	0.44 (0.311)	0.72** (0.285)
Emigration * Time = 1				-0.46 (0.616)					
Emigration * Time = 2					1.09** (0.511)				
Emigration * Time = 3						-0.67 (0.649)			
Remigration * Time = 1							-0.21 (0.482)		
Remigration * Time = 2								0.56 (0.428)	
Remigration * Time = 3									-0.45 (0.517)
Time = 2	0.08 (0.205)	0.25 (0.265)	0.04 (0.202)	-0.08 (0.543)	-0.58 (0.470)	0.26 (0.266)	-0.11 (0.440)	-0.37 (0.398)	0.04 (0.203)
Time = 3	-0.15 (0.263)	0.15 (0.326)	-0.29 (0.259)	-0.18 (0.635)	0.13 (0.327)	0.60 (0.617)	-0.44 (0.489)	-0.30 (0.261)	0.01 (0.467)
Constant	-4.07*** (0.336)	-4.17*** (0.349)	-3.99*** (0.274)	-3.97*** (0.475)	-3.91*** (0.366)	-4.31*** (0.417)	-3.91*** (0.390)	-3.86*** (0.310)	-4.06*** (0.314)
Observations	12,025	8,750	9,771	8,750	8,750	8,750	9,771	9,771	9,771

Note: Entropy Balancing based on “migration-accompanying covariates”. Standard errors in parenthesis. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. EB weights trimmed at 99th percentiles are being used.

ARTICLE TWO

**THE SHORT-TERM EFFECT OF INTERNATIONAL MIGRATION ON FAMILY FORMATION:
FERTILITY DISRUPTION OR INTERRELATION?**

Status: under review

THE SHORT-TERM EFFECT OF INTERNATIONAL MIGRATION ON FAMILY FORMATION:
FERTILITY DISRUPTION OR INTERRELATION?

ABSTRACT

The majority of research on the link between international migration and fertility lacks causal analyses. Furthermore, existing studies tend to ignore gendered patterns of family formation as well as heterogeneity among migrants such as where and why they move. Combining longitudinal data of the German Emigration and Remigration Panel Study (GERPS) and the German Family Panel (pairfam), and applying entropy balancing and discrete-time proportional hazard models, the goal in this paper is to fill these research gaps. In particular, the causal short-term effect of international mobility on first-birth probabilities is studied in the context of voluntary migration from and to Germany as an example of a highly industrialized welfare state. Results show that, overall, migration implies fertility disruption, followed by catch-up. This pattern appears to be driven mainly by women (independent of the migration direction) and is also observable among emigrant men. In contrast, remigrant men show evidence of lagged interrelation of migration and family formation. Furthermore, the process of family formation was found to relate to migration's underlying motives. These findings emphasize the necessity of considering migrant's heterogeneity and assessing men and women separately when studying the consequences of migration on family formation.

INTRODUCTION

Since Courgeau's (1989) pioneering study, many studies assessing the timing of (first) birth in the context of migration have emerged. Still, many of these studies are not able to assess causal effects of migration. This stems primarily from two methodological features. First, studies often lack comparisons to non-migrants at origin (e.g. Adserà & Ferrer, 2016; Okun & Kagya, 2012; Wilson, 2020). This comparison, however, is needed to evaluate the actual effect of migration on family formation (Lübke, 2015). Second, many of the relevant studies comparing immigrant fertility with native fertility in the destination countries are based on immigrant population samples. Even if these studies can control for time since immigration (Cantalini & Panichella, 2019; Kreyenfeld & Krapf, 2017; Kulu et al., 2019), they may be biased due to selective remigration. If remigration is not at random (which appears to be the case, see e.g. Caron & Ichou, 2020; Wahba, 2015), sampling immigrants at destination implies oversampling of those who stayed longer and thus is not representative for initial immigrants (Ette et al., 2021).

Additionally, most existing studies do not consider certain heterogeneities among migrants. The effect of migration on family formation may, however, depend on where (migration direction) and why (migration motives) people move. Migration direction refers to emigrants and remigrants: emigrants are those migrants who move from their country of origin to a different country. In contrast, remigrants (or return migrants, see e.g. Constant, 2021; Lindstrom et al., 2021) are those who did so previously and then returned to their country of origin. As outlined in more detail in the theoretical section of this paper, the situation after arrival is likely to differ between emigrants and remigrants, which may lead to differences in the effect of migration on family formation. Similarly, migration motives may shape the effect of migration on family formation. For example, migration taking place due to a job offer may affect family formation differently than migration aimed at partner reunification.

Furthermore, prior research has tended to focus on women's family formation patterns and migration from less developed countries ("Global South"). The earlier implies that we know relatively less about how migration affects men's family formation. Regarding the latter, results may not be transferable to the current context of migration from (and back to) highly industrialized welfare states ("Global North"). In particular, migration in the current context can be understood as voluntary and planned (cf. Kley, 2011) and migrants as privileged individuals (Witte et al., 2021). Due to different opportunity structures, migration was found to impact family trajectories of more vulnerable individuals more than of privileged ones (Castro Torres & Gutierrez-Vazquez, 2022). Thus, we lack knowledge of the consequences of international migration from (and back to) the Global North, even though movements between such countries make up almost one-quarter of total international migration (Pison, 2019).

Against this background, the goal in this paper is to increase our understanding of short-term fertility after migration. In particular, it is asked to what extent migration disrupts or interrelates with first birth, building on the two opposing hypotheses of fertility disruption and interrelation of the two events. Combining longitudinal data of both migrants and non-migrants at origin and applying appropriate methods allows for assessing the causal effect of migration on first birth probabilities. In particular, these methods include entropy balancing (Hainmueller, 2012) followed by estimating discrete-time proportional hazard models (Jenkins, 1995). By using data of the German Emigration and Remigration Panel Study (Erlinghagen et al., 2022), migration of citizens from a highly industrialized welfare state is being assessed, expanding our knowledge on migration from (and back to) the Global North. The data set allows us to assess both men's and women's family formation patterns and to consider heterogeneity among

migrants. In particular, it is possible to distinguish migrants by the direction of their migration (emigration and remigration) and different migration motives.

To guide the reader, the following structure is used: First, existing hypothesis on the short-term effect of migration on fertility are outlined. Second, using these hypotheses as a structuring element, previous findings are presented. Third, the two data sources, GERPS and pairfam, and the methodological proceedings, are presented. Finally, multivariate results are presented and then discussed.

THEORY AND HYPOTHESES

Theory on migrant's fertility poses four main hypotheses: (a) adaption, (b) socialization, (c) disruption, and (d) interrelation hypothesis. These hypothesis are not mutually exclusive (Goldstein & Goldstein, 1984), but partially complementary (Kulu, 2006), and thus can be combined to best explain the effect of migration on fertility. Following Lübke (2015), the first two hypotheses refer to long-term effects as they pose that either the country of destination (adaption) or the country of origin (socialization) is crucial in determining migrants' fertility preferences. These two hypotheses assess not specifically the role of migration but rather differences in fertility levels between origin and destination country. The processes of adaption and socialization are generally assumed to take some time ("within a generation [adaption] or across generations [socialization]", M. J. White et al., 1995, p. 495), so which of the two hypotheses holds may only be observed in the long-term. Assessing migration more directly and investigating short-term fertility patterns (the topics of this paper), disruption and interrelation hypotheses are more relevant.

Disruption hypothesis: The disruption hypothesis poses lower levels of fertility shortly after migration. It assumes that migration causes stress given its economic and psychological costs (Wolf, 2016), including changes in daily life, the loss of social networks, and the potential (temporary) separation of spouses (Impicciatore et al., 2020). Such stressors associated with migration would imply a disruption in the life course and thus fertility postponement (Schmid & Kohls, 2011). This delay may take until both partners have adjusted to the new situation (Baykara-Krumme & Milewski, 2017), and might be followed by a so-called catch-up effect (Goldstein & Goldstein, 1981), i.e. increased fertility. Although the focus is on the effect after migration, an anticipatory effect may also exist: due to the stress associated with preparing migration, temporary separation of spouses or financial problems, fertility levels shortly prior to migration may also be lower (Wolf, 2016).

Interrelation hypothesis: In contrast, the interrelation hypothesis poses higher levels of fertility shortly after migration. This expectation stems from an interrelation of migration and family-related events including childbirth and union formation (Andersson, 2004; Courgeau, 1985; Milewski, 2007; Singley & Landale, 1998). The parallelism of the two events (Mulder & Wagner, 1993) can be explained by decisions being based on the anticipation of other events (here: the migration event) (Huinink & Feldhaus, 2009). Thus, the actual cause for the effect on fertility is not seen in migration itself but in the decision for family formation (Schmid & Kohls, 2011). Individuals anticipating migration might postpone childbirth to after migration, resulting in “catch-up behavior” after migration – which is then observed as an interrelation of migration and fertility (Lübke, 2015; Milewski, 2007). At the same time, migration might be triggered by the plan to have children (Kley, 2011). Thus, it appears plausible that migration motives play an important role (Schmid & Kohls, 2011): If migration is based on family-related motives, increased fertility can be expected shortly after migration. This might not hold for migrations based on career- or education-related motives. Thus, one important argument within the interrelation hypothesis would be that – depending on the underlying migration motives – it is more likely that either patterns predicted by the disruption or the interrelation hypothesis hold.

The two outlined hypotheses do not consider the migration direction. Still, diverging fertility patterns after emigration and remigration can be expected. First, after remigration, adjustment can be assumed to refer to situations that are already known and social networks may be regained. Thus, the stressors of migration appear less pronounced among remigrants and the disruption hypothesis may apply less. Secondly, compared to emigration, remigration tends to be based more on family-related motives (Erlinghagen, 2021). Consequently, the interrelation argument may apply more to remigration. This argument can be further backed with the so-called salmon hypothesis, suggesting that due to the support of the family and other social networks at origin, childbirth would be postponed until remigration (Kreyenfeld & Vatterrott, 2018).

Both migration and determinants of family formation are gendered, implying that migration may affect family formation differently for women and men. First, migration itself (Erlinghagen, 2021) and its economic consequences (Cooke et al., 2009) are highly gendered. Second, men and women differ with respect to age at first birth (Statistisches Bundesamt, 2022) and individual economic outcomes affect fertility patterns differently. For example, for men unemployment has the most negative impact on fertility but for women this holds for fixed-

term contracts (Alderotti et al., 2021). Acknowledging furthermore that care work is primarily conducted by women (Hank & Steinbach, 2021), it can be argued that men and women bear the “cost of family formation” to different extents. This may well influence family formation decisions, especially in the context of a rather unknown environment after migration. In sum, it is unclear whether the disruption or the interrelation hypotheses better apply to men or women, but it is likely men and women will show different effects.

PREVIOUS EMPIRICAL EVIDENCE

The following literature review is structured according to the two hypotheses under study (disruption vs. interrelation hypothesis). Subsequently, the review includes assessment of ideas that may help to explain contrasting findings. Studies mentioned in this review are based on comparisons of migrants to non-migrants at origin, allowing tests of the disruption vs. interrelation arguments. Studies based on migrants only (e.g. Kraus, 2019; Tønnessen & Mussino, 2020) or comparing migrants to non-migrants at destination (e.g. Cantalini & Panichella, 2019; Wolf, 2016) are not considered.

Disruption hypothesis: Some studies found evidence for a disruptive effect of migration on fertility. In particular, decreased first birth among married women after migration was observed in the context of couple’s joint migration as well as women’s own or their husbands’ sole migration from Latin America to the United States (US) and Spain (Lindstrom et al., 2021). Disruptive effects were also found among migrants from Poland in both Italy and the UK, and migrants from Romania in Italy (Mussino & Cantalini, 2022).

Additionally, two studies found an anticipatory disruptive effect followed by catch-up patterns after migration. This combination of findings can be interpreted in terms of both the disruption hypothesis (disruption occurs already prior to migration) and the interrelation hypothesis (higher fertility after migration). The patterns were observed in Polish migrants in Britain (Lübke, 2015) and Ukrainian migrants in Italy (Impicciatore et al., 2020). In the latter, however, the catch-up effect after migration was small.

Interrelation hypothesis: Other evidence has indicated interrelation effects, i.e. higher first birth probabilities shortly after migration. This pattern has been observed for migrants from Albania and Morocco (but not Ukraine) to Italy (Impicciatore et al., 2020), Turkey to Germany (K. L. White, 2011), and Latin American countries to the US (Lindstrom & Giorguli-Saucedo, 2007; Singley & Landale, 1998; K. L. White, 2011).

As outlined in the theoretical section of this paper, these contrasting previous findings may potentially be explained by the heterogeneity of migrants. In this context, to the best of my knowledge, there are only two international studies differentiating by migration direction (emigration vs. remigration). Assessing migration between Turkey and different European countries, both emigration and remigration increased first birth probabilities (Baykara-Krumme & Milewski, 2017). In contrast, looking at Mexico-US migration, emigrants showed lower probabilities of first birth than non-migrants, but no significant effect was found for remigrants (Lindstrom & Giorguli-Saucedo, 2007).

Assessing migration motives, previous studies also reveal mixed results. An interrelation effect was found for women migrating to Italy for family-related motives, but lower fertility was found for those migrating for employment motives (Impicciatore et al., 2020). In contrast, non-significant migration motives were observed among female Ghanaian migrants (Wolf & Mulder, 2019). For male migrants, the interrelation effect was found independent of migration motives (Milewski & Baykara-Krumme, 2021). Taken together, these varied findings suggest that migration motives may interact with gender and depend on different migration contexts.

More generally, most studies assessing the effect of migration on fertility focus on women. Although some studies based on comparisons to non-mobiles at destination (e.g. Cantalini & Panichella, 2019; Wolf, 2016) could be found, to my knowledge, only two studies assessing male fertility based on a comparison to non-migrants at origin exists. First, Milewski and Baykara-Krumme (2021) studied migration of Turkish men to different European countries and found evidence supporting the interrelation hypothesis. Second, Mussino and Cantalini (2022) studied fertility of both men and women migrating from Poland or Romania to Italy or the UK. Except for Polish migrants in Italy, they find similar patterns for men and women.

As outlined, evidence on the migration-fertility nexus is mixed. Part of these contrasting results might be explained by migrants' heterogeneity. Differences between emigration and remigration in their effect on family formation are not clear. Migration appears to interact with gender, but there is a lack of studies considering men's family formation. The following analysis was designed to gain more insight into this complex migration-fertility nexus and help fill these gaps.

DATA AND METHODS

Data

Analyses are based on the German Emigration and Remigration Panel Study (GERPS) (Erlinghagen et al., 2022; <https://www.gerps-project.de>). GERPS is a panel of German emigrants (Germans who left Germany) and remigrants (Germans who – after having been emigrants – returned to Germany) that assesses the multidimensional consequences of migration in the life course. Thus, it allows for the study of family formation patterns in the context of migration from (and back to) a highly industrialized welfare state. The sample includes German nationals aged 20-70 years, who either left or returned to Germany between July 2017 and June 2018. A push-to-web design was applied, i.e. sampled individuals were contacted by postal mail that included a link to complete an online survey. Subsequent waves were carried out online (Ette et al., 2020).

To answer the posed research questions, not only data on the internationally mobile but also on the non-mobile population at origin was required. Comparing migrants to non-migrants at origin (as opposed to non-migrants at destination) is crucial to learn about the effect of migration (Lübke, 2015). In this context, it is a common approach to combine different data sources (see e.g. Impicciatore et al., 2020; Lübke, 2015). Thus, for the non-mobile population the German Family Panel (pairfam) (Brüderl, Drobnič, et al., 2021; <https://www.pairfam.de/>) was used. Pairfam is a panel of residents in Germany, with a focus on family-related topics (Huinink et al., 2011). A cohort-sequence design based on three birth cohorts (1971-1973, 1981-1983, and 1991-1993) was applied in the first wave. Interviews were conducted face-to-face (CAPI) as well as by telephone (CATI) between April and July 2020 due to social distancing measures during the COVID-19 pandemic (Brüderl, Schmiedeberg, et al., 2021).

Both datasets are based on a two-step sampling process for the first wave, including sampling municipalities in a first step and people within municipalities in a second step. The design of the questionnaires enabled coding of the variables required for the analysis in both datasets. For example, it was possible to identify respondents without children, determine the timing of first birth, and observe both internal and international moves in the observation period. The set of covariates was chosen not only based on correlations with both migration and first birth, but also ensuring that they were measured in a similar manner in both datasets. Applying appropriate methods (outlined in the next section), the two datasets are understood as being sufficiently comparable (see also Mansfeld, 2023).

The combined dataset covers an observation period of three years (2017-2020) by using waves 1, 3, and 4 from GERPS and waves 10 to 12 from pairfam. The first three waves of GERPS were conducted in half-year intervals, followed by wave 4 one year after wave 3. The choice of waves ensures that GERPS and pairfam cover the same observation period. The sample consists of heterosexual respondents in the phase of family formation ($N = 29,228$) since homosexual couples are confronted with additional obstacles to fertility (e.g. legal restrictions, etc.), which are furthermore assumed to depend on the country context. “Family-formation phase” is defined as aged 19-48 years. This restriction stems from pairfam’s cohort design and is similar to those in other studies, (e.g. Gabrielli et al., 2007; Impicciatore et al., 2020). The sample is also restricted to respondents who did not yet have their first child prior to or in the year of migration (migrants) / start of observation (non-migrants) ($N = 20,177$). Excluding those who had their first child within the year of migration / start of observation ensured that fertility followed the migration event, considering the time gap between the fertility decision and actual birth.

Two specific restrictions apply to the geographical mobility of the non-mobile population (pairfam): First, to ensure that non-migrants do not become international migrants within the observation period, the pairfam sample was restricted to those who did not migrate internationally within the observation period ($N = 20,054$). Second, the pairfam sample was restricted to those who did not move during the time that international migration took place in the GERPS sample ($N = 19,270$). This ensured that international migration was being compared to no migration and not to internal migration. Finally, observations with missing values at the dependent variable were excluded and observations were right-censored after the event of first birth or dropout ($N = 18,926$). Table 1 gives an overview of the resulting sample.

Methods

The aim of this study is to learn about the causal effect of migration on first birth probabilities. Accounting for systematic differences between migrants and non-migrants ensures that the estimated effects are not primarily due to selectivity. Compared to the non-mobile population, international German migrants were more likely to have tertiary education, have non-German foreign roots, and were more willing to take risks than non-migrants (table 1). Furthermore, compositions in terms of age, employment, and family status differed. This is in line with previous findings (e.g. Ette & Erlinghagen, 2021; Lübke et al., 2021). Thus, simple regression models were not sufficient, and a two-step procedure was required to account for selectivity:

Table 1. Descriptive Statistics by Migrant Status

	Non-mobiles	Emigrants	Remigrants
<u>Mean / proportion of variables</u>			
Birth of first child (vs. no)	0.03	0.03	0.03
Age group (at start of observation)			
19 - 28 years	0.56	0.41	0.40
29 - 38 years	0.28	0.47	0.44
39 - 48 years	0.16	0.12	0.15
Female	0.45	0.54	0.56
Foreign roots (vs. no)	0.11	0.27	0.33
Foreign roots missing	0.02	0.01	0.01
Tertiary education (vs. less)	0.26	0.80	0.71
Education missing	0.00	0.00	0.00
Employment status			
Not employed	0.00	0.02	0.03
Unemployed	0.04	0.05	0.02
(Self)employed	0.71	0.64	0.57
Other	0.24	0.30	0.38
Missing information	0.00	0.00	0.00
Family status			
No partner	0.44	0.34	0.42
Partner, not married, no partner in household	0.22	0.34	0.26
Partner, not married, partner in household	0.23	0.14	0.12
Partner, married, no partner in household	0.01	0.03	0.02
Partner, married, partner in household	0.11	0.14	0.16
Missing information	0.00	0.02	0.03
Risk aversion			
Rather not willing to assume risks	0.38	0.23	0.23
Indifferent	0.24	0.14	0.11
Rather willing to assume risks	0.38	0.63	0.66
Missing information	0.00	0.01	0.00
<u>Number of observations</u>			
By time			
After 1 year	1,663	2,606	4,071
After 2 years	1,499	1,886	2,830
After 3 years	1,326	1,298	1,747
Total number of observations	4,488	5,790	8,648

Step one: There are different methods to account for differences between treatment and control groups, or in this case, migrants and non-migrants (see Imbens, 2004 for an overview). The method of choice for this study is entropy balancing and the respective Stata package *ebalance* (Hainmueller & Xu, 2013). In contrast to other methods, such as propensity score matching, entropy balancing allows for assessing the differences in covariate distributions between the two groups directly: Based on the known sample moments, it is possible to specify balance

conditions (Hainmueller, 2012). Covariate distributions of treatment and control group before and after entropy balancing can be found in the appendix (tables A1-3).

Step two: Discrete-time proportional hazards models (Jenkins, 1995) were estimated. For these models, complementary log-log regressions on first birth probabilities were run, using migration (the “treatment variable” in terms of entropy balancing) and time dummy variables as explanatory variables, and making use of the weights resulting from step 1. This way, the causal effect of migration (compared to no migration) on first birth probabilities could be assessed.

To examine differences in the effect between emigration and remigration on the one hand, and different migration motives on the other hand, non-migrants were compared to different subgroups of migrants. These comparisons allow for evaluation of the causal effect of migration on family formation for certain subgroups of migrants. For example, for assessing the effect of emigration on first birth, the group of migrants was restricted to emigrants. Thus, only emigrants were compared to non-migrants. The same reasoning applies to the models assessing migration motives: Non-migrants were compared to migrants who indicated that certain migration motives were important for their migration decision. Importance was measured on a scale ranging from 1 (not important at all) to 6 (very important) and a motive was considered important if the original rating was 4 to 6. An overview of the ratings of importance of the different migration motives can be found in the appendix (table A4).

To assess whether (potential) effects start to vanish at the end of the observation period, interaction terms of the migration variable and a time dummy indicating about three years after migration (migrants) / start of observation (non-migrants) were included. Acknowledging that the effect of migration on first birth may differ between men and women, separate models were estimated.

Variables

The dependent variable ‘first birth’ is a dummy variable indicating whether a first child was born between the current and the following point of time (“1”) or not (“0”). Similarly, the main explanatory variable is a dummy variable, coded as “1” if migration took place and “0” if not.

The choice of covariates was based on determinants of fertility that have been identified within the migration-fertility nexus. At the individual level, these determinants include age at migration (Robards & Berrington, 2016), migrant’s gender (Kraus, 2019), education (Baykara-Krumme & Milewski, 2017), and employment (Andersson & Scott, 2007). Furthermore,

immigrant origin may matter, as research on migrants' long-term fertility patterns has proven (e.g. Impicciatore et al., 2020). At the partnership level, especially partnership status and living arrangement appear crucial (e.g. Kapitány & Spéder, 2012; Kuhnt & Trappe, 2016).

At the same time, and consistent with the idea of selectivity (Baykara-Krumme & Milewski, 2017; Mussino & van Raalte, 2013), migrants differ from non-migrants with regards to these factors (see also table 1). Furthermore, risk aversion differs between migrants and non-migrants (Lübke et al., 2021). Covariate balancing should be applied to covariates associated with both treatment and outcome that are static or measured prior to the treatment (Caliendo & Kopeinig, 2008; Hainmueller, 2012). Thus, the following covariates were used: Age group at the start of observation indicated whether the respondent was 19-28, 29-38, or 39-48 years old. Dummies variables were used for gender (female vs. male), "foreign roots" when living in Germany (vs. no), and tertiary education (vs. less than tertiary education). Employment included the categories of not employed, unemployed, (self)employed, and other (e.g. students). Risk tolerance measured whether respondents were rather willing, indifferent, or rather unwilling to take risks. A combined measure of partnership status, marital status (married vs. not married), and living arrangements (living with a partner vs. not living with a partner) was used.

Two robustness checks were conducted. First, health may differ between migrants and non-migrants and influence fertility. As pre-migration health data are not available, health about one year after migration was included as an additional covariate in the regression model. Second, the weights resulting from entropy balancing were trimmed at the 99th percentile. The respective estimates and summary statistics of the weights can be found in the appendix (table A5-7).

MULTIVARIATE RESULTS

Having applied entropy balancing, table 2 displays the results of estimating discrete-time proportional hazard models on the probability of first birth. Model (1) is based on the whole sample (all migrants and non-migrants). The migration coefficient is negative and statistically significant. Thus, considering emigrants and remigrants jointly, migration was observed to decrease the probability of first birth over the whole time frame of about three years after migration. Compared to the situation about one year after migration (migrants) / start of observation (non-migrants), two and three years after migration (migrants) / start of observation (non-migrants) was associated with a higher probability of first birth. Thus, for both migrants and non-migrants, with the passage of time (increasing age and no first birth yet), the probability of first birth increased. Models (2) and (3) estimate the effect of migration distinguishing the direction of migration. In both models, the coefficient for migration is again negative and

statistically significant. Thus, considering emigration and remigration separately, both decreased the probability of first birth compared to no migration.

Table 2. Complementary Log-Log Regression on First Birth

	(1) Migrants (all) & non- migrants	(2) Emigrants & non- migrants	(3) Remigrants & non- migrants
Migration (vs. no)	-0.58*** (0.20)	-0.56*** (0.20)	-0.59*** (0.21)
Time (vs. After 1 year)			
After 2 years	0.82** (0.37)	0.89*** (0.33)	0.78** (0.38)
After 3 years	1.30*** (0.35)	1.36*** (0.32)	1.29*** (0.36)
Constant	-3.65*** (0.34)	-3.67*** (0.30)	-3.67*** (0.36)
Observations	18,926	10,278	13,136

Note: Only subsets of the data were used (see header). Estimation results based on complementary log-log regression using weights obtained from entropy balancing. Standard errors in parenthesis. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 3 shows the results for estimating the same models as in table 2 but separately by gender. Independent of the migration direction, migration decreased the probability of first birth among women (models 4, 6, and 8). The same disruptive effect was found for male emigrants (model 7). In contrast, assessing men and not distinguishing by migration direction (model 5) or assessing remigrants (model 9), the migration coefficient was not statistically significant.

Table 3. Complementary Log-Log Regression on First Birth by Gender

	(4) Migrants (all) & non-migrants		(6) Emigrants & non-migrants		(8) Remigrants & non-migrants	
	Women	Men	Women	Men	Women	Men
Migration (vs. no)	-0.83*** (0.29)	-0.37 (0.23)	-0.77** (0.30)	-0.48** (0.23)	-0.88*** (0.30)	-0.29 (0.25)
Observations	9,762	9,164	5,113	5,165	6,665	6,471

Note: Only subsets of the data were used (see header). Estimation results based on complementary log-log regression using weights obtained from entropy balancing. Coefficients for time dummy variables and constant not displayed. Standard errors in parenthesis. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Having argued that the effect of migration might not be universal but depend on the underlying motives for migration, these motives were assessed in more detail. In particular, the effect of migration was estimated using different subgroups of migrants, namely only those who stated that a certain migration motive was important for the migration decision. The analysed motives were own career-related motives, the partner's career-related motives, other partnership-related

motives, family-related motives, financial, and educational motives. Given that the effect might furthermore differ between men and women, the resulting models were estimated separately for female (table 4) and male (table 5) respondents.

In fact, different effects were found for women and men. Among women, independent of the underlying migration motives, migration decreased the probability of first birth. In contrast, considering men, only migrating when their own career was an important driver of the migration decision decreased the probability of first birth. For men migrating for the other migration motives, no statistically significant associations between migration and first birth probability were found.

Table 4. Complementary Log-Log Regression on First Birth: the Role of Migration Motives for Women

	(10)	(11)	(12)	(13)	(14)	(15)
Restrictions applying to migrant sample	Career: own	Career: partner's	Partnership	Family	Financial	Educational
Migration (vs. no)	-1.05*** (0.31)	-0.83*** (0.32)	-0.77** (0.33)	-0.68** (0.31)	-1.02*** (0.33)	-1.29*** (0.35)
Observations	6,833	4,291	4,252	5,278	4,659	4,730

Note: Only subsets of the data were used. These include female migrants who indicated that migration was (also) due to the respective migration motive (see header) and female non-migrants. Estimation results based on complementary log-log regression using weights obtained from entropy balancing. Coefficients for time dummy variables and constant not displayed. Standard errors in parenthesis. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5. Complementary Log-Log Regression on First Birth: the Role of Migration Motives for Men

	(16)	(17)	(18)	(19)	(20)	(21)
Restrictions applying to migrant sample	Career: own	Career: partner's	Partnership	Family	Financial	Educational
Migration (vs. no)	-0.56** (0.24)	-0.23 (0.24)	0.00 (0.24)	-0.07 (0.25)	-0.38 (0.26)	-0.44 (0.31)
Observations	7,214	3,992	4,061	4,802	4,753	4,547

Note: Only subsets of the data were used. These include male migrants who indicated that migration was (also) due to the respective migration motive (see header) and male non-migrants. Estimation results based on complementary log-log regression using weights obtained from entropy balancing. Coefficients for time dummy variables and constant not displayed. Standard errors in parenthesis. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

So far, analyses have focused on the effect of migration over the whole observation period and found disruptive or no effects. The estimates of the time variables already showed that overall fertility patterns vary over time. To find whether the effect of migration is stable over time, a migration – time interaction term was introduced. This term was used to assess specifically the situation about three years after migration (the last observed point in time so far). The

interaction term itself can be interpreted as the additional effect of migration at about three years after migration compared to the situation one and two years after migration. The sum of the migration and the interaction coefficient should be read as the effect of migration three years after migration, i.e. comparing migrants to non-migrants at this specific point of time (cf. Wooldridge, 2013 on the interpretation of interaction effects).

Table 6 shows the estimates for all migrants (model 22), emigrants (23), and remigrants (24). Throughout the models, the interaction term is positive and statistically significant, indicating a positive effect of migration on first birth probability about three years after migration compared to about one and two years after migration. Still, also about three years after migration, migration decreased the probability of first birth, as the sum of the migration and the interaction coefficient remains negative.

Table 6. Complementary Log-Log Regression on First Birth: Timing Patterns.

	(22) Migrants (all) & non- migrants	(23) Emigrants & non- migrants	(24) Remigrants & non- migrants
Migration (vs. no)	-1.03*** (0.25)	-0.97*** (0.25)	-1.07*** (0.27)
Migration * After 3 years	0.99** (0.40)	0.87** (0.41)	1.05** (0.42)
Observations	18,926	10,278	13,136

Note: Only subsets of the data were used (see header). Estimation results based on complementary log-log regression using weights obtained from entropy balancing. Coefficients for time dummy variables and constant not displayed. Standard errors in parenthesis. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 7 shows estimates of the same models but separated by gender. Again, results differ for women and men. For women, the interaction term is positive when not distinguishing by migration direction (model 25) and when considering remigration (model 29). For the latter, the sum of the interaction and the migration coefficient is positive, implying that three years after migration, remigrant women have a higher probability of first birth than non-migrants. Considering men, this pattern can be observed throughout the three models (26, 28, and 30): independent of the migration direction, three years after migration, migrant men have a higher probability of first birth than non-migrant men.

In tables 8 (for women) and 9 (for men), migrants are again distinguished by their underlying motives and the same interaction term as above was included. Again, different patterns for men and women were observed. For women who migrated for their own career, their partner's career, family-related or financial motives, the interaction term was positive and statistically

significant. With respect to the partner’s career and family-related motives, the sum of the migration and interaction coefficient was also positive. Thus, three years after migration, female migrants migrating for their partner’s career or family-related motives had a higher probability of first birth than non-migrants. In contrast, considering migration based on partnership-related or educational motives, the interaction term was not statistically significant, indicating no additional effect three years after migration. Turning to men, the interaction term was statistically significant independent of the underlying migration motives. In fact, except for migration being based on their own career, the sum of migration and interaction coefficients was positive, indicating that men migrating for any motive other than their own career showed a higher probability of first birth three years after migration than non-migrants.

Table 7. Complementary Log-Log Regression on First Birth by Gender: Timing Patterns

	(25) Migrants (all) & non-migrants Women	(26) Men	(27) Emigrants & non-migrants Women	(28) Men	(29) Remigrants & non-migrants Women	(30) Men
Migration (vs. no)	-1.34*** (0.35)	-0.84*** (0.27)	-1.19*** (0.38)	-0.96*** (0.29)	-1.43*** (0.36)	-0.75** (0.30)
Migration * After 3 years	1.26** (0.59)	0.97** (0.47)	0.97 (0.63)	1.01** (0.48)	1.46** (0.59)	0.92* (0.51)
Observations	9,762	9,164	5,113	5,165	6,665	6,471

Note: Only subsets of the data were used (see header). Estimation results based on complementary log-log regression using weights obtained from entropy balancing. Coefficients for time dummy variables and constant not displayed. Standard errors in parenthesis. Significance levels: * p < 0.1, ** p < 0.05, *** p < 0.01.

Table 8. Complementary Log-Log Regression on First Birth: Timing Patterns by Migration Motive for Women

Restrictions applying to migrant sample	(31) Career: own	(32) Career: partner’s	(33) Partnership	(34) Family	(35) Financial	(36) Educational
Migration (vs. no)	-1.73*** (0.38)	-1.51*** (0.39)	-1.18*** (0.41)	-1.18*** (0.37)	-1.74*** (0.41)	-1.62*** (0.44)
Migration * After 3 years	1.54** (0.65)	1.64*** (0.63)	0.95 (0.70)	1.30** (0.61)	1.74*** (0.63)	0.88 (0.72)
Observations	6,833	4,291	4,252	5,278	4,659	4,730

Note: Only subsets of the data were used. These include female migrants who indicated that migration was (also) due to the respective migration motive (see header) and female non-migrants. Estimation results based on complementary log-log regression using weights obtained from entropy balancing. Coefficients for time dummy variables and constant not displayed. Standard errors in parenthesis. Significance levels: * p < 0.1, ** p < 0.05, *** p < 0.01.

Table 9. Complementary Log-Log Regression on First Birth: Timing Patterns by Migration Motive for Men

Restrictions applying to migrant sample	(37) Career: own	(38) Career: partner	(39) Partnership	(40) Family	(41) Financial	(42) Educational
Migration (vs. no)	-1.07*** (0.29)	-0.62** (0.29)	-0.45 (0.29)	-0.59* (0.31)	-0.93*** (0.33)	-1.15*** (0.44)
Migration * After 3 years	1.03** (0.49)	0.91* (0.50)	0.92* (0.50)	1.04** (0.51)	1.09** (0.55)	1.32** (0.65)
Observations	7,214	3,992	4,061	4,802	4,753	4,547

Note: Only subsets of the data were used. These include male migrants who indicated that migration was (also) due to the respective migration motive (see header) and male non-migrants. Estimation results based on complementary log-log regression using weights obtained from entropy balancing. Coefficients for time dummy variables and constant not displayed. Standard errors in parenthesis. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

DISCUSSION AND CONCLUSIONS

The question whether migrants' family formation follows disruption or interrelation patterns was the starting point of this paper: The disruption hypothesis poses that migration would disrupt fertility, resulting in decreased fertility shortly after migration. In contrast, the interrelation hypothesis understands migration and fertility as being based on a joint decision for family formation, leading to higher fertility soon after migration. The current paper shows that – to some extent – both hypotheses hold true but that gender, migration direction, and motives must also be taken into consideration when aiming to understand the complex migration-fertility nexus.

Over a time frame of three years, migration decreased first birth probabilities, supporting the disruption hypothesis. The effect, however, was not universal, but rather depended on the combination of gender, migration direction, and migration motives. On the one hand, disruptive effects were found for women (independent of migration direction and underlying motives) as well as for emigrant men and men migrating for their own career. On the other hand, no effect of migration on the probability of first birth was found for remigrant men and men migrating for motives other than their own career. Thus, for these men, neither interrelation nor disruption hypothesis were suitable, and family formation did not appear to depend on the migration event when considering the whole observation period.

One major claim of this article was that heterogeneity among migrants needs to be considered when aiming to understand the consequences of migration. With respect to the migration direction, the theoretical arguments suggested disruption for emigrants and interrelation for remigrants. Family formation in the current context of international migration, however,

appears more complex. One potential explanation for the disruptive effect after remigration among women could be that return to the origin country does not necessarily mean return to the old place of living with (the same) access to previous social networks. Additionally, it has been argued that remigration would be more family-oriented and thus interrelation would be more likely. However, results show that for women migration based on family-related motives also implies fertility disruption. In fact, family-related migration motives may not necessarily refer to family formation but also, e.g. reunification with other family members, such as older parents in need of care (cf. Gmelch, 1980 on reasons for remigration; and Niedomysl, 2011 on heterogeneity within the category of "social reasons").

This leads to the role of migration motives. Supporting the idea that contrasting results in previous literature might partly be explained by different underlying migration motives (Robards & Berrington, 2016), the current analysis showed that migration motives impact women's and men's family formation patterns differently. For women, migration based on any of the possible migration motives implied a disruption of family formation. For men, the disruptive effect was found only among emigrants and those migrating for their own career. At first, this appears counterintuitive to traditional work-family patterns: Men are less involved with care work (Hank & Steinbach, 2021) and thus their careers potentially less interrelated with family formation. It might, however, be explained by a relatively high proportion of men migrating first (and their spouses joining them later). This pattern has been shown for emigrant men (Erlinghagen, 2021) and it is plausible to assume that this holds also for men migrating for their own career. Non-simultaneous migration can be hypothesized to be linked to a disruption of fertility of the leading spouse, given that the partner joins only later.

Acknowledging that effects might not be stable throughout the observation period, this paper also included analyses to take a closer look at the situation three years after migration. In almost all models, the probability of first birth three years after migration was higher than the probability of first birth in the years before. For those subgroups of migrants for whom an overall disruptive effect was found (women, emigrant men, and men migrating for their own career), this can be conceptualized as a catch-up effect: The disruptive effect started to vanish at the end of the observation period. In contrast, for the remaining migrant men, the positive interaction term in combination with the non-significant overall effects can be interpreted as a "lagged interrelation effect": Interrelation arguments apply but family formation needs some time (three years) to take place. Thus, migration and the plan to form a family shortly after settlement would interrelate. Another potential explanation, taking into account disruption

including a catch-up effect among women, would be that family formation among these men does not interrelate with the migration event directly but indirectly via the family formation patterns of their female spouses (which are directly affected by migration). Future research might follow up on these findings and investigate the role of leading and tied migration patterns as well as within-couple processes in determining post-migration fertility.

Limitations to this study need to be mentioned. First, prior research showed evidence of the so-called selectivity hypothesis, arguing that migrants and non-migrants differ in their underlying characteristics – and that these differences would translate into fertility differences (Baykara-Krumme & Milewski, 2017; Gabrielli et al., 2007; Lindstrom et al., 2021). The entropy balancing applied in this paper was used to account for several covariates that might lead to selectivity. However, only observable characteristics can be accounted for, i.e. selectivity by non-observables such as partnership quality or fertility intentions (c.f. Impicciatore et al., 2020) cannot be ruled out. Second, an earlier study found that marriage duration could explain differences in fertility between migrants and non-migrants (Baykara-Krumme & Milewski, 2017). The data used in the current study, however, does not provide full information on partnership or marriage duration. Thus, it was only possible to control for the existence of a partnership at the beginning of the observation period. Third, the underlying dataset does not provide the exact date but only year of a child's birth. Consequently, births that occurred in the year of migration (or the respective comparison time for non-migrants) were excluded, because it could not be inferred whether the child was born before or after migration. This ensures that the birth of the child takes place after migration. Still, anticipatory patterns cannot be investigated.

Not ignoring the outlined limitations, this study enhances our knowledge of the effect of migration on family formation, considering gender differences as well as heterogeneity among migrants in terms of migration direction and migration motives. Combining longitudinal data of both German migrants and German non-migrants (“context-of-origin perspective”) (Baykara-Krumme & Milewski, 2017; Milewski & Baykara-Krumme, 2021), it does so in the context of migration from (and back to) a highly industrialized welfare-state.

REFERENCES

- Adserà, A., and A. Ferrer. 2016. “The Fertility of Married Immigrant Women to Canada.” *International Migration Review* 50 (2): 475–505. <https://doi.org/10.1111/imre.12114>.
- Alderotti, G., D. Vignoli, M. Baccini, and A. Matysiak. 2021. “Employment Instability and Fertility in Europe: A Meta-Analysis.” *Demography* 58 (3): 871–900. <https://doi.org/10.1215/00703370-9164737>.
- Andersson, G. 2004. “Childbearing After Migration: Fertility Patterns of Foreign-Born Women in Sweden.” *International Migration Review* 38 (2): 747–74. <https://doi.org/10.1111/j.1747-7379.2004.tb00216.x>.
- Andersson, G., and K. Scott. 2007. “Childbearing Dynamics of Couples in a Universalistic Welfare State.” *Demographic Research* 17 (30): 897–938. <https://doi.org/10.4054/DemRes.2007.17.30>.
- Baykara-Krumme, H., and N. Milewski. 2017. “Fertility Patterns Among Turkish Women in Turkey and Abroad: The Effects of International Mobility, Migrant Generation, and Family Background.” *European Journal of Population* 33 (3): 409–36. <https://doi.org/10.1007/s10680-017-9413-9>.
- Brüderl, J., S. Drobnič, K. Hank, F. J. Neyer, S. Walper, P. Alt, E. Borschel et al. 2021. “The German Family Panel (pairfam).” ZA5678 Data file Version 12.0.0.
- Brüderl, J., C. Schmiedeberg, L. Castiglioni, O. Arránz Becker, P. Buhr, D. Fuß, V. Ludwig, J. Schröder, and N. Schumann. 2021. “The German Family Panel: Study Design and Cumulated Field Report (Waves 1 to 12).” https://search.gesis.org/research_data/ZA5678?doi=10.4232/pairfam.5678.12.0.0. Release 12.0.
- Caliendo, M., and S. Kopeinig. 2008. “Some Practical Guidelines for the Implementation of Propensity Score Matching.” *Journal of Economic Surveys* 22 (1): 31–72.
- Cantalini, S., and N. Panichella. 2019. “The Fertility of Male Immigrants: A Comparative Study on Six Western European Countries.” *European Societies* 21 (1): 101–29. <https://doi.org/10.1080/14616696.2018.1511820>.
- Caron, L., and M. Ichou. 2020. “High Selection, Low Success: The Heterogeneous Effect of Migrants’ Access to Employment on Their Remigration.” *International Migration Review* 54 (4): 1104–33. <https://doi.org/10.1177/0197918320904925>.
- Castro Torres, A. F., and E. Y. Gutierrez-Vazquez. 2022. “Gendered and Stratified Family Formation Trajectories in the Context of Latin American Migration, 1950 to 2000.”

- International Migration Review* 56 (4): 1107-1140.
<https://doi.org/10.1177/01979183211067768>.
- Constant, A. F. 2021. "Return, Circular, and Onward Migration Decisions in a Knowledge Society." In *The Economic Geography of Cross-Border Migration*, edited by K. Kourtit, B. Newbold, P. Nijkamp, and M. Partridge, 133–56. Springer eBook Collection. Cham: Springer International Publishing.
https://link.springer.com/chapter/10.1007/978-3-030-48291-6_7.
- Cooke, T. J., P. Boyle, K. Couch, and P. Feijten. 2009. "A Longitudinal Analysis of Family Migration and the Gender Gap in Earnings in the United States and Great Britain." *Demography* 46 (1): 147–67. <https://doi.org/10.1353/dem.0.0036>.
- Courgeau, D. 1985. "Interaction Between Spatial Mobility, Family and Career Life-Cycle: A French Survey." *European Sociological Review* 1 (2): 139–62.
<https://doi.org/10.1093/oxfordjournals.esr.a036382>.
- Courgeau, D. 1989. "Family Formation and Urbanization." *Population: An English Selection* 44 (1): 123–46.
- Erlinghagen, M. 2021. "Migration Motives, Timing, and Outcomes of Internationally Mobile Couples." In *The Global Lives of German Migrants: Consequences of International Migration Across the Life Course*, edited by M. Erlinghagen, A. Ette, N. F. Schneider and N. Witte, 157–71. Cham: Springer.
- Erlinghagen, M., N. Schneider, and A. Ette. 2022. "German Emigration and Remigration Panel Study (GERPS) 2018." ZA7583 Data file Version 2.1.0.
- Ette, A., J. P. Décieux, M. Erlinghagen, J. G. Auditor, N. F. Schneider, and N. Witte. 2021. "Surveying Across Borders: The Experience of the German Emigration and Remigration Panel Study." In *The Global Lives of German Migrants: Consequences of International Migration Across the Life Course*, edited by M. Erlinghagen, A. Ette, N. F. Schneider and N. Witte, 21–39. Cham: Springer.
- Ette, A., J. P. P. Décieux, M. Erlinghagen, A. Genoni, J. G. Auditor, F. Knirsch, S. Kühne et al. 2020. "German Emigration and Remigration Panel Study (GERPS): Methodology and Data Manual of the Baseline Survey (Wave 1)." BiB Daten- und Methodenberichte 1.
- Ette, A., and M. Erlinghagen. 2021. "Structures of German Emigration and Remigration: Historical Developments and Demographic Patterns." In *The Global Lives of German Migrants: Consequences of International Migration Across the Life Course*, edited by M. Erlinghagen, A. Ette, N. F. Schneider and N. Witte, 43–63. Cham: Springer.

- Gabrielli, G., A. Paterno, and M. J. White. 2007. "The Impact of Origin Region and Internal Migration on Italian Fertility." *Demographic Research* 17 (24): 705–40.
<https://doi.org/10.4054/DemRes.2007.17.24>.
- Gmelch, G. 1980. "Return Migration." *Annual Review of Anthropology* 9 (1): 135–234.
<https://doi.org/10.1146/annurev.an.09.100180.001031>.
- Goldstein, S., and A. Goldstein. 1981. "The Impact of Migration on Fertility: An 'Own Children' Analysis for Thailand." *Population Studies* 35 (2): 265–84.
<https://doi.org/10.1080/00324728.1981.10404967>.
- Goldstein, S., and A. Goldstein. 1984. "Inter-Relations Between Migration and Fertility: Their Significance for Urbanisation in Malaysia." *Habitat International* 8 (1): 93–103.
[https://doi.org/10.1016/0197-3975\(84\)90030-4](https://doi.org/10.1016/0197-3975(84)90030-4).
- Hainmueller, J. 2012. "Entropy Balancing for Causal Effects: A Multivariate Reweighting Method to Produce Balanced Samples in Observational Studies." *Political Analysis* 20 (1): 25–46. <https://doi.org/10.1093/pan/mpr025>.
- Hainmueller, J., and Y. Xu. 2013. "Ebalance: A Stata Package for Entropy Balancing." *Journal of Statistical Software* 54 (7): 1–18.
- Hank, K., and A. Steinbach. 2021. "The Virus Changed Everything, Didn't It? Couples' Division of Housework and Childcare Before and During the Corona Crisis." *Journal of Family Research* 33 (1): 99–114. <https://doi.org/10.20377/jfr-488>.
- Huinink, J., J. Brüderl, B. Nauck, S. Walper, L. Castiglioni, and M. Feldhaus. 2011. "Panel Analysis of Intimate Relationships and Family Dynamics (Pairfam): Conceptual Framework and Design." *Zeitschrift für Familienforschung* 23 (1): 77–101.
<https://doi.org/10.20377/jfr-235>.
- Huinink, J., and M. Feldhaus. 2009. "Family Research from the Life Course Perspective." *International Sociology* 24 (3): 299–324. <https://doi.org/10.1177/0268580909102910>.
- Imbens, G. W. 2004. "Nonparametric Estimation of Average Treatment Effects Under Exogeneity: A Review." *Review of Economics and Statistics* 86 (1): 4–29.
<https://doi.org/10.1162/003465304323023651>.
- Impicciatore, R., G. Gabrielli, and A. Paterno. 2020. "Migrants' Fertility in Italy: A Comparison Between Origin and Destination." *European Journal of Population* 36 (4): 799–825. <https://doi.org/10.1007/s10680-019-09553-w>.
- Jenkins, S. P. 1995. "Easy Estimation Methods for Discrete-Time Duration Models." *Oxford Bulletin of Economics and Statistics* 57 (1): 129–38.

- Kapitány, B., and Z. Spéder. 2012. “Realization, Postponement or Abandonment of Childbearing Intentions in Four European Countries.” *Population* 67 (4): 599–629. <https://www.cairn-int.info/journal-population-2012-4-page-599.htm?wt.tsrc=cairnpdf>.
- Kley, S. 2011. “Explaining the Stages of Migration Within a Life-Course Framework.” *European Sociological Review* 27 (4): 469–86. <https://doi.org/10.1093/esr/jcq020>.
- Kraus, E. K. 2019. “Family Formation Trajectories Across Borders: A Sequence Analysis Approach to Senegalese Migrants in Europe.” *Advances in Life Course Research* 42:100290. <https://doi.org/10.1016/j.alcr.2019.100290>.
- Kreyenfeld, M., and A. Vatterrott. 2018. “Salmon Migration and Fertility in East Germany – an Analysis of Birth Dynamics Around German Reunification.” *Journal of Family Research* 30 (3): 247–68. <https://doi.org/10.3224/zff.v30i3.02>.
- Kuhnt, A.-K., and H. Trappe. 2016. “Channels of Social Influence on the Realization of Short-Term Fertility Intentions in Germany.” *Advances in Life Course Research* 27:16–29. <https://doi.org/10.1016/j.alcr.2015.10.002>.
- Kulu, H. 2006. “Fertility of Internal Migrants: Comparison Between Austria and Poland.” *Population Space and Place* 12 (3): 147–70. <https://doi.org/10.1002/psp.406>.
- Lindstrom, D. P., and S. Giorguli-Saucedo. 2007. “The Interrelationship Between Fertility, Family Maintenance, and Mexico-U.S. Migration.” *Demographic Research* 17 (28): 821–58. <https://escholarship.org/uc/item/09z2q1f5>.
- Lindstrom, D. P., A. Hernandez-Jabalera, and S. Giorguli Saucedo. 2021. “Migration, Family Formation and Fertility in the Americas.” *International Migration Review* 55 (1): 280–314. <https://doi.org/10.1177/0197918320923353>.
- Lübke, C. 2015. “How Migration Affects the Timing of Childbearing: The Transition to a First Birth Among Polish Women in Britain.” *European Journal of Population* 31 (1): 1–20. <https://doi.org/10.1007/s10680-014-9326-9>.
- Lübke, C., J. P. Décieux, M. Erlinghagen, and G. C. Wagner. 2021. “Comparing the Risk Attitudes of Internationally Mobile and Non-Mobile Germans.” In *The Global Lives of German Migrants: Consequences of International Migration Across the Life Course*, edited by M. Erlinghagen, A. Ette, N. F. Schneider and N. Witte, 83–100. Cham: Springer.
- Mansfeld, L. 2023. “International Migration and Its Short-term Effect on Partnership Stability.” *Population, Space and Place* 29 (4): e38. <https://doi.org/10.1002/psp.2638>.

- Milewski, N. 2007. "First Child of Immigrant Workers and Their Descendants in West Germany." *Demographic Research* 17 (29): 859–96.
<https://doi.org/10.4054/DemRes.2007.17.29>.
- Milewski, N., and H. Baykara-Krumme. 2021. "Fertility Behavior of Turkish Migrant Men in Europe Compared to Stayers at Origin." *Journal of International Migration and Integration* 24:115–36. <https://doi.org/10.1007/s12134-021-00879-1>.
- 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 (1): 55–76.
- Mussino, E., and S. Cantalini. 2022. "Influences of Origin and Destination on Migrant Fertility in Europe." *Population, Space and Place* 28 (7): e2567.
<https://doi.org/10.1002/psp.2567>.
- Mussino, E., and A. A. van Raalte. 2013. "Immigrant Fertility: A Comparative Study Between Italy and Russia." *International Migration* 51 (2): 148–64.
<https://doi.org/10.1111/j.1468-2435.2012.00760.x>.
- Niedomysl, T. 2011. "How Migration Motives Change over Migration Distance: Evidence on Variation Across Socio-Economic and Demographic Groups." *Regional Studies* 45 (6): 843–55. <https://doi.org/10.1080/00343401003614266>.
- Okun, B. S., and S. Kagya. 2012. "Fertility Change Among Post-1989 Immigrants to Israel from the Former Soviet Union." *International Migration Review* 46 (4): 792–827.
<https://doi.org/10.1111/imre.12001>.
- Pison, G. 2019. "The number and proportion of immigrants in the population: International comparisons." *Population Societies* 563 (2): 1–4. <https://www.cairn-int.info/journal-population-and-societies-2019-2-page-1.htm>.
- Robards, J., and A. Berrington. 2016. "The Fertility of Recent Migrants to England and Wales." *Demographic Research* 34 (36): 1037–52.
<https://doi.org/10.4054/demres.2016.34.36>.
- Schmid, S., and M. Kohls. 2011. "Generatives Verhalten und Migration: Eine Bestandsaufnahme des generativen Verhaltens von Migrantinnen in Deutschland." *Forschungsbericht* 978-3-9812115-8-0.
<https://www.ssoar.info/ssoar/handle/document/68142>.
- 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): 1437–70. <https://doi.org/10.1093/sf/76.4.1437>.

- Statistisches Bundesamt. 2022. "Zahl Der Woche Nr. 21 Vom 24. Mai 2022." Accessed October 05, 2023. https://www.destatis.de/DE/Presse/Pressemitteilungen/Zahl-der-Woche/2022/PD22_21_p002.html.
- Tønnessen, M., and E. Mussino. 2020. "Fertility Patterns of Migrants from Low-Fertility Countries in Norway." *Demographic Research* 42 (31): 859–74. <https://doi.org/10.4054/demres.2020.42.31>.
- Wahba, J. 2015. "Selection, Selection, Selection: The Impact of Return Migration." *Journal of Population Economics* 28 (3): 535–63. <https://doi.org/10.1007/s00148-015-0541-4>.
- White, K. L. 2011. Determinants of Fertility Across Context: A Comparison of Mexican and Turkish Immigrant Women. Doctoral dissertation: University of Texas at Austin. <http://hdl.handle.net/2152/ETD-UT-2011-05-2904>.
- White, M. J., L. Moreno, and S. Guo. 1995. "The Interrelation of Fertility and Geographic Mobility in Peru: A Hazards Model Analysis." *The International Migration Review* 29 (2): 492–514. <https://doi.org/10.1177/019791839502900207>.
- Wilson, B. 2020. "Understanding How Immigrant Fertility Differentials Vary over the Reproductive Life Course." *European Journal of Population* 36 (3): 465–98. <https://doi.org/10.1007/s10680-019-09536-x>.
- Witte, N., R. Pollack, and A. Ette. 2021. "Social Origins of German Emigrants: Maintaining Social Status Through International Mobility?" In *The Global Lives of German Migrants: Consequences of International Migration Across the Life Course*, edited by M. Erlinghagen, A. Ette, N. F. Schneider and N. Witte, 139–53. Cham: Springer.
- Wolf, K. 2016. "Marriage Migration Versus Family Reunification: How Does the Marriage and Migration History Affect the Timing of First and Second Childbirth Among Turkish Immigrants in Germany?" *European Journal of Population* 32 (5): 731–59. <https://doi.org/10.1007/s10680-016-9402-4>.
- Wolf, K., and C. H. Mulder. 2019. "Comparing the Fertility of Ghanaian Migrants in Europe with Nonmigrants in Ghana." *Population Space and Place* 25 (2): e2171. <https://doi.org/10.1002/psp.2171>.
- Wooldridge, J. M. 2013. *Introductory Econometrics: A Modern Approach*. 5. ed. Mason, Ohio: South-Western Cengage Learning

Appendix

Table A1. Entropy Balancing for Treatment = Migration (All)

Group	Treatment	Mean		Variance		Skewness		
		Control Before	Control After	Treatment Before	Control Before	Treatment Control	Control After	
Time (referring to EB)								
Age Group (ref: 19-28)								
29-38	0.45	0.28	0.45	0.25	0.20	0.19	0.99	0.19
39-48	0.14	0.16	0.14	0.12	0.13	2.05	1.86	2.05
Female	0.54	0.45	0.54	0.25	0.25	-0.15	0.20	-0.15
Foreign roots	0.31	0.11	0.31	0.21	0.10	0.84	2.42	0.84
Tertiary Education	0.75	0.26	0.75	0.19	0.19	-1.15	1.08	-1.14
Employment status (ref.: not employed)								
Unemployed	0.03	0.04	0.03	0.03	0.04	5.40	4.47	5.40
(Self)Employed	0.59	0.71	0.59	0.24	0.20	-0.38	-0.95	-0.38
Other	0.35	0.24	0.35	0.23	0.18	0.65	1.23	0.65
Family status (ref: not married, no partner in household)								
Not married, partner in household	0.13	0.23	0.13	0.12	0.18	2.15	1.30	2.15
Married, no partner in household	0.02	0.01	0.02	0.02	0.01	6.50	13.29	6.51
Married, partner in household	0.15	0.11	0.15	0.13	0.09	1.95	2.57	1.96
Risk-taking (ref.: indifferent)								
Rather not willing to assume risks	0.23	0.38	0.23	0.18	0.24	1.29	0.48	1.29
Rather willing to assume risks	0.65	0.38	0.64	0.23	0.24	-0.60	0.50	-0.60

Note: Missing categories included but not displayed.

Table A2. Entropy Balancing for Treatment = Emigration

Group	Mean		Variance		Skewness		
	Treatment	Control	Treatment	Control	Treatment	Control	
Time (referring to EB)		Before	After	Before	After	Before	After
Age Group (ref: 19-28)							
29-38	0.47	0.28	0.47	0.20	0.25	0.99	0.13
39-48	0.12	0.16	0.12	0.13	0.11	1.86	2.28
Female	0.54	0.45	0.54	0.25	0.25	0.20	-0.14
Foreign roots	0.27	0.11	0.27	0.10	0.120	2.42	1.02
Tertiary Education	0.80	0.26	0.80	0.19	0.16	1.08	-1.51
Employment status (ref.: not employed)							
Unemployed	0.05	0.04	0.05	0.04	0.04	4.47	4.33
(Self)Employed	0.64	0.71	0.64	0.20	0.23	-0.95	-0.57
Other	0.30	0.24	0.30	0.18	0.21	1.23	0.89
Family status (ref: not married, no partner in household)							
Not married, partner in household	0.14	0.23	0.14	0.18	0.12	1.30	2.05
Married, no partner in household	0.03	0.01	0.03	0.01	0.02	13.29	6.08
Married, partner in household	0.14	0.11	0.14	0.09	0.12	2.57	2.09
Risk-taking (ref.: indifferent)							
Rather not willing to assume risks	0.23	0.38	0.23	0.24	0.18	0.48	1.26
Rather willing to assume risks	0.63	0.38	0.63	0.24	0.23	0.50	-0.52

Note: Missing categories included but not displayed.

Table A3. Entropy Balancing for Treatment = Remigration

Group	Mean		Variance		Skewness		
	Treatment	Control	Treatment	Control	Treatment	Control	
Time (referring to EB)		Before	After	Before	After	Before	After
Age Group (ref: 19-28)							
29-38	0.44	0.28	0.44	0.20	0.25	0.99	0.23
39-48	0.15	0.16	0.16	0.13	0.13	1.86	1.91
Female	0.54	0.45	0.54	0.25	0.25	0.20	-0.15
Foreign roots	0.33	0.11	0.33	0.10	0.22	2.42	0.73
Tertiary Education	0.71	0.26	0.71	0.19	0.21	1.08	-0.94
Employment status (ref.: not employed)							
Unemployed	0.02	0.04	0.02	0.04	0.02	4.47	6.67
(Self)Employed	0.57	0.71	0.57	0.20	0.25	-0.95	-0.27
Other	0.38	0.24	0.38	0.18	0.24	1.23	0.51
Family status (ref: not married, no partner in household)							
Not married, partner in household	0.13	0.23	0.13	0.18	0.11	1.30	2.22
Married, no partner in household	0.02	0.01	0.02	0.01	0.02	13.29	6.84
Married, partner in household	0.16	0.11	0.16	0.10	0.13	2.57	1.87
Risk-taking (ref.: indifferent)							
Rather not willing to assume risks	0.23	0.38	0.226	0.24	0.18	0.48	1.31
Rather willing to assume risks	0.66	0.38	0.657	0.24	0.23	0.50	-0.66

Note: Missing categories included but not displayed.

Table A4. Rather Important Migration Motives (%)

	Emigrants		Remigrants	
	Female	Male	Female	Male
Job-related: own	73.85	83.51	69.67	74.50
Job-related: partner	59.33	39.65	39.25	35.29
Other partnership-related	56.30	38.17	42.32	39.62
Family-related	36.68	26.38	63.83	55.40
Financial	42.98	48.73	40.49	34.58
Educational	46.16	40.66	52.12	44.74

Note: Percentage of migrants by migration direction and gender who stated that the respective motives were rather important for their migration decision.

Table A5. Complementary Log-Log Regression on First Birth Controlling for General Health

	(1a)	(2a)	(3a)
	Migrants (all) & non-migrants	Emigrants & non-migrants	Remigrants & non-migrants
Migration (vs. no)	-0.59*** (0.20)	-0.57*** (0.20)	-0.61*** (0.21)
Time (vs. After 1 year)			
After 2 years	1.30** (0.57)	1.28* (0.77)	1.32* (0.69)
After 3 years	1.77*** (0.52)	1.74** (0.75)	1.82*** (0.63)
General health (vs. satisfactory)			
Bad	0.55 (1.10)	0.48 (1.10)	0.58 (1.11)
Not so good	-0.65 (0.56)	-0.58 (0.56)	-0.71 (0.58)
Good	0.09 (0.40)	0.04 (0.39)	0.13 (0.42)
Very good	-0.10 (0.39)	-0.10 (0.39)	-0.11 (0.40)
Constant	-4.11*** (0.61)	-4.02*** (0.81)	-4.20*** (0.73)
Observations	18,886	10,238	13,096

Note: Only subsets of the data are used (see header). Estimation results based on complementary loglog regression using weights obtained from entropy balancing. Standard errors in parenthesis. Significance levels: *** p < 0.01, ** p < 0.05, * p < 0.1.

Article two

Table A6. Summary Statistics of Weights Without Trimming and After Trimming at 99th Percentiles for Entropy Balancing

Weights of control group when compared to	Mean	Standard deviation	Minimum	Maximum
Without trimming				
Migration	3.22	8.22	0.05	145.44
Emigration	1.29	3.18	0.01	59.32
Remigration	1.93	5.20	0.03	84.50
After trimming at the 99th percentile				
Migration	2.93	5.74	0.05	36.56
Emigration	1.20	2.40	0.01	15.28
Remigration	1.76	3.57	0.03	24.67

Note: N = 4,488

Table A7. Complementary Log-Log Regression on First Birth using Trimmed Weights

	(4a) Migrants (all) & non-migrants	(5a) Emigrants & non-migrants	(6a) Remigrants & non-migrants
Migration (vs. no)	-0.55*** (0.17)	-0.53*** (0.18)	-0.57*** (0.19)
Time (vs. After 1 year)			
After 2 years	0.86*** (0.28)	0.89*** (0.29)	0.82*** (0.31)
After 3 years	1.37*** (0.27)	1.35*** (0.27)	1.37*** (0.29)
Constant	-3.73*** (0.25)	-3.70*** (0.26)	-3.73*** (0.28)
Observations	18,926	10,278	13,136

Note: Only subsets of the data are used (see header). Estimation results based on complementary loglog regression using weights obtained from entropy balancing. Standard errors in parenthesis. Significance levels: *** p < 0.01, ** p < 0.05, * p < 0.1.

ARTICLE THREE

CORRELATIONS BETWEEN FAMILY PATTERNS AND SHORT-TERM ECONOMIC OUTCOMES OF EMIGRATION

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CORRELATIONS BETWEEN FAMILY PATTERNS AND SHORT-TERM ECONOMIC OUTCOMES OF EMIGRATION

ABSTRACT

The focus of this paper is on how parental and partnership status as well as status changes (e.g. union dissolution) shape emigrants' economic outcomes, considering both individual- and household-level outcome measures. Using data from German emigrants (GERPS), a two-part strategy accounting for state-dependence of employment trajectories is being applied. Considering not only individual but also destination country characteristics, multilevel models are estimated. Results are highly gendered: For female emigrants, living with their spouse was found to negatively relate to employment probabilities and personal income (individual-level economic outcomes), but benefits were observed at the household level. Similarly, for female emigrants individual-level outcomes were found to be negatively associated with having children and with childbirth. At the same time, male emigrants' economic outcomes after migration were less affected by family status or status change. These results show that even among privileged emigrants from a relatively egalitarian society, traditionally gendered patterns of gains and losses after migration emerge.

INTRODUCTION

Family, gender, and economic outcomes of migration interact in various ways. An individual's or family's economic situation shapes not only migration decisions (DaVanzo, 1976; Mincer, 1978; Sandell, 1977), but also partnership trajectories and fertility decisions (Inanc, 2015; Kalmijn, 2011). Regarding migration and family patterns, on one hand, migration affects partnership stability (Davis & Jennings, 2018; Frank & Wildsmith, 2005; Mansfeld, 2023) and fertility (Adserà & Ferrer, 2016; Lübke, 2015; Wolf, 2016). On the other hand, at least regarding internal moves, migration is often a consequence of changing family constellations (Feijten & van Ham, 2007; Kulu et al., 2021; Mikolai & Kulu, 2018). Furthermore, wages and employment patterns after migration differ by gender and family status (Bevelander & Groeneveld, 2012; Cooke et al., 2009; Rabe, 2011), providing the starting point for this chapter.

At first glance, literature on these topics might appear abundant. Focusing on the economic consequences of family patterns (status, e.g. married, with children; and status changes, e.g.

union dissolution, childbirth) in the context of migration, however, there is a lack of knowledge regarding certain aspects. First, not much is known about the relationship between migrants' family status changes and economic outcomes. For example regarding partnership status changes, to my knowledge, only two studies have approached this research gap (De Jong & Graefe, 2008, in the context of internal migration; Khoudja & Platt, 2018, assessing women with different ethnic origins in the United Kingdom). Second, most studies assess objective economic outcome measures such as income or employment status at the individual level (e.g. Khoudja & Platt, 2018; Kogan, 2011). Although objective outcome measures are important, it is also informative to understand how economic outcomes are perceived by migrants, because migrants' experiences and subjectively perceived realities are crucial in shaping (migration) decisions (e.g. Huinink & Kley, 2008; Kley, 2011). Similarly, individual-level outcomes are important, but economic variables need to be considered at the household-level as well. The consideration of both individual- and household-level outcomes is informative to learn about distributional patterns within families and to infer the importance of these economic variables in migration decisions. Third, most existing research has been conducted in the context of internal migration, or has been based on immigrant samples in a single destination country. The extent to which findings regarding internal geographic mobility are transferable to the context of international migration is not clear. Internal migration involves lower costs (Krieger, 2020) and consequences might differ compared to international (long-distance) migration. For example, differences related to migration distance have been found in several studies, assessing partnership outcomes (Boyle et al., 2008; Shapira et al., 2019) as well as wages and subjective wellbeing (Preston & Grimes, 2019). Moreover, using immigrant samples does not allow for assessment of short-term outcomes and, given that remigration is not at random (Caron & Ichou, 2020; Wahba, 2015), is likely to be biased due to selective remigration (Ette et al., 2021).

Taken together, these three research gaps lead to the following research question: How do parental and partnership status as well as status changes shape emigrants' economic outcomes? And do these patterns vary by gender or outcome measures (individual- vs. household-level)? Data from the German Emigration and Remigration Panel Study (GERPS; Erlinghagen et al., 2022) were used, focussing on emigrants, i.e. German nationals who have recently moved abroad. Considering status changes, different dimensions of economic outcomes, and assessing men and women separately in the context of international migration, this research reaches beyond previous approaches. Doing so, we gain insights into gender-linked experiences and a broader picture of the economic consequences of family patterns (status and status changes) in light of migration.

The following structure is used for this chapter: First, theoretical considerations regarding potential effects of family patterns on migrants' economic outcomes are outlined. Then, an overview of previous empirical literature is provided. This is followed by a presentation of the data and methods used to assess the question guiding the current research. Subsequently, multivariate results are presented. To end the paper, the results are discussed in view of theoretical arguments.

THEORETICAL CONSIDERATIONS

The theoretical section of this paper consists of two subsections. Part one deals with the question of to what extent family members and changing family constellations represent a barrier or bridge to additional social capital and thereby have the potential to worsen or enhance individual-level economic outcomes among emigrants. Building on these considerations, part two focuses on the economic outcomes of emigration, making use of different theoretical strands to hypothesize about potential differences between individual- and household-level economic outcomes. In both subsections, potential gender differences are identified. Even though distinctions between subjective and objective outcomes are not made explicit in this section, it should be noted that theoretical considerations (in contrast to most empirical studies, see section 3) acknowledge that migration decisions are based on perceived opportunity differentials (e.g. Mincer, 1978; Sandell, 1977) or anticipated bargaining power (e.g. Ott, 1992), thus expectations, which are by definition subjective. Subjective economic outcomes highly correlate with objective economic outcomes (Williams et al., 2017), and subjective economic outcomes relate more strongly to other outcome measures such as subjective wellbeing than objective economic outcomes relate to such outcome measures (Tan et al., 2020; Tibesigwa et al., 2016). In the context of international migration, utilizing subjective outcomes helps to reduce inaccuracy and increase understanding of the economic experience because subjective assessments can take into account country differences in income level, support systems, costs of living, etc.

Migration, the family, and social capital

Thinking about general effects of the family on individual economic integration, the concept of social capital appears relevant, as migrants' social capital may change in the course of migration (see below) and social capital is generally assumed to impact economic outcomes. Congruent with the approaches of all scholars engaged in the discussion on social capital, Lin (2001) defined social capital as an "investment in social relations with expected returns in the marketplace" (p. 19). Individuals interact and form networks to achieve (economic, and

possibly other) benefits (Lin, 2001). Dyadic ties are a specific result of these interactions and crucial to these networks, and Granovetter (1973) further distinguished strong versus weak ties. The strength of a tie is a combination of time spent together, emotional closeness, mutual confiding, and reciprocal services (p. 1,361). Strong ties (e.g. with family members) involve more time commitment, emotional closeness, etc., and the individuals' networks are assumed to overlap more than the networks of dyads with weak ties. This implies that strong ties can provide less new information and fewer indirect contacts than weak ties can provide. Consequently, weak ties appear more helpful on the labour market than strong ties (Granovetter, 1973, 1983).

In addition to strong ties being less helpful than weak ties on the labour market, the family (strong ties) may act as a barrier to building alternative, potentially more helpful social capital (i.e. weak ties). Contact with family members may meet a variety of social needs (Nauck, 2004), thereby competing with or limiting the building of larger social networks (i.e. of weak ties) in the destination country. Especially the presence of a partner may correlate negatively with weak ties, since "marriage is privatizing, as it competes with, even undermines, other relationships, while being single promotes these relationships" (Sarkisian & Gerstel, 2016, p. 362). This might be particularly true immediately following union formation and in early phases of partnerships (Rözer et al., 2015), when partners may be most focused on each other and the new relationship. Similar arguments may apply to parenthood and especially shortly after childbirth and with young children. According to Song (2012), parents' social interactions are constrained given (a) fewer occasions for engaging with high-status people, and (b) less resources for non-children-centered activities and career-oriented networking. Furthermore, migration mostly implies a "shrinking family" (Bonjour & Kraler, 2015, p. 1419; Strasser et al., 2009, p. 171), for example grandparents staying behind. This loss of potential support for reconciling work and family duties may put an additional strain on (at least) one migrant parent's labour market participation. Consequently, the number of friends and extended kin (Schnettler & Wöhler, 2016), interethnic contacts (Martinovic et al., 2009), and the quality of their social capital (Song, 2012) are lower for parents than the childless.

An opposing line of arguments points towards the family representing a bridge to building additional social capital for migrants. The starting point of these arguments is the fact that migrants leave at least part of their social networks behind when moving. This might translate directly into less social capital (e.g. Tulin et al., 2018). As the social network shrinks, and given that migrants can rely less on host country institutions (Lancee, 2012) and services (Sime &

Fox, 2015) than natives can, information and networks accessible via the family may become more crucial. Returns on a certain amount of social capital (in this case, the family) may differ between migrants and non-migrants, which has already been found for other types of social capital (Lu et al., 2013). One explanation would be that the family provides more emotional and instrumental support after migration. This explanation is in line with the finding that migration increases intergenerational solidarity between adult children and their parents (Baykara-Krumme & Fokkema, 2019). Another explanation would be that the available social capital might be more helpful or more applicable after migration. For example, a partner speaking the host country language fluently or knowing about hiring processes in that country appears more beneficial for economic outcomes in the host country compared to when staying in the country of origin. Such skill-spillovers and network effects are likely to take some time to manifest: Marriage-related resources might still be available after divorce (Özcan, 2011) and thus the bridging effect of a partner may still be observed after union dissolution. In contrast, union formation might counteract the effect of a “shrinking family” explained above.

This bridging effect may refer not only to partners but also to children. Given that language acquisition becomes more difficult with increasing age (Nikolov & Djigunovic, 2006), children typically learn a new language faster than their parents do. The children’s language fluency may provide opportunities for parents to communicate with others when they themselves are not (yet) able to articulate their ideas in the host country’s language. At the same time, children may provide an additional motivation for parents to learn the host country’s language, so that the parents can support the children, e.g. at school (Baykara-Krumme, 2020), facilitating contact with locals in the host community. In addition, opportunities to form new ties emerge from social foci (Feld, 1981) and children provide many occasions for shared activities and social gatherings with others. For example, children may link their parents to other parents (Schaeffer, 2013), providers of childcare services, and the neighbourhood (Song, 2012). Although children also provide these links in the non-migratory context, the links might be especially crucial in the migratory context assuming a rather low number of ties to the destination population shortly after arrival.

The effect of social capital on migrant’s economic outcomes may be gender-linked (Aguilera, 2005). In the non-migration context, Özcan (2011) hypothesized that spillover effects of social capital may work primarily in one direction: from men to women. This idea is consistent with the fact that among German emigrants, women tend to be the tied migrant (Erlinghagen, 2021), implying that the male partner potentially already has a job and his social capital may indeed

be more helpful for the female partner than the other way around. Furthermore, if female partners engage more with their children than their male counterparts do (Schäper et al., 2023), the female partners may benefit more from their children's social capital after migration. At the same time, however, also the constraints applying to parents' social interactions (outlined above) might apply more to female than male migrants.

The family and economic consequences of migration

When considering single emigrants, individual-level economic outcomes correspond to household-level economic outcomes. However, at least in the current study context, many international emigrants are coupled (Ette & Erlinghagen, 2021). Thus, both individual- and household-level outcomes of migration are important to understanding the migrant experience. The first relevant theoretical concept to consider these economic outcomes in the context of migration is New Home Economics (NHE). NHE assumed common preferences (Becker, 1974, 1981; Samuelson, 1956) and was based on maximizing the family's joint utility (Becker, 1965): Migration was predicted to take place if the family's utility was expected to increase (Mincer, 1978; Sandell, 1977). That is, household-level economic outcomes can be expected to increase after migration. Turning back to individual-level outcomes, optimal job offers for both partners at the same time and place appear rather unlikely. Thus, in most cases the two partners cannot benefit economically (e.g. via higher individual wages) from migration to the same extent, and the phenomenon of "tied" migration has evolved to describe the scenario in which the individual economic gains of one partner outweigh individual losses of the other (Mincer, 1978). Intrahousehold specialization suggests that (married) couples benefit economically from the division of labour, i.e. one partner focussing on market work and the other on housework (Becker, 1981). Given such specialization – which becomes especially relevant with children or after childbirth – the incentive (or the necessity) for the tied migrant to perform successfully on the labour market further decreases. Considering these worse individual-level outcomes, improvements at the household-level may have a higher priority to the tied than the lead migrant. Due to generally lower earnings and (expected) employment discontinuities, women are expected to be the tied migrant (Mincer, 1978) and the majority of studies show that indeed partnered women tend to benefit less from migration at the individual-level (e.g. Cooke et al., 2009; Rabe, 2011) than men. Thus, household-level economic outcomes can be hypothesized to be of higher priority to women than to men.

Leaving behind the idea of gender-neutrality in migration decisions and acknowledging gender roles (e.g. Bielby & Bielby, 1992; Duncan & Perrucci, 1976; Jürges, 2006), similar predictions

and an additional explanation arise. Due to social norms ascribing the primary responsibility of income generation to men, the male partner's employment options can be assumed to be more crucial to (migration) decisions than the female partner's employment options (Abraham et al., 2010). This has been shown among couples with traditional but not egalitarian gender roles (Jürges, 2006). Even though this might hold true in general, it may be especially important in the migration context as gender roles might not be constant (Lynott & McCandless, 2000), instead changing in the course of migration. Perceiving the destination country as an unknown environment, emigrants may orient themselves in more familiar, rather traditional ways (Erlinghagen, 2021). Thus, individuals may become more traditional with emigration, which affects their individual economic outcomes and implies a stronger tendency towards gendered specialization. Furthermore, considering gender role attitudes, the above hypothesis that women would value household-level economic outcomes more than men could be complemented by the argument that this might hold true especially for women with traditional gender role attitudes. Not following the ideal of economic equality within the relationship, household-level gains driven by the economic success of their male partner become more relevant. Thus, acknowledging the above retraditionalization in the course of migration, women might value household-level economic outcomes more after than before migration.

As an additional theoretical strand, bargaining theory may add to our understanding of post-migration economic outcomes. Instead of assuming that couples share common preferences, bargaining approaches understand family decisions such as migration as the result of a bargaining process based on individual utility function (Lundberg & Pollak, 1996; Ott, 1992). Specifically, bargaining approaches pose that – in the absence of binding long-term contracts (Ott, 1992) – migration takes place only if the bargaining power of the tied migrant does not decrease too much (Abraham et al., 2010). This bargaining power is assumed to depend crucially on the individual's economic standing (Abraham et al., 2010; Ott, 1992). Compared to the expectations according to NHE and considering gender roles, bargaining approaches predict more female labour force participation and more similar individual-level outcomes of the two migrating partners. This would be expected particularly if both partners were employed prior to migration. Still, current research shows that post-migration individual economic outcomes are far from equal (see section 3). Within the bargaining framework, two potential explanations for post-migration economic inequality arise. First, in addition to pre-migration economic asymmetries (and thus asymmetric bargaining power) and gender roles shaping bargaining outcomes, the different value that women and men ascribe to household-level economic outcomes may explain such migration decisions. In particular, in bargaining

approaches individual preferences are still assumed to include household-level goods (Lundberg & Pollak, 1996), but in a gender-asymmetric way. If women are in weaker individual economic positions prior to migration (and thus have lower bargaining power), these women might benefit from household-level gains from migration and thus these outcomes might be more important to them than to men. Thus, even though migration decisions might not be beneficial or may even be detrimental in the long-term due to a worsening of women's bargaining position after a move, women might agree for sake of short-term benefits. Second, relationship-specific investments may help to overcome the problem of non-binding contracts (Abraham et al., 2010) by increasing the sunk costs of that relationship (Brines & Joyner, 1999). Thereby, such investments could make tied (mostly female) migrants feel more comfortable with decreases in bargaining power. Migration might be a relationship-specific investment. Thus, coupled migrants may be more likely to compromise on individual-level economic outcomes compared to non-migrants. Among these migrants, relationship-specific investments such as a joint household, marriage, and/or children may further explain these gendered patterns post-migration.

Taken together, all theoretical strands outlined here help to understand gendered individual economic outcomes as well as gendered evaluations of importance of household-level economic outcomes. Thus, gender differences regarding all outcome levels can be expected.

PREVIOUS EMPIRICAL FINDINGS

The following literature review focuses on the role of family patterns (partnership and parental status as well as status changes) in the context of migration. Only a few studies in the context of international migration exist, and so this section also includes findings from research in the context of internal migration.

Individual-level economic outcomes

For women, the family appears to present a barrier to successful economic outcomes. The vast majority of studies have found that having a partner (primarily being married) is associated with worse economic outcomes among female migrants. This holds for the few studies in the international migration context (Bevelander & Groeneveld, 2012; Kogan, 2011) and a bulk of studies assessing internal migration (Boyle et al., 2001; Boyle et al., 2009; Clark & Huang, 2006; Cooke et al., 2009; Jacobsen & Levin, 2000; Nivalainen, 2005; Preston & Grimes, 2019; Rabe, 2011; Shauman & Noonan, 2007). Similarly, having children appears to be a barrier to female migrants' economic outcomes. This finding is consistent across different individual-level economic outcome measures in the contexts of both internal (Cooke, 2001; Nilsson, 2001)

and international (Bevelander & Groeneveld, 2012; Khoudja & Platt, 2018; Kogan, 2011) migration.

In contrast, several studies have indicated that the family may serve as a bridge to successful economic outcomes after migration for men. Assessing coupled internal migrants, many studies have found that men benefit in terms of individual economic outcomes (Cooke, 2003; Cooke et al., 2009; Nilsson, 2001; Nivalainen, 2005; Preston & Grimes, 2019). Furthermore, having (older) children was found to be associated with a slight increase in men's earnings after internal migration (Nilsson, 2001) and to have a positive relationship with employment in the context of international migration (Kogan, 2011).

Little empirical evidence exists regarding the role of partnership status changes in shaping migrants' economic outcomes. The one study that was found to address this topic provides some evidence that both union formation and dissolution represent a bridge to entering the labour market (Khoudja & Platt, 2018). In contrast, childbirth appears to act as a barrier to women's economic success after migration in the context of both internal (Clark & Huang, 2006; Cooke et al., 2009) and international migration (Khoudja & Platt, 2018). However, the extent to which this (negative) effect of childbirth differs between migrant and non-migrant women is not clear. Assessing internal migration, no difference between migrants and non-migrants in the effect of childbirth on income was found (Cooke, 2003). In the context of international migration, the negative consequences of childbirth on employment and working hours are less pronounced among migrants, which may (at least partially) be explained by differences in pre-birth starting levels (Lee et al., 2020).

Household-level economic outcomes

Research on the role of partnership and parental status for household-level economic outcomes in the migration context is scarce. Existing studies tend to find increases in household-level income after migration (e.g. Cooke et al., 2009; Preston & Grimes, 2019). However, in the context of internal migration, such an effect has been observed only for high-income families where the husband was the primary wage-earner (Cooke, 2003). Indeed, that same study found the effect to be driven only by an increase in the husbands' income (Cooke, 2003). Regarding parental status, results appear to depend on the country context: In the context of internal migration, total family earnings are positively related to number of children in the United States (US), but a negative link was found in Great Britain (Cooke et al., 2009).

Similarly, evidence on the effect of family status changes on household-level economic outcomes after migration is quite sparse and inconsistent. To my knowledge, only two studies

exist. In one study, De Jong and Graefe (2008) found that union dissolution has negative consequences in terms of family income and employment, but the effects of marriage and childbirth appear to be variable and depend on (a) migration distance and (b) the timing of migration relative to the specific family change (i.e. whether for example marriage took place prior to or after the move). In the other study, Cooke et al. (2009) found a positive association between childbirth and family earnings in Great Britain, but not in the US.

Research gap

Several research gaps can be deduced from this literature review. First, not much is known about the role of partnership and parental status changes for economic outcomes in the context of migration. This lack of information pertains to both individual-level and household-level outcomes. Second, regarding outcome measures, previous literature has focused on objective outcome measures at (mostly) the individual and (less often) the household level. Thus, not much information about subjective and household-level outcome measures is available. Third, most of the presented findings are based on internal migration and some are based on (international) immigrant samples in one destination country. As a result, not much is known about the economic outcomes of recent international migrants. The aim of the current paper is to approach these three major research gaps by (a) considering status changes, (b) assessing both individual- and household-level incomes and relying primarily on subjective outcome measures, and (c) doing so in the context of recent emigration from Germany.

DATA AND METHODS

Data and sample restrictions

Using the dataset of GERPS (Erlinghagen et al., 2022), the research topic is explored in the context of voluntary migration from a highly industrialized welfare state. GERPS comprises information of German nationals aged 20 to 70 years who emigrated from or remigrated to Germany between July 2017 and June 2018 (see detailed description of the data in Ette et al., 2020). Analyses focused on emigrants and were based on wave one. In total, wave 1 comprises of information on 4,928 emigrants. Including only those who migrated in 2017 or 2018 decreased the dataset to 3,841 respondents. In this reduced sample, average time between emigration and interview was one year, which allowed assessment of the short-term consequences of emigration. To assess integration pathways of individuals previously economically integrated into German society, the sample was further restricted to respondents of working age who were employed, self-employed, or civil servants prior to migration, such that 2,421 respondents remained in the sample. This criteria stems from the fact that current

employment status is not independent of past employment status (see e.g. Boyle et al., 2009). It should be noted that this restriction was not applied to the present data for the estimation of probability of employment (table 4) but was applied for subsequent regressions. Additionally, those who did not complete the whole questionnaire ($n = 69$), or did not indicate their sex ($n = 13$) or age ($n = 14$), were excluded such that 2,325 respondents remained in the sample.

As will be outlined below, multilevel models including country-level covariates were estimated, and these analyses included a reduction of the overall sample to 2,203 respondents, because respondents were removed from the sample if no individual country information were available due to data protection regulations. Furthermore, to properly perform multilevel analysis, destination countries were included only if the data contained at least five observations for both the female and the male samples. A minimum size of five observations per group is common in longitudinal analyses and family research (Maas & Hox, 2005) and considered sufficient for this study. This restriction further reduced the analytical sample to 2,103 observations. An overview of the destination countries comprised, including the number of observations and descriptive statistics on country-level indicators, can be found in the appendix (table 3).

Observations for each dependent variable (described below) differed in number, with $n = 2,088$ emigrants for employment status, $n = 2,025$ emigrants for subjective change of personal income, $n = 1,964$ emigrants for subjective change of household income, and $n = 2,097$ emigrants for subjective change of living standard.

Choice of variables

Two sets of explanatory variables were used. The first set of explanatory variables referred to partnership and parental status after migration and the second set of explanatory variables referred to partnership and parental status changes between three months prior to migration and at the time of the first interview after emigration. Partnership status was assessed using a composite measure including whether the respective person was in a partnership, his/her marital status, and living arrangement (i.e. whether s/he lives with that partner or not). This differentiation by marital status is used because marriage as an institution compared to unmarried cohabitation reduces income risks (Hess, 2004; Özcan, 2011). Furthermore, living arrangements are considered, because in a joint household resources can be pooled and thus living arrangements can be assumed to have a direct effect on household-level economic outcomes. Parental status is a categorical measure indicating whether there were no children in the household, the youngest child in the household was aged 0-5, or the youngest child was aged 6-16 years. Assessing partnership status change, a categorical variable indicated whether

a person was continuously in a partnership, continuously single, experienced a union dissolution, or formed a new partnership. In cases where respondents experienced both union dissolution (prior to migration) and subsequently the formation of a new union, their status change was considered as experiencing union dissolution. Importantly, if both union dissolution and the formation of a new union took place after migration, their experience was not indicated in the data. Furthermore, parental status change was assessed using a dummy variable to indicate whether a new child was born or not. Importantly, both parental status and parental status change measures relied on children living in the same household with the respondent.

As outcome measures, both subjective and objective economic outcomes were considered. Employment status was used as an objective measure. This variable indicates whether a person was employed at the time of the first interview (after migration) or not. Unfortunately, no objective measure of household income was available in the dataset. Instead, subjective comparisons of different dimensions of the current economic situation with the situation prior to migration were considered. These subjective variables included both personal and household income as well as living standard. Respondents were asked to indicate the extent of change in all three variables on a scale ranging from “much better than in Germany” (1) to “much worse than in Germany” (5). The resulting variables were recoded as binary measures indicating whether a situation got better (=1) or not, i.e. remained the same/got worse (=0).

General determinants of individual economic outcomes include age (Aaberge & Mogstad, 2015), health (Jones et al., 2020), and education (Harmon et al., 2003). In the context of migration, host country language proficiency (Adserà & Pytliková, 2016) and previous migration experience (Knapp et al., 2013) have also been shown to be relevant. Additionally, differences between destination countries may occur. The effect of migration on employment patterns (Clark & Huang, 2006; Lersch, 2013) as well as the evolution of employment patterns after life course changes (Anxo et al., 2006) have been found to differ between countries. Such differences may be explained by different economic prospects (Åslund & Rooth, 2007; Dustmann et al., 2010) but also by institutional settings, and by potential to reconcile family and working life (Stier et al., 2001; Thévenon, 2016) in different countries.

Thus, since individual- and household-level economic outcomes may depend not only on individual-level characteristics, but also on country-level characteristics, covariates were included at both the individual and the destination country level. At the individual level, a categorical measure of age at the time of the first interview was included, indicating whether a person is aged 19-28, 29-38, 39-48, or 49-58 years. A subjective measure of health indicated

whether a person possessed good health (=1) or not. Considering both general and host-country-specific human capital, a categorical variable of education (based on the International Standard Classification of Education, ISCED) and a measure of self-ranked destination country language proficiency was used. To assess previous migration experience, immigrant origin when living in Germany (coded as 0 or 1) and the duration of previous long-term stays outside Germany (no, <2 years, 2 to <5 years, or 5 and more years) were included.

In contrast to the other variables discussed thus far, which were taken from GERPS, covariates at the (destination) country level were derived from other data sources. Individual- and household-level economic performance generally depends on the overall economic situation in the destination country. Two indicators were included to account for country-level economic situation. First, a dummy based on the World Bank's classification of income groups (The World Bank, 2022) was used to indicate whether the country has been categorized as a high- vs. upper middle-income country (low- and lower middle-income countries were not present in the sample). Second, the unemployment rate in the respective migration year (International Labour Organization, 2023) was used. Furthermore, family policies and support facilitate the reconciliation of family and work life, thereby affecting economic outcomes. To assess family policies, total public social expenditure on families (% of GDP) were included. Additionally, the percentage of children aged 0-2 enrolled in formal childcare and pre-school, which can be understood as a measure of both provision and social acceptance of early childcare, was used. The latter two indicators were drawn from the Organisation for Economic Co-Operation and Development (OECD, 2023).

Estimation strategy

Assessing emigrants who were employed prior to migration, it appears crucial to consider "state dependence" (Boyle et al., 2009; Heckman, 1991; Heckman & Borjas, 1980) and acknowledge that previous employment is not at random. To account for selectivity, a two-part analytical strategy was adopted (Farewell et al., 2017; Madden, 2008; Puhani, 2000). To estimate the probability of employment prior to migration, the following covariates were used: gender, age, immigrant origin when in Germany, partnership status, and age of the youngest child in the household. These covariates are either time-invariant or refer to the time three months prior to migration. The estimation table can be found in the appendix (table 4). The resulting predicted probabilities of previous employment were used as covariates in the regressions of interest.

Given that not only individual- but also country-level covariates were included, multilevel (here: two-level) logistic regression analysis was applied (Hox et al., 2018; Snijders & Bosker,

2012). Logistic models were estimated given that all dependent variables were coded as binary (Wooldridge, 2009). As both migration (Cooke, 2003; Cooke et al., 2009; Nilsson, 2001) and family patterns (Cukrowska-Torzewska & Lovasz, 2020; Davies & Pierre, 2005) are expected to affect men's and women's labour market patterns differently, separate models were estimated for men and women.

RESULTS

Table 1 presents the results of analyses looking at both partnership and parental status as related to the four different economic outcome variables, including separate models for female and male emigrants. Regarding partnership status, four types of partnerships (depending on marital status and living arrangements) were compared to being single. Results are highly gendered, and thus results for female and male emigrants are described separately here. For female emigrants, living together with a spouse (compared to being single) was negatively associated with the probability of employment and improvements in personal income. At the same time, however, living together with a spouse correlated positively with improvements in terms of household income and living standard for these women. Cohabiting with a romantic partner while not married was not statistically significantly associated with the probability of employment or improvements in terms of personal income for female emigrants. Instead, cohabitation correlated positively with improvements in household income and living standard. With the exception of female emigrants' change in living standards (which was positively associated with being unmarried but having a partner not living in the same household), having a partner not living in the same household (independent of marital status) was not statistically significantly associated with any of the four outcome measures for female emigrants.

Turning to male emigrants, estimation results reveal a negative association between living with a spouse and the probability of employment. For all remaining combinations of the partnership variable and outcome measures, no statistically significant associations are found for male emigrants.

Assessing parenthood, respondents living with children aged 0-5 years and respondents living with children aged 6-16 (depending on the age of the youngest child) were compared to respondents living without children. As with partnership status, these patterns were also highly gendered. For emigrant mothers, living together with their children (irrespective of the age of the youngest child) was associated with a lower probability of employment. No associations were found regarding any of the subjective outcome measures. In contrast, for emigrant fathers, living with their children aged 6-16 (but not younger children) negatively correlated with

personal income change. However, for emigrant fathers, living with their children (irrespective of the children’s ages) was not statistically significantly associated with the probability of employment, changes in household income, or changes in living standard.

Table 1: Two-level logistic regression of family status on four different economic outcomes

	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)	
	employment		subj. improvement personal income		subj. improvement household income		subj. improvement living standard		Female		Male		Female		Male	
Partnership and parental status variables																
Partnership arrangements after migration (ref. Single)																
Married, LT	-0.64**	(0.26)	-0.94**	(0.40)	-0.37*	(0.22)	-0.13	(0.22)	0.58**	(0.23)	-0.07	(0.23)	0.56***	(0.21)	-0.07	(0.20)
Unmarried, LT	0.22	(0.28)	-0.19	(0.44)	-0.22	(0.21)	-0.07	(0.22)	0.52**	(0.22)	-0.08	(0.22)	0.45**	(0.20)	0.06	(0.21)
Married, LAT	-0.17	(0.57)	0.45	(1.09)	-0.06	(0.49)	-0.60	(0.41)	-0.13	(0.50)	-0.42	(0.42)	0.50	(0.48)	-0.09	(0.40)
Unmarried, LAT	0.01	(0.34)	-0.05	(0.51)	0.40	(0.26)	0.01	(0.26)	0.43	(0.28)	-0.27	(0.27)	0.65**	(0.25)	-0.39	(0.24)
Age of youngest child (ref. No children)																
Children aged 0-5 years	-1.51***	(0.27)	0.47	(0.44)	-0.39	(0.27)	0.13	(0.24)	0.15	(0.27)	-0.18	(0.24)	0.07	(0.26)	0.01	(0.22)
Children aged 6-16 years	-0.75**	(0.33)	0.37	(0.56)	-0.08	(0.33)	-0.62*	(0.32)	-0.06	(0.33)	-0.48	(0.31)	-0.01	(0.31)	-0.04	(0.30)
Individual-level controls																
Age group (ref. 29-38 years)																
19-28 years	-0.44	(0.44)	-0.39	(0.68)	0.27	(0.35)	0.12	(0.39)	0.14	(0.37)	-0.03	(0.42)	-0.49	(0.35)	0.36	(0.37)
39-48 years	0.14	(0.27)	-0.39	(0.39)	-0.11	(0.23)	-0.25	(0.21)	-0.01	(0.24)	-0.23	(0.21)	0.22	(0.23)	0.09	(0.19)
49-58 years	-0.22	(0.31)	-1.05**	(0.41)	0.03	(0.28)	-0.84***	(0.25)	-0.31	(0.28)	-0.55**	(0.25)	-0.03	(0.26)	-0.24	(0.23)

Table 1 continued

	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)	
	employment		subj. improvement		personal income		household income		subj. improvement		living standard		subj. improvement		living standard	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Good health	0.12 (0.25)	-0.10 (0.35)	0.21 (0.21)	0.20 (0.20)	0.19 (0.21)	0.32 (0.20)	0.40** (0.20)	0.41** (0.18)								
Education (ref. Medium (ISCED 4-5))																
Low (ISCED 0-3)	0.12 (0.45)	-1.09** (0.46)	0.23 (0.40)	-0.48 (0.37)	0.16 (0.42)	-0.53 (0.38)	-0.06 (0.41)	-0.55 (0.36)								
High (ISCED 6-8)	0.54** (0.21)	0.50 (0.34)	0.06 (0.19)	-0.03 (0.22)	0.04 (0.20)	-0.20 (0.22)	-0.06 (0.19)	-0.37* (0.21)								
Host country language skills	0.14* (0.07)	0.18* (0.10)	0.01 (0.07)	0.02 (0.06)	-0.09 (0.07)	0.08 (0.06)	-0.00 (0.06)	0.06 (0.06)								
Immigrant origin (ref. no)	-0.37* (0.20)	-0.43 (0.34)	0.02 (0.18)	-0.25 (0.19)	0.18 (0.19)	-0.24 (0.19)	0.11 (0.17)	-0.01 (0.18)								
Duration of previous stays abroad (ref. No)																
< 2 years	-0.07 (0.25)	0.26 (0.36)	-0.20 (0.21)	-0.19 (0.21)	-0.23 (0.22)	-0.24 (0.20)	-0.52** (0.20)	-0.07 (0.19)								
2 to < 5 years	-0.09 (0.25)	0.66 (0.41)	-0.30 (0.22)	0.15 (0.22)	-0.18 (0.23)	0.17 (0.23)	-0.59*** (0.21)	-0.02 (0.20)								
5 or more years	0.28 (0.24)	1.26*** (0.43)	-0.19 (0.20)	0.12 (0.21)	-0.25 (0.21)	0.00 (0.20)	-0.65*** (0.20)	0.10 (0.19)								
Predicted probability of employment prior to migration	-0.46 (1.02)	1.27 (1.74)	0.33 (0.81)	0.63 (0.96)	0.06 (0.88)	0.10 (1.02)	-1.68** (0.83)	0.08 (0.90)								

Table 1 continued

	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)	
	employment		employment		subj. improvement personal income		subj. improvement personal income		subj. improvement household income		subj. improvement household income		subj. improvement living standard		subj. improvement living standard	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Country-level controls																
High-income country	0.28 (0.61)	0.23 (0.95)	0.51 (0.70)	0.09 (0.66)	0.41 (0.74)	0.12 (0.66)	0.53 (0.67)	0.17 (0.59)	-0.04 (0.04)	-0.06 (0.06)	-0.08* (0.05)	-0.10** (0.05)	-0.03 (0.05)	-0.03 (0.04)	0.01 (0.04)	0.01 (0.04)
Unemployment rate	0.03 (0.19)	-0.18 (0.29)	-0.28 (0.22)	-0.16 (0.22)	-0.05 (0.24)	0.12 (0.23)	-0.22 (0.21)	-0.09 (0.20)	0.03 (0.19)	-0.18 (0.29)	-0.28 (0.22)	-0.16 (0.22)	-0.05 (0.24)	-0.05 (0.24)	-0.09 (0.20)	-0.09 (0.20)
Public expenditures on families	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.00 (0.01)	0.00 (0.01)	-0.00 (0.01)	-0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.00 (0.01)	0.00 (0.01)	-0.01 (0.01)	-0.01 (0.01)
Children 0-2 years old enrolled in official childcare	1.00 (1.03)	1.63 (1.75)	-0.26 (0.97)	0.63 (1.08)	0.13 (1.03)	-0.02 (1.12)	1.27 (0.94)	0.29 (1.00)	0.04 (0.06)	0.07 (0.11)	0.10 (0.10)	0.11 (0.09)	0.09 (0.13)	0.06 (0.09)	0.06 (0.07)	0.06 (0.07)
Variance statistics																
Country variance	0.04 (0.06)	0.08 (0.11)	0.21** (0.10)	0.19** (0.09)	0.28** (0.13)	0.21** (0.09)	0.19** (0.09)	0.14* (0.07)	0.05 (0.05)	0.07 (0.11)	0.10 (0.10)	0.11 (0.09)	0.09 (0.13)	0.06 (0.09)	0.06 (0.07)	0.06 (0.07)
ICC (based on empty model)	0.01 (0.01)	0.02 (0.02)	0.06 (0.06)	0.05 (0.05)	0.08 (0.08)	0.06 (0.06)	0.05 (0.05)	0.04 (0.04)	0.01 (0.01)	0.02 (0.02)	0.06 (0.06)	0.05 (0.05)	0.06 (0.06)	0.05 (0.05)	0.04 (0.04)	0.04 (0.04)
Number of groups	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
Observations	982	1,102	935	1,089	911	1,052	989	1,105	989	989	1,052	989	989	989	989	1,105

Standard errors in parenthesis. Missing dummies/categories included but not displayed. Significance levels: ***p<0.01, **p<0.05, *p<0.1. ICC at the 95% confidence intervals. LT = living together, LAT = living apart together. Source: GERPSw1.

Covariates were associated with the outcome measures as in several ways. For reasons of parsimony, only statistically significant results are described in this paragraph. Among male emigrants, being in the oldest age group was negatively correlated with the probability of employment and both personal and household income. For both female and male emigrants, good health status was associated with improvements in living standard. A low level of

education compared to a medium level education was associated with a decreased probability of employment for male emigrants, meaning that less educated male emigrants were less likely to be employed. In addition, having a high level of education corresponded to a higher probability of employment among female emigrants. However, having a high level of education was found to be negatively correlated with living standard among male emigrants. Good host country language skills corresponded with a higher probability of employment for both genders, but having an immigrant origin (perspective from Germany) was associated with a lower probability of employment for female emigrants. Among male emigrants, having stayed abroad previously for five or more years (compared to those without previous long-term stays) correlated with an increase in the probability of employment. In contrast, any long-term stay prior to the current one (irrespective of its length) was negatively associated with female emigrants' living standard. Similarly, the estimated probability of employment prior to migration corresponded to a worsening of female emigrants' living standard. Among covariates at the country level, the only variable that was significantly correlated with any of the four outcome measures was unemployment. In particular, a higher unemployment rate negatively correlated with personal income for emigrants of both genders, and also with household income among female emigrants.

Table 2 shows results of assessments regarding the role of partnership and parental status change on the four different economic outcome variables. Regarding partnership status changes, being continuously single, union dissolution, and union formation were compared to being continuously in a partnership. Being continuously single (as compared to being continuously in a partnership) negatively correlated with changes in household income and living standard among female emigrants. Furthermore, experiencing either a union dissolution or forming a new partnership negatively correlated with changes in household income among female emigrants. In contrast, turning to male emigrants, forming a new partnership was associated with improvements in both personal income and living standard. For the remaining outcome measures, there were no statistically significant associations with partnership changes.

In addition to children in the household (a variable found to be negatively related to the probability of employment for female emigrants), the birth of a new child was also associated with a lower probability of employment for female emigrants. In addition, birth of a new child negatively correlated with personal income among female emigrants. Still, no significant associations between childbirth and changes in household income or living standard were found for female emigrants. Different patterns were found for male emigrants.

Table 2: Two-level logistic regression of family status change on four different economic outcomes

	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	employment		subj. improvement personal income		subj. improvement household income		subj. improvement living standard	
	Female	Male	Female	Male	Female	Male	Female	Male
Partnership and parental status change variables								
Partnership status change (ref. Continuous partnership)								
Continuously single	0.35 (0.26)	0.55 (0.38)	0.30 (0.20)	0.25 (0.20)	-0.56*** (0.21)	0.22 (0.21)	-0.62*** (0.194)	0.07 (0.19)
Union dissolution	0.13 (0.38)	1.29 (0.82)	0.03 (0.32)	0.23 (0.31)	-0.76*** (0.33)	0.34 (0.32)	-0.15 (0.305)	0.38 (0.30)
Single & new partner	0.29 (0.33)	0.45 (0.55)	0.26 (0.26)	0.75*** (0.35)	-0.46* (0.28)	0.23 (0.35)	0.20 (0.263)	0.68*** (0.32)
Childbirth	-2.38*** (0.33)	2.23** (1.07)	-1.03*** (0.35)	0.40 (0.29)	-0.24 (0.32)	0.09 (0.27)	-0.47 (0.303)	0.48* (0.27)
Children in household prior to migration	-0.73*** (0.24)	-0.04 (0.34)	-0.11 (0.23)	0.15 (0.19)	0.23 (0.23)	-0.07 (0.19)	0.07 (0.220)	0.01 (0.18)
Variance statistics								
Country variance	0.06 (0.07)	0.11 (0.12)	0.22** (0.11)	0.18** (0.09)	0.27** (0.13)	0.20** (0.09)	0.18** (0.084)	0.13* (0.07)
ICC (based on empty model)	0.05	0.07	0.10	0.11	0.12	0.09	0.06	0.06
ICC (based on full model)	0.02	0.03	0.06	0.05	0.08	0.06	0.05	0.04
Number of groups	28	28	28	28	28	28	28	28
Observations	980	1,102	933	1,089	911	1,052	987	1,105

Note: Covariates included but not displayed (see table 5 in the appendix). Standard errors below coefficients. Missing dummies/categories included but not displayed. Significance levels: ***p<0.01, **p<0.05, *p<0.1. ICC at the 95% confidence intervals. Source: GERPSw1.

First, childbirth corresponded to a higher probability of employment and improvements in living standards among male emigrants. However, no statistically significant associations between childbirth and personal or household income measures were found among male emigrants. Covariates were the same as in table 1 and showed similar results. A complete table including the estimated coefficients for covariates can be found in the appendix (table 5).

DISCUSSION AND CONCLUSION

In the beginning of this chapter, several research gaps that interfere with our understanding of migrants' economic outcomes and experiences were identified. With attention to these gaps, the research developed and presented here expands existing literature in three main ways: first, by considering not only parental and partnership status, but also status changes and their relationships with economic outcomes; second, by assessing different dimensions of migration-related economic outcomes (individual- and household-level); and third, by extending the study context to recent and privileged international migration. The present use of different outcome measures is particularly noteworthy. Considering both individual- and household-level outcomes provides insights into distributional patterns within families. Furthermore, doing so by using subjective evaluations of changes in income and living standards, comparing the situation after migration to the situation prior to migration, it is possible to learn about how family patterns together with migration lead to economic outcomes.

The major pattern that can be deduced in the present findings is that female emigrants in certain family constellations and experiencing certain family status changes suffer worse individual-level economic outcomes after migration but benefit at the household-level. It may be that these female emigrants focus less on their own employment after migration, instead relying on or prioritizing household-level gains primarily driven by the economic success of their male partners. Thereby, in the course of migration and under certain conditions, employment and income patterns become more traditional than they were before migration. These results may also indicate a retraditionalization of gender roles initiated by emigration (Erlinghagen, 2021) and correspond to the (qualitative) finding that highly-skilled emigrants would “put the equal gender contract and ‘family democracy’ temporarily on hold” (Boström et al., 2018, p. 99).

This potential retraditionalization, including worse individual economic outcomes but household-level benefits, was observed for female emigrants living with their spouses. Furthermore, and also in line with this argumentation, female emigrants with children and especially after childbirth experienced worse individual economic outcomes. These findings might be explained by migrants perceiving these family patterns as relationship-specific

investments. Such investments are assumed to lessen the problem of non-binding contracts in bargaining outcomes (Abraham et al., 2010) and increase the agreeable loss of bargaining power (Ott, 1992), leading to a higher degree of specialization. Then, living with a spouse might be understood as a barrier to successful individual economic outcomes due to gender roles and bargaining more than in terms of social capital. Similarly, children appear to represent a barrier to migrant mothers' economic success, potentially also because of constrained social interactions due to care obligations and less support for reconciling work and family duties than if they had not migrated.

Notably, not all partnered female emigrants experience these individual losses after migration. Although migration might also be understood as a relationship-specific investment and thus commitment mechanism, in contrast to living with a spouse or children, migration itself does not suffice for specialization after migration. Still, even though not experiencing changes in their own career, female partnered but unmarried emigrants benefit at the household-level. Consequently, these household-level gains can be attributed to the male partner. This may be supported by previous research finding that men generally benefit from migration (e.g. Cooke et al., 2009; Preston & Grimes, 2019). Even though it was found that female and male emigrants experienced similar wage gains after migration from Germany (Witte & Guedes Auditor, 2021), the current research emphasizes heterogeneity among female emigrants and suggests that their economic outcomes are crucially shaped by family patterns.

In contrast to female emigrants, male emigrants' economic outcomes appear to depend less on family patterns. This could be explained by the asymmetric migration decision in favour of the men's careers among couples (Abraham et al., 2010). Consequently, for male emigrants, family patterns represent neither a bridge nor a barrier in terms of social capital, and in line with the arguments from NHE and gender-role approaches, men are expected to increase their earnings with migration. From the present research, three statistically significant results in particular should be discussed for emigrant men. First, the only statistically significant association regarding partnership arrangements is that living with a spouse corresponded to a lower probability of employment. This was also found for married female emigrants living with their spouses, which hints at a decreased necessity to work for both female and male emigrants in this partnership arrangement. Second, and in contrast to female emigrants' suffering worse employment probabilities after childbirth, male emigrants' employment probabilities were higher after childbirth, corresponding to traditional work arrangements after family formation. Third, for male emigrants, living with their children aged 6-16 years (but not younger)

negatively correlated with personal income. This might hint towards rebargaining between parent emigrants. As a consequence of this rebargaining, male emigrants might do at least some part of the care work when children are older. Thus, economic outcomes of emigration and family decisions appear not to be static.

Given the different destination contexts, this article considered individual- and country-level covariates. A higher unemployment rate in the destination country negatively correlated with personal income (among both female and male emigrants) and household income (for female emigrants only). This corresponds to findings on internal migration (De Jong & Graefe, 2008) and the general assumption that higher unemployment rates correspond to migrants' worse labour market outcomes. Still, the remaining destination country variables are not significantly related to any of the outcomes, which may be due to the fact that the variables already influence the planning phase of migration (Kley, 2011) and have no further effect on economic outcomes once migration to a specific country has been decided upon. In line with this thinking, almost all destination countries in this sample are high-income countries according to the World Bank classification (The World Bank, 2022). Furthermore, German emigrants can be assumed to be privileged in their destination countries (Fauser, 2020; Witte et al., 2023), implying that they might be less affected by structural problems there (e.g. high unemployment rates).

Limitations to this study need to be mentioned. First, even though information on personal income both before and after migration is provided within GERPS, household-level income data were not provided. Thus, to ensure comparability, a subjective measure comparing the situation prior to migration to the situation about one year after migration was used for both personal and household income. As outlined in the theoretical section, subjective and objective measures highly correlate (Williams et al., 2017) and have the advantage that no inaccuracy due to differences between destination countries will be introduced. Still, given different degrees of reliance on household income, these patterns might be experienced differently by female and male emigrants. To test whether subjective outcomes are perceived similarly by female and male migrants, data from both objective and subjective income changes would be required. Second, the measures of children and childbirth are based on information regarding children living in the respondent's household. Thus, the role of children not living with the respondent – which may well have different consequences in terms of economic outcomes – cannot be analysed. Third, considering partnerships, the role of partnership and living arrangements was analysed but no information on partner characteristics were included. In keeping social capital arguments, however, the partner's role in shaping economic outcomes

may well depend on such characteristics: The social capital provided by the partner may be especially beneficial if employed in a similar occupational area (Verbakel & de Graaf, 2008) and dependent on the partner's origin (Kanas et al., 2012; Martinovic et al., 2009).

The above three limitations are due to data restrictions, and a fourth limitation that should be considered is the transferability of the current results to other contexts, which is unclear. Even though current findings are mostly in line with previous findings, some evidence of potential country-linked differences exists (Cooke et al., 2009). International migrants are a selective group of the German population (Ette & Erlinghagen, 2021) and may differ systematically from internal migrants. Given differences in who moves, and given lower costs (Krieger, 2020) and presumably less pronounced consequences in terms of social capital, patterns after internal migration may be different from patterns of international migration. Furthermore, generalizability of the present research to international migration from other countries is unclear. Due to different conditions prior to migration, this holds for migration from both more traditional and more egalitarian countries. Thus, similar analyses for migration from different countries is required and generalizing the current findings to other contexts should be done with caution.

Despite limitations, potential lines for future research can be deduced from the focus on emigrants and short-term effects in this paper. First, the current results based on emigration may suggest that due to female emigrants' worse labour market position and decreased bargaining power, patterns may become even more traditional in context of remigration. However, prior research has shown that remigration is more female-led (Amcoff & Niedomysl, 2015) and female remigrants tend to be the "leading wife" (Erlinghagen, 2021). Furthermore, the risk of union dissolution was shown to increase with remigration (Mansfeld, 2023), bringing into question the long-term bindingness of relationship-specific investments. Thus, conducting analyses similar to those in the present paper but among remigrants might further enhance our understanding of the relationships between family patterns and migration experiences.

Second, outcome measures in this paper referred to the situation about one year after migration. Consequently, only short-term consequences of migration and family patterns could be investigated. Future research might assess medium- or long-term consequences, given that previous research from other contexts has shown that the negative economic consequences of migration for partnered women are only short-lived (Clark & Withers, 2002; Spitze, 1984). Contrasting these findings and following the theoretical section of this paper, skill-spillovers may take some time to manifest, and the tendency towards specialization can be assumed to

affect bargaining power for future negotiations. Further, career breaks due to family formation were shown crucial in determining continuing differences in labour market performance (Davies & Pierre, 2005). Thus, in a next step, it would be interesting to investigate how the short-term patterns of family (change) in this paper translate into medium- or long-term consequences.

Despite these limitations and given the outlined foci, this paper sheds light on the complex interdependencies between emigration, family, gender, and the economic sphere by analysing the role of family patterns in shaping emigrants' short-term economic outcomes. The fact that associations between family patterns and economic outcomes of recent emigrants are highly gendered emphasizes that even among privileged and previously employed emigrants from modern societies, traditional work-family arrangements evolve after emigration. These patterns can be explained by the conjunction of social capital considerations, and arguments from NHE, bargaining theory, and gender-role approaches. In particular, not only economic outcomes but also the importance that is given to the different levels of outcomes (individual- vs. household-level) appear to be gendered. Even though the measures of family policy included here turned out not statistically significant, they might well shape the preceding decision to migrate to a specific country. Thus, if policies aimed at fostering immigration and/or enhancing immigrants' labour market integration are to be designed, the current findings should be taken into account.

REFERENCES

- Aaberge, R., & Mogstad, M. (2015). Inequality in current and lifetime income. *Social Choice and Welfare*, 44(2), 217–230. <https://doi.org/10.1007/s00355-014-0838-3>
- Abraham, M., Auspurg, K., & Hinz, T. (2010). Migration Decisions Within Dual-Earner Partnerships: A Test of Bargaining Theory. *Journal of Marriage and Family*, 72(4), 876–892. <https://doi.org/10.1111/j.1741-3737.2010.00736.x>
- Adserà, A., & Ferrer, A. (2016). The Fertility of Married Immigrant Women to Canada. *International Migration Review*, 50(2), 475–505. <https://doi.org/10.1111/imre.12114>
- Adserà, A., & Pytliková, M. (2016). Language and Migration. In V. Ginsburgh & S. Weber (Eds.), *The Palgrave Handbook of Economics and Language* (pp. 342–372). Palgrave Macmillan. https://doi.org/10.1007/978-1-137-32505-1_13
- Aguilera, M. B. (2005). The Impact of Social Capital on The Earnings of Puerto Rican Migrants. *The Sociological Quarterly*, 46(4), 569–592. <https://doi.org/10.1111/j.1533-8525.2005.00027.x>
- Amcoff, J., & Niedomysl, T. (2015). Is the Tied Returnee Male or Female? The Trailing Spouse Thesis Reconsidered. *Population, Space and Place*, 21(8), 872–881. <https://doi.org/10.1002/psp.1969>
- Anxo, D., Fagan, C., Cebrian, I., & Moreno, G. (2006). Patterns of labour market integration in Europe--a life course perspective on time policies. *Socio-Economic Review*, 5(2), 233–260. <https://doi.org/10.1093/ser/mwl019>
- Åslund, O., & Rooth, D.-O. (2007). Do When and Where Matter? Initial Labour Market Conditions and Immigrant Earnings. *The Economic Journal*, 117(518), 422–448. <https://doi.org/10.1111/j.1468-0297.2007.02024.x>
- Baykara-Krumme, H. (2020). Migration und Familie. In A. Röder & D. Zifonun (Eds.), *Handbuch Migrationssoziologie* (pp. 1–33). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-20773-1_12-1
- Baykara-Krumme, H., & Fokkema, T. (2019). The impact of migration on intergenerational solidarity types. *Journal of Ethnic and Migration Studies*, 45(10), 1707–1727. <https://doi.org/10.1080/1369183X.2018.1485203>
- Becker, G. S. (1965). A Theory of the Allocation of Time. *The Economic Journal*, 75(299), 493. <https://doi.org/10.2307/2228949>
- Becker, G. S. (1974). A Theory of Social Interactions. *Journal of Political Economy*, 82(6), 1063–1093. <https://doi.org/10.1086/260265>
- Becker, G. S. (1981). *A treatise on the family*. Harvard University Press.

- Bevelander, P., & Groeneveld, S. (2012). How many hours do you have to work to be integrated? Full-time and part-time employment of native and ethnic minority women in the Netherlands. *International Migration*, 50(s1), e117-e131.
<https://doi.org/10.1111/j.1468-2435.2010.00622.x>
- Bielby, W. T., & Bielby, D. D. (1992). I Will Follow Him: Family Ties, Gender-Role Beliefs, and Reluctance to Relocate for a Better Job. *American Journal of Sociology*, 97(5), 1241–1267.
- Bonjour, S., & Kraler, A. (2015). Introduction: family migration as an integration issue? Policy perspectives and academic insights. *Journal of Family Issues*, 36(11), 1407–1432. <https://doi.org/10.1177/0192513X14557490>
- Boström, K. W., Öhlander, M., & Pettersson, H. (2018). Temporary international mobility, family timing, dual career and family democracy. A case of Swedish medical professionals. *Migration Letters*, 15(1), 99–111. <https://www.cceol.com/search/article-detail?id=597395>
- Boyle, P., Cooke, T. J., Halfacree, K., & Smith, D. (2001). A cross-national comparison of the impact of family migration on women's employment status. *Demography*, 38(2), 201–213.
- Boyle, P., Feng, Z., & Gayle, V. (2009). A New Look at Family Migration and Women's Employment Status. *Journal of Marriage and Family*, 71(2), 417–431.
- Boyle, P., Kulu, H., Cooke, T., Gayle, V., & Mulder, C. H. (2008). Moving and union dissolution. *Demography*, 45(1), 209–222.
- Brines, J., & Joyner, K. (1999). The Ties That Bind: Principles of Cohesion in Cohabitation and Marriage. *American Sociological Review*, 64(3), 333–355.
<https://doi.org/10.2307/2657490>
- Caron, L., & Ichou, M. (2020). High Selection, Low Success: The Heterogeneous Effect of Migrants' Access to Employment on Their Remigration. *International Migration Review*, 54(4), 1104–1133. <https://doi.org/10.1177/0197918320904925>
- Clark, W. A. V., & Huang, Y. (2006). Balancing move and work: women's labour market exits and entries after family migration. *Population, Space and Place*, 12(1), 31–44.
<https://doi.org/10.1002/psp.388>
- Clark, W. A. V., & Withers, S. D. (2002). Disentangling the Interaction of Migration, Mobility, and Labor-Force Participation. *Environment and Planning a*, 34(5), 923–945.

- Cooke, T. J. (2001). 'Trailing wife' or 'trailing mother'? The effect of parental status on the relationship between family migration and the labor-market participation of married women. *Environment and Planning a*, 33(3), 419–430.
- Cooke, T. J. (2003). Family Migration and the Relative Earnings of Husbands and Wives. *Annals of the Association of American Geographers*, 93(2), 338–349.
- Cooke, T. J., Boyle, P., Couch, K., & Feijten, P. (2009). A longitudinal analysis of family migration and the gender gap in earnings in the United States and Great Britain. *Demography*, 46(1), 147–167. <https://doi.org/10.1353/dem.0.0036>
- Cukrowska-Torzewska, E., & Lovasz, A. (2020). The role of parenthood in shaping the gender wage gap - A comparative analysis of 26 European countries. *Social Science Research*, 85, 102355. <https://doi.org/10.1016/j.ssresearch.2019.102355>
- DaVanzo, J. (1976). *Why Families Move: A Model of the Geographic Mobility of Married Couples*. Rand Corporation. <https://eric.ed.gov/?id=ed135697>
- Davies, R., & Pierre, G. (2005). The family gap in pay in Europe: A cross-country study. *Labour Economics*, 12(4), 469–486. <https://doi.org/10.1016/j.labeco.2005.05.003>
- Davis, J., & Jennings, E. A. (2018). Spatial and Temporal Dimensions of Migration on Union Dissolution. *International Migration*, 56(6), 136–152. <https://doi.org/10.1111/imig.12513>
- De Jong, G. F., & Graefe, D. R. (2008). Family life course transitions and the economic consequences of internal migration. *Population, Space and Place*, 14(4), 267–282. <https://doi.org/10.1002/psp.506>
- Duncan, R. P., & Perrucci, C. C. (1976). Dual Occupation Families and Migration. *American Sociological Review*, 41(2), 252–261. <https://doi.org/10.2307/2094472>
- Dustmann, C., Glitz, A., & Vogel, T. (2010). Employment, wages, and the economic cycle: Differences between immigrants and natives. *European Economic Review*, 54(1), 1–17. <https://doi.org/10.1016/j.eurocorev.2009.04.004>
- Erlinghagen, M. (2021). Love in motion: Migration patterns of internationally mobile couples. *Population, Space and Place*, 27(2), e2382. <https://doi.org/10.1002/psp.2382>
- Erlinghagen, M., Schneider, N., & Ette, A. (2022). *German Emigration and Remigration Panel Study (GERPS) 2018*. <https://doi.org/10.4232/1.13942>
- Ette, A., Décieux, J. P., Erlinghagen, M., Auditor, J. G., Schneider, N. F., & Witte, N. (2021). Surveying across borders: The experience of the German Emigration and Remigration Panel Study. In M. Erlinghagen, A. Ette, N. F. Schneider, & N. Witte (Eds.),

- IMISCOE Research Series. The global lives of German migrants: Consequences of international migration across the life course* (pp. 21–39). Springer.
- Ette, A., Décieux, J. P. P., Erlinghagen, M., Genoni, A., Auditor, J. G., Knirsch, F., Kühne, S., Mörchen, L., Sand, M., Schneider, N. F., & Witte, N. (2020). *German Emigration and Remigration Panel Study (GERPS): Methodology and Data Manual of the Baseline Survey (Wave 1)* (BiB Daten- und Methodenberichte No. 1). Bundesinstitut für Bevölkerungsforschung. <https://doi.org/10.13140/RG.2.2.25013.42720>
- Ette, A., & Erlinghagen, M. (2021). Structures of German Emigration and Remigration: Historical Developments and Demographic Patterns. In M. Erlinghagen, A. Ette, N. F. Schneider, & N. Witte (Eds.), *IMISCOE Research Series. The global lives of German migrants: Consequences of international migration across the life course* (pp. 43–63). Springer.
- Farewell, V. T., Long, D. L., Tom, B. D. M., Yiu, S., & Su, L. (2017). Two-Part and Related Regression Models for Longitudinal Data. *Annual Review of Statistics and Its Application*, 4, 283–315. <https://doi.org/10.1146/annurev-statistics-060116-054131>
- Fausser, M. (2020). Emigrant citizenship, privileged local belonging and the option to return: Germans on the Turkish coast. *Comparative Migration Studies*, 8(1), 1–17. <https://doi.org/10.1186/s40878-019-0155-1>
- Feijten, P., & van Ham, M. (2007). Residential mobility and migration of the separated. *Demographic Research*, 17(21), 623–654. <https://doi.org/10.4054/DemRes.2007.17.21>
- Feld, S. L. (1981). The Focused Organization of Social Ties. *American Journal of Sociology*, 86(5), 1015–1035. <https://doi.org/10.1086/227352>
- Frank, R., & Wildsmith, E. (2005). The Grass Widows of Mexico: Migration and Union Dissolution in a Binational Context. *Social Forces*, 83(3), 919–948.
- Granovetter, M. (1973). The Strength of Weak Ties. *American Journal of Sociology*, 78(6), 1360–1380. <https://doi.org/10.1016/B978-0-12-442450-0.50025-0>
- Granovetter, M. (1983). The Strength of Weak Ties: A Network Theory Revisited. *Sociological Theory*, 1, 201–233. <https://doi.org/10.2307/202051>
- Harmon, C., Oosterbeek, H., & Walker, I. (2003). The Returns to Education: Microeconomics. *Journal of Economic Surveys*, 17(2), 115–156. <https://doi.org/10.1111/1467-6419.00191>
- Heckman, J. J. (1991). Identifying the hand of past: Distinguishing state dependence from heterogeneity. *The American Economic Review*, 81(2), 75–79. https://www.jstor.org/stable/2006829?casa_token=s17ljsz0kduaaaaa:bd6fd1xgkzeubpa

- hc2xnuot2xbuqgr3uyx71nm79ccejbzeyjyadlm1xgajvuzuvraegdod-
zcrmmr21soxcjkz1cgwggc4xifvmigiab71bt5ui93rvea
- Heckman, J. J., & Borjas, G. J. (1980). Does Unemployment Cause Future Unemployment? Definitions, Questions and Answers from a Continuous Time Model of Heterogeneity and State Dependence. *Economica*, 47(187), 247. <https://doi.org/10.2307/2553150>
- Hess, G. D. (2004). Marriage and Consumption Insurance: What's Love Got to Do with It? *Journal of Political Economy*, 112(2), 290–318. <https://doi.org/10.1086/381477>
- Hox, J. J., Moerbeek, M., & van Schoot, R. de. (2018). *Multilevel analysis: Techniques and applications* (Third edition). ProQuest Ebook Central. Routledge Taylor & Francis. <https://ebookcentral.proquest.com/lib/kxp/detail.action?docID=5046900>
- Huinink, J., & Kley, S. (2008). Regionaler Kontext und Migrationsentscheidungen im Lebensverlauf. *Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, 8(48), 162-148. https://www.researchgate.net/profile/stefanie-kley-2/publication/261364741_regionaler_kontext_und_migrationsentscheidungen_im_lebensverlauf/links/0c96053411d521106a000000/regionaler-kontext-und-migrationsentscheidungen-im-lebensverlauf.pdf
- Inanc, H. (2015). Unemployment and the timing of parenthood: implications of partnership status and partner's employment. *Demographic Research*, 32(7), 219–250. <https://doi.org/10.4054/DemRes.2015.32.7>
- International Labour Organization. (2023). *ILO Modelled Estimates and Projections database (ILOEST)*. ILOSTAT. <https://ilostat.ilo.org/data/>
- Jacobsen, J. P., & Levin, L. M. (2000). The effects of internal migration on the relative economic status of women and men. *Journal of Socio-Economics*, 29(3), 291–304.
- Jones, A. M., Rice, N., & Zantomio, F. (2020). Acute health shocks and labour market outcomes: Evidence from the post crash era. *Economics and Human Biology*, 36, 100811. <https://doi.org/10.1016/j.ehb.2019.100811>
- Jürges, H. (2006). Gender ideology, division of housework, and the geographic mobility of families. *Review of Economics of the Household*, 4(4), 299–323. <https://doi.org/10.1007/s11150-006-0015-2>
- Kalmijn, M. (2011). The Influence of Men's Income and Employment on Marriage and Cohabitation: Testing Oppenheimer's Theory in Europe. *European Journal of Population*, 27(3), 269–293. <https://doi.org/10.1007/s10680-011-9238-x>
- Kanas, A., Chiswick, B. R., van der Lippe, T., & van Tubergen, F. (2012). Social Contacts and the Economic Performance of Immigrants: A Panel Study of Immigrants in

- Germany. *International Migration Review*, 46(3), 680–709.
<https://doi.org/10.1111/j.1747-7379.2012.00901.x>
- Khoudja, Y., & Platt, L. (2018). Labour market entries and exits of women from different origin countries in the UK. *Social Science Research*, 69, 1–18.
<https://doi.org/10.1016/j.ssresearch.2017.10.003>
- Kley, S. (2011). Explaining the Stages of Migration within a Life-course Framework. *European Sociological Review*, 27(4), 469–486. <https://doi.org/10.1093/esr/jcq020>
- Knapp, T. A., White, N. E., & Wolaver, A. M. (2013). The Returns to Migration: The Influence of Education and Migration Type. *Growth and Change*, 44(4), 589–607.
<https://doi.org/10.1111/grow.12022>
- Kogan, I. (2011). New Immigrants — Old Disadvantage Patterns? Labour Market Integration of Recent Immigrants into Germany. *International Migration*, 49(1), 91–117.
<https://doi.org/10.1111/j.1468-2435.2010.00609.x>
- Krieger, M. (2020). Tied and Troubled: Revisiting Tied Migration and Subsequent Employment. *Journal of Marriage and Family*, 82(3), 934–952.
<https://doi.org/10.1111/jomf.12620>
- Kulu, H., Mikolaj, J., Thomas, M. J., Vidal, S., Schnor, C., Willaert, D., Visser, F. H. L., & Mulder, C. H. (2021). Separation and Elevated Residential Mobility: A Cross-Country Comparison. *European Journal of Population*, 37(1), 121–150.
<https://doi.org/10.1007/s10680-020-09561-1>
- Lancee, B. (2012). *Immigrant Performance in the Labour Market: Bonding and Bridging Social Capital*. Amsterdam University Press.
<https://library.oapen.org/handle/20.500.12657/34533> <https://doi.org/27500>
- Lee, R., Ruppanner, L., & Perales, F. (2020). "Making it work: Migration, motherhood and employment in Australia". *Social Science Research*, 88-89, 102429.
<https://doi.org/10.1016/j.ssresearch.2020.102429>
- Lersch, P. M. (2013). Long-Distance Moves and Employment of Women in Dual-Earner Couples in Britain and Germany. *Journal of Contextual Economics - Schmollers Jahrbuch*, 133(2), 133–142. <https://doi.org/10.3790/schm.133.2.133>
- Lin, N. (2001). *Social capital: A theory of social structure and action* (1. paperback ed.). *Structural analysis in the social sciences: Vol. 19*. Cambridge University Press.
- Lu, Y., Ruan, D., & Lai, G. (2013). Social Capital and Economic Integration of Migrants in Urban China. *Social Networks*, 36(3), 357–369.
<https://doi.org/10.1016/j.socnet.2013.04.001>

- Lübke, C. (2015). How Migration Affects the Timing of Childbearing: The Transition to a First Birth Among Polish Women in Britain. *European Journal of Population*, 31(1), 1–20. <https://doi.org/10.1007/s10680-014-9326-9>
- Lundberg, S., & Pollak, R. A. (1996). Bargaining and Distribution in Marriage. *Journal of Economic Perspectives*, 10(4), 139–158. <https://doi.org/10.1257/jep.10.4.139>
- Lynott, P. P., & McCandless, N. J. (2000). The impact of age vs. Life experience on the gender role attitudes of women in different cohorts. *Journal of Women & Aging*, 12(1-2), 5–21. https://doi.org/10.1300/J074v12n01_02
- Maas, C. J. M., & Hox, J. J. (2005). Sufficient Sample Sizes for Multilevel Modeling. *Methodology*, 1(3), 86–92. <https://doi.org/10.1027/1614-2241.1.3.86>
- Madden, D. (2008). Sample selection versus two-part models revisited: The case of female smoking and drinking. *Journal of Health Economics*, 27(2), 300–307. <https://doi.org/10.1016/j.jhealeco.2007.07.001>
- Mansfeld, L. (2023). International migration and its short-term effect on partnership stability. *Population, Space and Place*, 29(4), e38. <https://doi.org/10.1002/psp.2638>
- Martinovic, B., van Tubergen, F., & Maas, I. (2009). Dynamics of Interethnic Contact: A Panel Study of Immigrants in the Netherlands. *European Sociological Review*, 25(3), 303–318. <https://doi.org/10.1093/esr/jcn049>
- Mikolai, J., & Kulu, H. (2018). Divorce, Separation, and Housing Changes: A Multiprocess Analysis of Longitudinal Data from England and Wales. *Demography*, 55(1), 83–106. <https://doi.org/10.1007/s13524-017-0640-9>
- Mincer, J. A. (1978). Family migration decisions. *Journal of Political Economy*, 86(5), 749–773.
- Nauck, B. (2004). Familienbeziehungen und Sozialintegration von Migranten. *IMIS-Beiträge*, 23, 83–104.
- Nikolov, M., & Djigunovic, J. M. (2006). Recent research on age, second language acquisition, and early foreign language learning. *Annual Review of Applied Linguistics*, 26, 234–260. <https://doi.org/10.1017/S0267190506000122>
- Nilsson, K. (2001). Migration, Gender and the Household Structure: Changes in Earnings Among Young Adults in Sweden. *Regional Studies*, 35(6), 499–511. <https://doi.org/10.1080/00343400120065679>
- Nivalainen, S. (2005). Interregional migration and post-move employment in two-earner families: Evidence from Finland. *Regional Studies*, 39(7), 891–907. <https://doi.org/10.1080/00343400500289853>

- OECD. (2023). *Family Database: Public Policies for Families and Children*.
<https://www.oecd.org/els/family/database.htm>
- Ott, N. (1992). *Intrafamily Bargaining and Household Decisions*. *Microeconomic Studies*.
 Springer Berlin / Heidelberg.
- Özcan, B. (2011). Only the lonely? The influence of the spouse on the transition to self-employment. *Small Business Economics*, 37(4), 465–492.
<https://doi.org/10.1007/s11187-011-9376-x>
- Preston, K., & Grimes, A. (2019). Migration, Gender, Wages and Wellbeing: Who Gains and in Which Ways? *Social Indicators Research*, 144(3), 1415–1452.
<https://doi.org/10.1007/s11205-019-02079-y>
- Puhani, P. (2000). The Heckman Correction for Sample Selection and Its Critique. *Journal of Economic Surveys*, 14(1), 53–68. <https://doi.org/10.1111/1467-6419.00104>
- Rabe, B. (2011). Dual-earner migration. Earnings gains, employment and self-selection. *Journal of Population Economics*, 24(2), 477–497. <https://doi.org/10.1007/s00148-009-0292-1>
- Rözer, J. J., Mollenhorst, G., & Volker, B. (2015). Romantic relationship formation, maintenance and changes in personal networks. *Advances in Life Course Research*, 23, 86–97. <https://doi.org/10.1016/j.alcr.2014.12.001>
- Samuelson, P. A. (1956). Social Indifference Curves. *The Quarterly Journal of Economics*, 70(1), 1–22. <https://doi.org/10.2307/1884510>
- Sandell, S. H. (1977). Women and the Economics of Family Migration. *Review of Economics and Statistics*, 59(4), 406. <https://doi.org/10.2307/1928705>
- Sarkisian, N., & Gerstel, N. (2016). Does singlehood isolate or integrate? Examining the link between marital status and ties to kin, friends, and neighbors. *Journal of Social and Personal Relationships*, 33(3), 361–384. <https://doi.org/10.1177/0265407515597564>
- Schaeffer, M. (2013). Inter-Ethnic Neighbourhood Acquaintances of Migrants and Natives in Germany: On the Brokering Roles of Inter-Ethnic Partners and Children. *Journal of Ethnic and Migration Studies*, 39(8), 1219–1240.
<https://doi.org/10.1080/1369183X.2013.778147>
- Schäper, C., Schrenker, A., & Wrohlich, K. (2023). Gender Care Gap and Gender Pay Gap Increase Substantially until Middle Age. *DIW Weekly Report*, 13(9), 83–88.
https://doi.org/10.18723/diw_dwr:2023-9-1
- Schnettler, S., & Wöhler, T. (2016). No children in later life, but more and better friends? Substitution mechanisms in the personal and support networks of parents and the

- childless in Germany. *Ageing and Society*, 36(7), 1339–1363.
<https://doi.org/10.1017/s0144686x15000197>
- Shapira, M., Gayle, V., & Graham, E. (2019). Moving on and moving out: The implications of socio-spatial mobility for union stability. *Population, Space and Place*, 25(2), e2180. <https://doi.org/10.1002/psp.2180>
- Shauman, K. A., & Noonan, M. C. (2007). Family Migration and Labor Force Outcomes: Sex Differences in Occupational Context. *Social Forces*, 85(4), 1735–1764.
<https://doi.org/10.1353/sof.2007.0079>
- Sime, D., & Fox, R. (2015). Migrant Children, Social Capital and Access to Services Post-Migration: Transitions, Negotiations and Complex Agencies. *Children & Society*, 29(6), 524–534. <https://doi.org/10.1111/chso.12092>
- Snijders, T. A. B., & Bosker, R. J. (2012). *Multilevel analysis: An introduction to basic and advanced multilevel modeling* (2nd edition). Sage.
- Song, L. (2012). Raising network resources while raising children? Access to social capital by parenthood status, gender, and marital status. *Social Networks*, 34(2), 241–252.
<https://doi.org/10.1016/j.socnet.2011.12.005>
- Spitze, G. (1984). The effect of family migration on wives' employment: How long does it last? *Social Science Quarterly*, 1(65), 21–36.
https://search.proquest.com/openview/c4fb27e8681f7222bab1dc67ac4e1129/1?pq-origsite=gscholar&cbl=1816420&casa_token=f3azho0ef_oaaaa:njvtamdl-aiodljdqee27ka4m4qpkkiz5tvonqlh0pkhowusfh7jwc3h4u_obdkrwu99cmhlntoy
- Stier, H., Lewin-Epstein, N., & Braun, M. (2001). Welfare Regimes, Family-Supportive Policies, and Women's Employment along the Life-Course. *American Journal of Sociology*, 106(6), 1731–1760. <https://doi.org/10.1086/321302>
- Strasser, E., Kraler, A., Bonjour, S., & Bilger, V. (2009). Doing family. *The History of the Family*, 14(2), 165–176. <https://doi.org/10.1016/j.hisfam.2009.02.005>
- Tan, J. J. X., Kraus, M. W., Carpenter, N. C., & Adler, N. E. (2020). The association between objective and subjective socioeconomic status and subjective well-being: A meta-analytic review. *Psychological Bulletin*, 146(11), 970–1020.
<https://doi.org/10.1037/bul0000258>
- Thévenon, O. (2016). Do 'institutional complementarities' foster female labour force participation? *Journal of Institutional Economics*, 12(2), 471–497.
<https://doi.org/10.1017/S1744137415000399>

- Tibesigwa, B., Visser, M., & Hodkinson, B. (2016). Effects of Objective and Subjective Income Comparisons on Subjective Wellbeing. *Social Indicators Research*, 128(1), 361–389. <https://doi.org/10.1007/s11205-015-1035-1>
- Tulin, M., Lancee, B., & Volker, B. (2018). Personality and Social Capital. *Social Psychology Quarterly*, 81(4), 295–318. <https://www.jstor.org/stable/48588648>
- Verbake, E., & de Graaf, P. M. (2008). Resources of the Partner: Support or Restriction in the Occupational Career? Developments in the Netherlands Between 1940 and 2003. *European Sociological Review*, 24(1), 81–95. <https://doi.org/10.1093/esr/jcm036>
- Wahba, J. (2015). Selection, selection, selection: The impact of return migration. *Journal of Population Economics*, 28(3), 535–563. <https://doi.org/10.1007/s00148-015-0541-4>
- Williams, V. F., Smith, A. A., Villanti, A. C., Rath, J. M., Hair, E. C., Cantrell, J., Teplitskaya, L., & Vallone, D. M. (2017). Validity of a Subjective Financial Situation Measure to Assess Socioeconomic Status in US Young Adults. *Journal of Public Health Management and Practice : JPHMP*, 23(5), 487–495. <https://doi.org/10.1097/phh.0000000000000468>
- Witte, N., Ette, A., & Sander, N. (2023). How do global crises affect privileged migrants? Return migration of German emigrants one year into the Covid-19 pandemic. *Journal of Ethnic and Migration Studies*, 1–23. <https://doi.org/10.1080/1369183X.2023.2245570>
- Witte, N., & Guedes Auditor, J. (2021). Affluent Lives Beyond the Border? Individual Wage Change Through Migration. In M. Erlinghagen, A. Ette, N. F. Schneider, N. Witte, & (Keine Angabe) (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course* (pp. 121–138). Springer.
- Wolf, K. (2016). Marriage Migration Versus Family Reunification: How Does the Marriage and Migration History Affect the Timing of First and Second Childbirth Among Turkish Immigrants in Germany? *European Journal of Population*, 32(5), 731–759. <https://doi.org/10.1007/s10680-016-9402-4>
- Wooldridge, J. (2009). *Econometrics: A Modern Approach*. Cengage Learning, Mason (OH).
- The World Bank. (2022). *World Bank Country and Lending Groups*. <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>

APPENDIX

Table 3: Number of observations and macrolevel indicators by destination country

Destination country	Number of observations		Income group	Unemployment rate	Total public social expenditure on families (%/GDP)	Children 0-2 in formal childcare (%)
	Female	Male Total				
Australia	19	20 39	High	5.44	2.06	39.52
Austria	101	123 224	High	5.65	2.62	18.57
Belgium	25	29 54	High	6.66	3.15	56.68
Brazil	11	8 19	Upper-middle	6.57		20.68
Canada	14	21 35	High	6.14	1.75	
China	16	36 52	Upper-middle	6.55		
Czech Republic	7	5 12	High	2.64	2.92	9.37
Denmark	19	21 40	High	5.55	3.40	56.06
France	60	59 119	High	9.24	3.60	56.84
Hungary	5	5 10	High	3.68	3.35	16.08
Ireland	11	12 23	High	6.15	1.62	37.7
Italy	29	14 43	High	11.04	2.47	28.53
Japan	8	15 23	High	2.65	1.79	
Luxembourg	6	15 21	High	5.54	3.30	63.49
Mexico	8	13 21	Upper-middle	3.37	0.86	3.86

Table 3 continued

Destination country	Number of observations		Income group	Unemployment rate	Total public social expenditure on families (%/GDP)	Children 0-2 in formal childcare (%)
	Female	Male Total				
Netherlands	70	41 111	High	5.38	1.84	60.72
New Zealand	10	9 19	High	4.47	2.66	48.39
Norway	12	13 25	High	4.13	3.35	56.94
Poland	9	11 20	High	4.69	2.99	15.23
Portugal	7	10 17	High	7.65	1.69	49.66
Russian Federation	5	8 13	Upper-middle	6.51		19.55
Singapore	8	16 24	High	6.48		
Spain	50	52 102	High	16.19	1.31	37.35
Sweden	34	21 55	High	6.67	3.40	45.91
Switzerland	264	306 570	High	4.75	2.30	34.48
Turkey	12	10 22	Upper-middle	10.9	0.49	0.24
United Kingdom	86	86 172	High	4.25	3.23	41.66
United States	87	131 218	High	4.12	1.08	
Total	993	1,110 2,103				

Source: GERPSw1

Table 4: Logit regression on employment prior to migration

Dependent variable = employment prior to migration	(I)
Female	-0.35*** (0.07)
Agegroup (ref. 29-38 years)	
19-28 years	-1.65*** (0.10)
39-48 years	0.61*** (0.16)
49-58 years	0.41** (0.20)
Partnership and living arrangements prior to migration (ref. single)	
Married, LT	0.63*** (0.16)
Unmarried, LT	0.64*** (0.14)
Married, LAT	0.04 (0.21)
Unmarried, LAT	0.00 (0.11)
Age youngest child in household (ref. no child)	
Children aged 0-5 years	-1.10*** (0.17)
Children aged 6-16 years	-0.20 (0.26)
Immigrant origin	-0.26*** (0.10)
Constant	1.45*** (0.11)
Pseudo R^2	0.16
Observations	3,126

Note: Standard errors in parenthesis. Missing dummies/categories included but not displayed. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. LT = living together, LAT = living apart together. Source: GERPSw1.

Table 5: Two-level logistic regression of family status change on four different economic outcomes (full table)

	(9)		(10)		(11)		(12)		(13)		(14)		(15)		(16)		
	employment		employment		subj. improvement personal income		subj. improvement personal income		subj. improvement household income		subj. improvement household income		subj. improvement living standard		subj. improvement living standard		
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
Partnership and parenthood status change variables																	
Partnership status change (ref. continuous partnership)																	
Continuously single	0.35 (0.26)	0.55 (0.38)	0.30 (0.20)	0.25 (0.20)	-0.56*** (0.21)	0.22 (0.21)	-0.62*** (0.194)	0.07 (0.19)									
Union dissolution	0.13 (0.38)	1.29 (0.82)	0.03 (0.32)	0.23 (0.31)	-0.76** (0.33)	0.34 (0.32)	-0.15 (0.305)	0.38 (0.30)									
Single & new partner	0.29 (0.33)	0.45 (0.55)	0.26 (0.26)	0.75** (0.35)	-0.46* (0.28)	0.23 (0.35)	0.20 (0.263)	0.68** (0.32)									
Childbirth	-2.38*** (0.33)	2.23** (1.07)	-1.03*** (0.35)	0.40 (0.29)	-0.24 (0.32)	0.09 (0.27)	-0.47 (0.303)	0.48* (0.27)									
Children in household prior to migration	-0.73*** (0.24)	-0.04 (0.34)	-0.11 (0.23)	0.15 (0.19)	0.23 (0.23)	-0.07 (0.19)	0.07 (0.220)	0.01 (0.18)									
Individual-level controls																	
Age group (ref. 29-38 years)																	
19-28 years	-0.22 (0.42)	-0.40 (0.66)	0.34 (0.34)	0.22 (0.38)	0.09 (0.37)	0.04 (0.41)	-0.47 (0.346)	0.38 (0.36)									
39-48 years	-0.09 (0.27)	-0.43 (0.39)	-0.13 (0.23)	-0.34 (0.21)	-0.14 (0.24)	-0.26 (0.21)	0.25 (0.227)	0.10 (0.19)									
49-58 years	-0.38 (0.32)	-1.30*** (0.42)	-0.03 (0.28)	-1.06*** (0.25)	-0.38 (0.28)	-0.66*** (0.25)	-0.03 (0.262)	-0.28 (0.23)									

Table 5 continued

	(9)		(10)		(11)		(12)		(13)		(14)		(15)		(16)		
	employment		employment		subj. improvement personal income		subj. improvement personal income		subj. improvement household income		subj. improvement household income		subj. improvement living standard		subj. improvement living standard		
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
Good health	0.25 (0.24)	-0.12 (0.36)	0.20 (0.20)	0.21 (0.20)	0.19 (0.21)	0.34* (0.20)	0.42** (0.201)	0.45** (0.18)									
Education (ref. Medium (ISCED 4-5))																	
Low (ISCED 0-3)	0.17 (0.46)	-1.14** (0.46)	0.24 (0.40)	-0.52 (0.37)	0.16 (0.42)	-0.58 (0.38)	-0.11 (0.403)	-0.59* (0.36)									
High (ISCED 6-8)	0.55** (0.22)	0.49 (0.34)	0.09 (0.19)	-0.01 (0.22)	0.00 (0.20)	-0.19 (0.22)	-0.03 (0.189)	-0.35* (0.21)									
Host country language skills	0.16** (0.07)	0.17* (0.10)	0.03 (0.07)	0.03 (0.06)	-0.08 (0.07)	0.08 (0.06)	-0.01 (0.063)	0.06 (0.06)									
Immigrant origin (ref. no)	-0.26 (0.21)	-0.49 (0.34)	0.00 (0.18)	-0.29 (0.19)	0.18 (0.19)	-0.27 (0.19)	0.11 (0.173)	-0.03 (0.18)									
Duration of previous stays abroad (ref. No)																	
<2 years	-0.04 (0.25)	0.37 (0.36)	-0.16 (0.21)	-0.22 (0.20)	-0.21 (0.22)	-0.29 (0.20)	-0.51** (0.201)	-0.09 (0.19)									
2 to <5 years	-0.16 (0.25)	0.69* (0.41)	-0.24 (0.21)	0.15 (0.22)	-0.18 (0.23)	0.16 (0.22)	-0.56*** (0.209)	-0.04 (0.20)									
5 or more years	0.13 (0.24)	1.36*** (0.43)	-0.16 (0.20)	0.09 (0.21)	-0.26 (0.21)	-0.03 (0.20)	-0.61*** (0.198)	0.10 (0.19)									
Predicted probability of employment prior to migration	0.13 (0.99)	0.89 (1.71)	0.44 (0.81)	0.83 (0.94)	0.04 (0.88)	0.31 (1.00)	-1.55* (0.824)	0.23 (0.88)									

Table 5 continued

	(9)		(10)		(11)		(12)		(13)		(14)		(15)		(16)	
	employment		employment		subj. improvement personal income		subj. improvement personal income		subj. improvement household income		subj. improvement household income		subj. improvement living standard		subj. improvement living standard	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Country-level controls																
High-income country	0.41 (0.63)	0.54 (0.98)	0.54 (0.70)	0.10 (0.65)	0.54 (0.70)	0.10 (0.65)	0.38 (0.74)	0.10 (0.65)	0.38 (0.74)	0.10 (0.66)	0.61 (0.656)	0.23 (0.59)	0.61 (0.656)	0.23 (0.59)		
Unemployment rate	-0.03 (0.04)	-0.07 (0.06)	-0.08* (0.05)	-0.10** (0.05)	-0.08* (0.05)	-0.10** (0.05)	-0.09* (0.05)	-0.03 (0.05)	-0.09* (0.05)	-0.03 (0.05)	-0.02 (0.043)	0.02 (0.04)	-0.02 (0.043)	0.02 (0.04)		
Public expenditures on families	0.09 (0.19)	-0.24 (0.30)	-0.26 (0.22)	-0.19 (0.22)	-0.26 (0.22)	-0.19 (0.22)	-0.05 (0.24)	-0.19 (0.22)	-0.05 (0.24)	0.10 (0.23)	-0.23 (0.209)	-0.11 (0.20)	-0.23 (0.209)	-0.11 (0.20)		
Children 0-2 years old enrolled in official childcare	0.00 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.00 (0.01)	0.01 (0.01)	0.00 (0.01)	0.01 (0.01)	-0.00 (0.009)	-0.01 (0.01)	-0.00 (0.009)	-0.01 (0.01)		
Constant	-0.04 (1.03)	1.24 (1.80)	-0.71 (0.99)	0.25 (1.09)	-0.71 (0.99)	0.25 (1.09)	0.81 (1.05)	-0.37 (1.13)	0.81 (1.05)	-0.37 (1.13)	1.57* (0.948)	-0.07 (1.01)	1.57* (0.948)	-0.07 (1.01)		
Variance statistics																
Country variance	0.06 (0.07)	0.11 (0.12)	0.22** (0.11)	0.18** (0.09)	0.22** (0.11)	0.18** (0.09)	0.27** (0.13)	0.20** (0.09)	0.27** (0.13)	0.20** (0.09)	0.18** (0.084)	0.13* (0.07)	0.18** (0.084)	0.13* (0.07)		
ICC (based on empty model)	0.05	0.07	0.1	0.11	0.1	0.11	0.12	0.09	0.12	0.09	0.06	0.06	0.06	0.06		
ICC (based on full model)	0.02	0.03	0.06	0.05	0.06	0.05	0.08	0.05	0.08	0.06	0.05	0.04	0.05	0.04		
Number of groups	28	28	28	28	28	28	28	28	28	28	28	28	28	28		
Observations	980	1,102	933	1,089	933	1,089	911	1,052	911	1,052	987	1,105	987	1,105		

Note: Standard errors in parenthesis. Missing dummies/categories included but not displayed. Significance levels: ***p<0.01, **p<0.05, *p<0.1. ICC at the 95% confidence intervals. Source: GERPSwI.

ARTICLE FOUR

OUT OF SIGHT, OUT OF MIND? FREQUENCY OF EMIGRANTS' CONTACT WITH FRIENDS IN GERMANY AND ITS IMPACT ON SUBJECTIVE WELL-BEING

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OUT OF SIGHT, OUT OF MIND? FREQUENCY OF EMIGRANTS' CONTACT WITH FRIENDS IN GERMANY AND ITS IMPACT ON SUBJECTIVE WELL-BEING

ABSTRACT

Migration implies both benefits and costs. The latter include a possible breakdown of social networks, and thus a loss of social capital (Lesage & Ha, 2012; Wahba & Zenou, 2012). Although there is some literature on the evolution of family networks after migration, not as much is known about friendship. This article assesses quality of friendship between German emigrants and their friends who stayed in Germany. In particular, it asks three research questions: (a) How does quality of relationships with friends in Germany differ from quality of other relationships after migration? (b) How is friendship quality after migration related to socio-demographic or socio-economic factors? And (c) is there a link between friendship quality and subjective well-being of emigrants? Results indicate that friendship quality measured as frequency of contact with friends falls in the middle range of contact frequency, as respondents typically have more contact with partners and children, but less contact with some other relatives, compared to close friends. Furthermore, several socio-demographic and socio-economic determinants of contact frequency can be identified and correlations with various aspects of subjective well-being were found.

INTRODUCTION

Migration provides people with new opportunities. For example, migration can be beneficial for the individual's career by bringing about income gains (Clemens, 2013; Gibson & McKenzie, 2012; Gibson et al., 2018; Hendricks & Schoellman, 2018). However, migration also brings about costs. By definition, moving across borders implies financial costs. These include costs shortly before or during the migration event, such as costs for transportation, visa fees, or new furniture. Furthermore, financial costs can arise after migration (e.g. travel costs to visit friends and family at home). However, migration might not only be costly in terms of economic capital. For example, human capital could be devaluated as it might not be applicable to the labour market in the destination country (Chiswick, 1978; Chiswick & Miller, 2007). In this context, Chiswick and Miller (2007) talk about "less-than-perfect transferability of skills acquired on the job or through formal schooling" (p. 2) to underline that this devaluation does not only refer to language skills. Furthermore, social networks might be broken, leading to a loss of social

capital (Lesage & Ha, 2012; Wahba & Zenou, 2012). In particular, accessibility of social capital is crucial for its mobilisation (Lin, 1999), which might be hindered after international migration.

Social capital understood as interpersonal ties (Granovetter, 1973) involves both instrumental and emotional support. With international migration and, thus, increased geographical distance, the loss of instrumental support seems plausible. However, emotional support is also important to analyse as O’Flaherty et al. (2007, p. 819) point out that “migrants are often in the situation where many of their most emotionally significant relationships are conducted internationally”. To what extent and by which means migration affects emotional support appears unclear as only a few qualitative studies exist (see e.g. Baldassar, 2007; Guo et al., 2009). These studies focus on family relationships. Migration, however, also implies friendships across borders. Concerning these friendships, there exists even less scientific knowledge than with respect to transnational family relationships. This lack of understanding of a potentially impactful social experience provides the starting point for this chapter, which asks three research questions:

- (a) How does quality of relationships with friends in Germany differ from quality of other relationships after migration?
- (b) How is friendship quality after migration related to socio-demographic or socio-economic factors?
- (c) Is there a link between friendship quality and subjective well-being of emigrants?

The first question can be seen as the starting point, and can be answered using descriptive statistics, providing the basis of this analysis. The second question builds on the first. To address the second question, determinants of friendship quality are identified by application of multivariate regressions. Finally, the third question looks at correlations between friendship quality and different aspects of subjective well-being. Subjective well-being can be conceptualised as an important outcome variable of the migration event (Auditor & Erlinghagen, 2021; Bartram, 2013; Baykara-Krumme & Platt, 2018; Erlinghagen, 2011; Safi, 2010). With this in mind, by focussing on friendship quality the third research question takes a step towards analysing differences in subjective well-being between emigrants. Doing so, this article provides new insights concerning individual psychosocial consequences of emigration from industrialised countries as data from German emigrants is used.

The remainder of this chapter is structured as follows. First, I outline some theoretical considerations concerning determinants of contact frequency and its link with subjective well-being. This is followed by a short overview of (both qualitative and quantitative) findings concerning these factors. Then, I describe methodology and outline the sets of variables used to answer the

three research questions. Next, the research questions are answered in sequence. Finally, I discuss the findings and draw a conclusion.

THEORY

Determinants of friendship quality

Friendship quality can be conceptualised as relationship quality with friends. Relationship quality is usually measured by contact frequency, whereby scholars assume that ties are closer the higher the contact frequency (Bauernschuster et al., 2010; Blömers & Letschert, 2011). This contact frequency can encompass different modes of contact: personal visits, calls, messages, etc. Although the German Emigration and Remigration Panel Study (GERPS) includes all modes of contact in their frequency measures, some scholars focus on one aspect, for example personal visits. Below, I summarise theoretical considerations concerning different modes of contact frequency.

O’Flaherty et al. (2007) assume economic integration (wealth, income, economic status, education, etc.) to have a positive impact on visits to one’s own home country as financial resources are crucial for travel opportunities. Still, some aspects of economic integration that are time-consuming appear to work into the opposite direction: someone who has a full-time job and thus a limited number of days of annual leave might be less likely to return home frequently than a student or a pensioner who has fewer obligations in the host country. Also, higher economic integration increases the attractiveness of staying in the host country (Portes et al., 1999). Concerning other forms of contact (letters, information and communication technologies or ICTs, etc.), the direction of the effect is not so clear either. Education might, in general, be correlated with higher ICT handling skills and thus foster contact using this channel. However, given that the overall level of education in the GERPS sample is already very high, education might rather correlate with employment obligations and thus have the opposite effect. Furthermore, it might foster the speed of overall integration (Guarnizo et al., 2003) and thus negatively impact contact frequency. Social integration implies closer ties to the host country’s society and thus is assumed to have a negative impact on frequency of contact with friends in the home country. Furthermore, social integration is likely to negatively affect intentions to remigrate, and not intending to remigrate is assumed to decrease contact with friends in the home country.

Individual characteristics that have been considered include gender, age, and foreign roots. O’Flaherty et al. (2007) find that women are more likely than men to visit home. They argue that this finding might reflect expectations concerning gender roles: women are traditionally

expected to do caregiving and provide emotional support but men focus on political and economic concerns. In line with this argumentation, Kaasa and Parts (2008) argue that it is easier for women to find emotional support, for example when depressed. This would imply that they not only invest but also receive more in terms of social support. Age might increase contact frequency as older people are usually more attached to their home country (Iarmolenko et al., 2016). Also, the nature of friendship changes when aging: Fox et al. (1985) state that – with age – men develop more concern and thoughtfulness regarding friends and women become more tolerant and less confrontational. Different behaviour or attitudes towards friends might also impact contact frequencies in friendships. Additionally, foreign roots might play a role in defining contact behaviour. In this context, foreign roots refers to having a migration background in Germany and not in the host country as German emigrants by definition have a migration background if they have moved abroad. In order to prevent confusion, I use the term foreign roots. For example, Iarmolenko et al. (2016) hypothesise that differences in home visits among ethnic Germans, Russian Jews, and Turkish people living in Germany depend on distinct exit and entry conditions. Consequently, as resources are limited, these differences might in turn affect home visits in Germany (and thus contact frequency with friends living there).

Distance to the home and time in the host country are assumed to affect contact frequency. In particular, I hypothesise contact frequency to decrease with distance. This is for two reasons: first, travel costs increase with distance, making home visits more expensive. Second, a longer distance is associated with a larger time difference, which narrows possible time slots for communication and thus complicates transnational contact (Ryan et al., 2015). Connections with the home country decrease with time in the host country, and this holds especially for friends (Ryan et al., 2015). Thus, length of stay is assumed to decrease contact frequency.

Number of friends is assumed to play a crucial role as having a large number of friends simply provides more opportunities for contact frequency. Furthermore, partnership, marital status, and household size (i.e. whether there are children in the household or not) might be important. Ryan et al. (2015) argue that family obligations negatively impact the likelihood of home visits, one possible mode of contact. Such obligations are higher for people with a partner and/or children and with the presence of the respective person(s) in the household. Furthermore, family obligations might affect network size, which is consistent with the finding that married persons have fewer informal networks (Kaasa & Parts, 2008).

Contact, friendship, and subjective well-being

Prilleltensky (2008) analyses different risk and protective factors of migrants' subjective well-being. Friendship is categorised as being protective and thus assumed to positively affect subjective well-being. But what exactly is the link between these two phenomena? Lee and Ishii-Kuntz (1987) argue that individuals choose their friends and at the same time are chosen as friends. The latter shows the individuals that they possess positive attitudes or qualities that are valued. This is assumed to have a positive impact on subjective well-being (Lee & Ishii-Kuntz, 1987). Furthermore, friendship is linked to subjective well-being via support and disclosure (Cuadros & Berger, 2016) and mediated via loneliness – a subjective feeling of social integration (Liang et al., 1980). The latter motivates the inclusion of different loneliness measures to assess the link between friendship and migrants' subjective well-being. Furthermore, contact with friends in the home country might correlate not only with overall life satisfaction, but also with satisfaction concerning different life domains.

LITERATURE REVIEW

In general, literature on cross-border relationships of emigrants mainly focusses on Asia and Latin America (Apitzsch, 2014) and economically disadvantaged groups (e.g. Benítez, 2012; Madianou & Miller, 2011). If Germany is the subject of study, literature usually approaches it as a destination country (Baykara-Krumme, 2014). This means that the behaviour of migrants in Germany – not German emigrants – is analysed. One exception is a study by Mau and Mewes (2007). They analysed transnational social relationships but focused only on non-mobile individuals living in Germany and their contact with people living abroad. Also with respect to other industrialized countries, not much research has been published. Exceptions, however, do exist: 98 per cent of Irish migrants in Melbourne have contact with their family in Ireland (O'Connor, 2009). The same holds for 93 per cent of migrants of English-speaking background and 91 per cent of migrants of non-English-speaking background in Australia (Ang et al., 2002) and 95.4 per cent of migrants from different countries in Vancouver, Canada (Hiebert & Ley, 2006).

Determinants of contact

Literature on the determinants of contact with people in the home country has focused primarily on contact with relatives and has mainly examined either home visits or contact using information and communication technologies (ICTs). Furthermore, research on transnational relationships of relatively affluent migrants is limited (O'Flaherty et al., 2007). However, some

exceptions exist: concerning migrants' visits home, major between-group differences for migrants in Australia were found (O'Flaherty et al., 2007). In particular, they report differences with respect to visa category, country of origin, sex, age, relative life satisfaction in Australia and aspirations to get the Australian citizenship, English language skills, income, housing situation, home ownership, education, financial aid from overseas, and financial aid from within Australia. Also looking at migrants' visits home, Iarmolenko et al. (2016) assessed different determinants of transnational activity of female migrants in Germany. They found that determinants vary by ethnic background, for example the financial situation is significant for Turkish immigrants but not so for ethnic Germans and Russian Jews. Determinants that are statistically significant (for some female migrant groups) but not considered by O'Flaherty et al. (2007) are length of stay, discrimination, thoughts about returning to the home country, as well as several acculturation, identification, and social network measures. Analysing contact behaviour of highly skilled American and French migrants in London, Ryan et al. (2015) found that geographical distance matters: French could visit their home country more frequently than Americans. Also, the authors identified competing family obligations as being crucial for determining home visits.

Given that transnational contact became easier with the surge of ICTs (Bacigalupe & Cámara, 2012; Pajnik & Bajt, 2012) one might assume that the economic status (i.e. income, home ownership, financial aid, etc.) is less crucial for ICT-based contact. However, the availability of these new technologies differs (Wilding, 2006). Bryceson and Vuorela (2002) showed that indeed income and material assets are crucial determinants. Analysing phone and e-mail contact of migrants in the Netherlands, Schans (2009) identified similar influencing factors as those for home visits. Furthermore, she added age at migration to the list of determinants.

Cross-border contacts and subjective well-being

Even though transnational ties are crucial for the emotional well-being of every migrant (Ryan et al., 2015), literature on the link between cross-border contacts and subjective well-being has focused mainly on migrant parents and left-behind children (e.g. Dito et al., 2017). One exception is from O'Flaherty et al. (2007), who found a significant effect of relative life satisfaction in Australia on the odds of home visits.

More generally and without focusing on migration, there appears to be a relationship between friendship and subjective well-being (Heady et al., 1991). Among children, Gauze et al. (1996) found that friendship and subjective well-being were correlated. More specifically, Cuadros

and Berger (2016) found that two aspects of friendship (support and disclosure) affect subjective well-being of female children. Concerning elderly people, friendship significantly increases morale and decreases loneliness, with effects being stronger than those associated with family (Lee & Ishii-Kuntz, 1987).

DATA AND METHODS

In order to answer the three research questions, I present analyses of data from the first wave of GERPS. GERPS assesses consequences of international migration of German citizens and is based on a random sample drawn from local population registers (Ette et al., 2021). It covers both German emigrants and remigrants but for this analysis only emigrants are considered. Additionally, only respondents who indicated both their sex and age and who emigrated from Germany in either 2017 or 2018 were included. The latter facilitates focusing the analysis on short-term effects of migration. In total, 3,536 observations remained.

Friendship quality is proxied by using contact frequency with friends who still live in Germany. This approach is common in literature (see e.g. Bauernschuster et al., 2010; Blömers & Letschert, 2011). Contact frequency is measured not only with friends, but also with seven groups of relatives, allowing for comparisons between types of relationships. In particular, GERPS respondents are asked to indicate their contact frequency with (a) partner/spouse, (b) parents/parent-in-law, (c) siblings, (d) children, (e) grandchildren, (f) grandparents, (g) other relatives (e.g. aunts, uncles, cousins), and (h) close friends. If respondents were in contact with more than one person in one category (e.g. siblings, friends), they were asked to answer the question thinking of the person with whom contact is most frequent. The resulting measures include different modes of contact (e.g. visits, phone calls, messages). Contact frequency is measured on a four-point scale and has been rescaled such that higher values indicate more frequent contact:

How often are you in contact with the following people in Germany?

- Daily
- At least once a week
- At least once a month
- Less than once a month

Thus, contact frequency is an ordered categorical variable. Often with categorical variables, ordered logit models are estimated. These models rest on the proportional odds assumption that does not hold in this sample. This is not surprising as scholars argue that it almost always needs

to be rejected, especially with many explanatory variables (Brant, 1990), the inclusion of continuous explanatory variables, and a large sample (Allison, 2012; Brant, 1990; Clogg & Shihadeh, 1994; O'Connell, 2006). Consequently, I estimated generalised ordered logit, which allows the coefficients to differ across categories of the dependent variable. The autofit option – in an iterative process – tests for each variable whether its coefficients do actually differ across categories and Stata estimates only one coefficient if this is not the case (Williams, 2006).

Table 1 describes the coding and underlying classification of each explanatory variable used to assess the second research question. It also shows summary statistics.

Table 1: Descriptions, coding, and summary statistics of explanatory variables

Variable Name	Description	N	Mean	SD	Min	Max
Gender	Dummy: 1 = male, 0 = female	3,536	0.49	0.50	0	1
Age	Age at the time of the interview (years)	3,536	35.84	10.69	19	71
Foreign roots	Dummy: 1 = foreign roots (direct, indirect, not differentiable migration background in Germany), 0 = no foreign roots. Classification congruent to GSOEP's MIGBACK variable.	3,536	0.27	0.44	0	1
Length of stay	Time between the migration event and the interview (months)	3,536	11.98	4.43	0.3	25.1
Intention to remigrate	Dummy: 1 = yes, 0 = no. Based on the question of whether the respondent seriously thought about remigrating to Germany.	3,536	0.36	0.48	0	1
Europe	Dummy: 1 = respondent lives in Europe. 0 = respondent lives outside Europe	3,531	0.75	0.44	0	1
Main activity	Categorical: 2 = (self-)employed, civil servant; 1 = education/training; 0 = not employed, unemployed, retired	3,394	1.62	0.71	0	2
Bachelor or higher	Dummy: 1 = bachelor, master, doctoral (or equivalents); 0 = in school, primary education; lower-, upper- and post-secondary education; short-cycle tertiary education.	3,536	0.75	0.43	0	1
Friends	Number of close friends	3,536	8.24	6.51	1	90
Partner	Dummy: 1 = no partner, 0 = partner (irrespective of civil status and living arrangement). Classification based on PARTZA (generated partner indicator for the time of the interview, congruent to GSOEP)	3,536	0.74	0.44	0	1
Household constellation	Categorical: 0 = single-person household, 1 = couple without children, 2 = couple with children, 3 = others.	3,425	1.04	0.96	0	3

Data source: GERPS (wave 1).

In order to address the third research question, different measures of subjective well-being were taken into account:

- (1) Individual items of the GSOEP loneliness scale
 - a. Miss the company of others
 - b. Feel left out
 - c. Feel isolated
- (2) GSOEP loneliness scale overall
- (3) General life satisfaction
- (4) Perceived change in the quality of different life domains

The inclusion of (1.) and (2.) in this list is based on the findings by Liang et al. (1980) concerning the mediating effects of loneliness on subjective well-being. In the present study, first, participants' responses to the individual items of the GSOEP loneliness scale, including "miss the company of others," "feel left out," and "feel isolated" were analysed. These items cover different dimensions of loneliness and are measured on a five-point scale, ranging from 1 (never) to 5 (very often). Second, the three-item GSOEP loneliness scale, which was developed building on the 20-item UCLA loneliness scale (Luhmann & Hawkey, 2016) is included. It is based on the three single items in (1.). Scholars have shown its strong correlation with the original scale (Hughes et al., 2004) as well as the validity of the German version (Hawkey et al., 2016). The overall score is computed as the sum of the individual items. Third, general life satisfaction as a measure of subjective well-being is considered. Respondents were asked about their overall satisfaction level on a scale from 0 to 10. Fourth, changes in the quality of different aspects of life are considered. These include changes in family life, the situation with friends, health, and neighbours. Respondents were asked to compare the situation before migration to the current situation and indicate whether it got better or worse. In particular, respondents could answer on a five-point scale ranging from 1 (much better than in Germany) to 5 (much worse than in Germany).

As with contact frequency, these measures are categorical variables. As explained above, ordered logit models rest on the proportional odds assumption, which in most cases does not hold. However, the measures of subjective well-being consist of five to 15 categories, which would lead to a very high number of equations to be estimated as well as a very low number of observations included in each estimation equation. When pooling these categories, information would be lost. Furthermore, the third research question is not so much about how exactly different determinants affect subjective well-being but rather whether there is a link between

friendship quality and different dimensions of subjective well-being or not. Thus, I stick to simple ordered logit regression and interpret estimation coefficients as “average effects” of contact frequency on subjective well-being (keeping in mind that this effect might differ across the categories of subjective well-being and that causality cannot be established).

RESULTS

Patterns of contact frequency

Table 2 shows emigrants’ contact frequencies with different relatives as well as friends living in Germany. Overall, frequency of contact with friends fell in the middle of this frequency scale, with most of the respondents having contact with their friends on a weekly (41.1%) or monthly (37.7%) basis. A total of 10.8 and 10.4 per cent accrue to the two extreme response options, less than once a month and daily, respectively. Contact was most frequent with the partner (if he or she stayed in Germany), followed by children and parents (including parents-in-law). Least frequent contact was observed to be with other relatives, followed by grandparents and grandchildren. Noteworthy are also the differences concerning the numbers of observations, which stem from the fact that not all respondents had all different types of relatives and/or a partner living in Germany.

Table 2: Contact frequency by types of relatives and friends (%)

Contact with	Less than once a month	At least once a month	At least once a week	Daily	N
Partner	2.4	3.0	8.3	86.4	873
Children	5.6	11.2	34.2	49.0	447
Parents (in-law)	5.1	23.2	57.0	14.7	3058
Friends	10.8	37.7	41.1	10.4	3406
Siblings	19.4	38.7	34.1	7.8	2778
Grandchildren	38.8	29.8	26.5	5.0	121
Grandparents	50.5	37.0	11.5	1.1	1457
Other relatives	72.1	22.1	5.0	0.8	2754

Partner includes both spouses and unmarried partners and parents also includes parents-in-law. Contact frequencies by types of relatives are operationalised similarly to contact frequency to friends as described in section four. Ranking is based on mean contact frequency. Data source: GERPS (wave 1).

Descriptive statistics for contact frequency with friends in Germany also show distinct patterns by socio-demographic and socio-economic variables (Table 3). Female migrants had more contact with friends in Germany than male migrants did. In particular, female migrants were more likely to have daily or weekly contact. The percentage of males having contact less than once a month is 9.3 percentage points higher than for females. Contact frequency decreased with age: the lowest contact category (less than once a month) increased, but both daily and at least once

a week decreased with age. Concerning foreign roots, only minor differences in contact frequency were observed: people with foreign roots were somewhat more likely to give extreme answers (daily or less than once a month). Similarly, small differences were found concerning the length of stay: contact frequency appears to decrease with the length of stay. Given that the maximum of length of stay in this data set is 25.1 months, even short-term differences could be identified. Contact frequency was slightly higher for emigrants who reported thinking about returning to Germany. The same held for emigrants who live in Europe – which can be seen as a proxy for distance. However, contact frequency was lower for people who reported being employed or holding a bachelor or higher degree.

Table 3: Contact frequency with friends by explanatory variables (%)

Variable	Category	Less than once a month	At least once a month	At least once a week	Daily	N
Sex	Female	7.1	33.3	47.7	11.9	1,794
	Male	14.6	42.3	34.1	8.9	1,742
Agegroup	20 to 29 years	6.6	32.8	44.7	15.9	1,098
	30 to 39 years	9.4	38.3	42.8	9.6	1,398
	40 to 49 years	15.8	43.4	35.5	5.3	468
	50 to 59 years	19.1	43.8	32.2	4.9	304
	60 years and older	24.1	38.7	32.9	4.4	137
Foreign roots	Yes	11.8	35.8	41.4	11.0	898
	No	10.5	38.2	41.1	10.2	2,458
	Less than 6 months	6.8	35.4	45.1	12.7	308
Length of stay	6 to less than 12 months	9.3	37.6	42.0	11.1	1,439
	12 to less than 18 months	12.7	38.2	39.9	9.3	1,449
	18 or more months	13.8	39.1	36.2	11.0	210
Intention to remigrate	Yes	9.5	36.7	42.1	11.7	1,251
	No	11.6	38.3	40.4	9.7	2,147
Europe	Yes	9.9	37.0	42.2	10.9	2,525
	No	13.4	39.7	37.8	9.1	876
Main activity	Econ. Active	11.0	38.7	40.2	10.1	2,484
	Education/training	6.5	36.9	42.3	14.4	355
	Other	9.2	41.7	38.3	10.8	120
	Not active	14.3	32.8	44.7	8.2	427
Education	Bachelor or higher	10.8	39.8	40.4	9.1	2,580
	Lower	10.6	31.2	43.2	14.9	810
Number of friends	1 to 5	14.4	37.9	39.4	8.3	1,461
	6 to 10	8.0	38.0	43.6	10.4	1,343
	11 to 20	7.6	37.0	41.0	14.4	486
	More than 20	11.2	36.2	31.9	20.7	116
Partner	No partner	9.1	29.8	46.0	15.1	843
	Partner	11.5	40.6	39.1	8.8	2,524
Household constellation	Single-person household	7.9	33.5	44.7	13.9	1,114
	Couple w/o children	9.5	40.8	40.5	9.2	1,279
	Couple with children	18.6	43.8	32.5	5.2	576
	Other	11.8	31.0	43.7	13.6	332

Data source: GERPS (wave 1).

Contact frequency increased with the number of friends between one and 20. Having more than 20 friends, however, did not further increase contact frequency. Comparing respondents with

more than 20 friends with those having six to 10 or 11 to 20 friends, it is furthermore noteworthy that people with more than 20 friends were more likely to give extreme answers, i.e. have contact daily or less than once a month. Furthermore, respondents who had a partner showed lower levels of contact frequency with friends than those who did not have a partner. A similar picture can be drawn when looking at household constellations: respondents in single-person households had more contact with friends than did people living with their partner but without children, who in turn have more contact than people living with their partner and children.

Estimation Results: Determinants of contact frequency

Generalised ordered logit regression draws a detailed picture of how different factors affect contact frequency (Table 4). Its coefficients need to be interpreted as follows (cf. Williams, 2006): a positive (and statistically significant) sign implies that a higher value of the explanatory variable increases the likelihood that the respondent is in a higher category of contact frequency than the current one. In contrast, the probability of being in the current or lower category of contact frequency increases with higher values of the explanatory variable if the estimated coefficient is negative. Concerning several explanatory variables (foreign roots, length of stay, intention to remigrate, Europe, main activity, and household constellation), the proportional odds assumption is not violated (i.e. coefficients are the same throughout the categories of the dependent variable). Thus, following Williams (2016), only one coefficient is shown in the first row which can be interpreted as a coefficient from estimating a simple ordered logit model. Concerning the other variables, the effect differs throughout the categories of the dependent variable and thus different coefficients are reported.

Being male increases the likelihood of being in the current or a lower category of contact frequency, but this effect decreases with increasing categories of contact frequency. Similarly, age has a negative impact on contact frequency, but the effect is strongest for the highest category of the dependent variable, followed by the lowest category. Concerning the next five variables, the proportional odds assumption holds and thus the effect is constant across the categories of the dependent variables. Although foreign roots and intention to remigrate appear to not be statistically significant, significant effects can be found for length of stay, Europe, and main activity. The longer the length of stay in the host country, the less frequently emigrants were in contact with friends in Germany. This effect is noteworthy as – due to the actuality of the study plus the fact that only respondents who left Germany in either 2017 or 2018 were included – the overall level of length of stay is still relatively low (see descriptive statistics in Table 1).

Staying in Europe was associated with more frequent contact with friends and being economically active (employed, self-employed, or civil servant) and being in training were associated with decreased contact compared to not being active (unemployed, not employed, or retired). Holding a bachelor's or higher degree was associated with decreased contact frequency. This effect is stronger for higher categories of the dependent variable (and it is not statistically significant for the lowest category). The number of friends had a positive impact on contact frequency, which is strongest for the lowest and highest category and weaker in the second column of the table (less than once a month and monthly vs weekly and daily). In contrast, having a partner (both married and unmarried) was negatively associated with contact frequency, with the effect being stronger for higher categories of the dependent variable (it even ceases to be statistically significant for the lowest category). Last, not living in a single-person household was associated negatively with contact frequency.

Table 4: Estimation results for contact frequency applying a generalised ordered logistic model using the autofit option.

	1L vs 2M, 3W, 4D	1L, 2M vs 3W, 4D	1L, 2M, 3W vs 4D
Male (vs. female)	-0.652***	-0.588***	-0.211*
Age	-0.040***	-0.030***	-0.051***
Foreign roots (yes vs. no)	-0.098		
Length of stay	-0.029***		
Intention to remigrate (yes vs. no)	0.085		
Europe (vs. outside Europe)	0.176**		
Main activity (vs. not active)			
econ. active	-0.237**		
educ. / training	-0.501***		
other	-1.499***		
Bachelor or higher degree (vs. lower)	-0.028	-0.343***	-0.578***
Number of friends	0.043***	0.019***	0.041***
Partner (yes vs. no)	0.145	-0.248**	-0.278**
Household constellation (vs. 1-pers. household)			
couple without children	-0.257***		
couple with children	-0.704***		
other	-0.227*		
Constant	4.284***	2.392***	0.553*
Observations	3401		
Pseudo R-Squared	0.053		

Note: Categories of the explanatory variable: 1L = less than once a month, 2M = at least once a month, 3W = at least once a week, 4D = daily. Models include controls for missing values of categorical/binary variables, which are not displayed in this table. Missing and improbable values concerning the number of friends and length of stay are replaced by the respective mean of the variable and a flag variable is used in order to indicate if values are real or imputed. Following Williams (2016), if variables meet the proportional odds assumption (and thus estimated coefficients are the same across categories of the dependent variable) only one coefficient is reported for the respective explanatory variable in the first row. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Data source: GERPS (wave 1).

Contact frequency and well-being

Table 5 shows estimation coefficients of contact frequency on different indicators of subjective well-being. The major finding is that a link between contact frequency and different indicators of subjective well-being exists. In particular, two individual items of the GSOEP loneliness scale, the composite GSOEP loneliness scale, general life satisfaction, and two indicators comparing changes in different life domains before and after migration (“situation has worsened with respect to...”) show statistically significant estimation coefficients. Concerning the GSOEP loneliness scale indicators, statistically significant negative coefficients with respect to “feel left out” and “feel isolated” as well as the composite indicator were found. These variables were coded such that higher values indicate stronger feelings of loneliness. Thus, a negative correlation indicated that higher contact frequency correlated with weaker feelings of loneliness. There were also statistically significant effects concerning general life satisfaction: more contact with friends corresponded to higher levels of general life satisfaction.

Table 5: Regression coefficients for contact frequency with friends on different subjective indicators of well-being estimating ordered logistic models.

	Contact frequency (Estimation coefficient)	N	Pseudo R-Squared
Miss company of others	-0.022	3368	0.037
Feel left out	-0.214***	3365	0.037
Feel isolated	-0.179***	3365	0.039
GSOEP loneliness scale	-0.151***	3401	0.031
General life satisfaction	0.077*	3377	0.027
Change family life	0.037	3383	0.06
Change friends	0.162***	3387	0.036
Change health	-0.032	3391	0.026
Change neighbours	0.076*	3394	0.016

Note: In contrast to regular presentations of regression results, in this table different models are displayed one below the other (and not next to each other). The first column shows the respective dependent variable. The coefficient of the main explanatory variable (contact frequency with friends) is shown in the second column. As controls, all explanatory variables from estimating contact frequency (Table 4) are used. For reasons of parsimony, they are not displayed but can be provided upon request. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Data source: GERPS (wave 1).

Additionally, changes in two of the four analysed life domains show statistically significant estimation coefficients: a worsening of the situation with respect to friends and neighbours. Low values of these variables indicate that the situation now is much better than it was in Germany (improvement) and high values indicate that the situation now is much worse than it was in Germany (worsening). Both changes in the area of friends and neighbours have positive signs, implying that more contact with friends in Germany corresponded with a worsening of

the situation. In other words, people who still have strong ties to their friends in Germany reported feeling that the situation concerning friends and neighbours after migration was worse than it was in Germany.

CONCLUSION AND DISCUSSION

At least in the short term, out of sight does not mean out of mind: German emigrants maintain contact with different types of relatives and friends in Germany. In particular, contact with friends falls in the middle of this frequency scale: it is less frequent than contact with the partner, children, and parents, but more frequent than contact with siblings, grandchildren, grandparents, and other relatives who remained in Germany.

Several determinants of this contact frequency with friends could be identified. In line with the theoretical considerations outlined earlier, staying within Europe and a higher overall number of friends was associated with increased contact with friends in Germany. The Europe dummy is used as a proxy for distance to Germany and the finding can be explained as follows: contact decreases with distance as travel costs and time difference increase. Having more friends simply provides more opportunities for contact and thus increases contact frequency. In contrast, being male, increasing age, length of stay, holding a bachelor or higher degree, having a major activity, being in a relationship, and not living in a single-person household were associated with decreases in emigrants' contact with friends in Germany. Except for age, these effects are also consistent with the theoretical considerations earlier outlined. Different models regarding gender roles, associating woman with being more involved with emotional support than men (O'Flaherty et al., 2007), might explain why being male is associated with lower frequency of contact with friends. Both length of stay and education are likely to foster integration, making contact with people in the host country relatively more attractive. Having a major activity, being in a relationship, and not living in a single household appear to influence contact frequency similarly. They not only increase the relative attractiveness of the host country, but are also time-consuming and imply more obligations in the host country. In contrast, previous literature suggested that contact frequency might increase with age as older people are more attached to their home country (Iarmolenko et al., 2016) and friendship was assumed to strengthen as people grow older (Fox et al., 1985). However, in the current analyses I found that contact with friends decreased with age. A potential explanation is that younger people are more affluent with ICT-based communication and that this type of communication represents an important way of staying in touch. Furthermore, age might correlate with obligations other than those covered with having a major activity, partnership status, and household composition. Assuming

that all types of obligations in the host country are associated with decreased contact frequency with friends in the home country, this might further explain the negative effect of age.

Correlations between different indicators of subjective well-being and contact frequencies exist. More contact with friends implied weaker feelings of loneliness and higher life satisfaction. However, not all individual items of the GSOEP loneliness score correlated with emigrants' contact frequency with friends in Germany. This emphasises that possibly different aspects of loneliness exist, and the different aspects might have different determinants and consequences. Consequently, this finding calls for further research. The fact that a perceived worsening in different life areas (comparing to the situation in Germany) corresponds to more contact with friends in Germany appears plausible: respondents might try to compensate the lack of friends or contact with neighbours in the new country of residence with friends in Germany. However, it poses the question of the direction of this relationship. In this chapter, I assumed contact frequency to affect subjective well-being and thus estimated coefficients using subjective well-being as the dependent variable. However, to some extent it might also be the other way around. In particular, the questions are the following: do people stay in touch because they perceive different aspects of their new lives as being worse than in Germany? Are they unhappy and seeking social support from friends left behind in Germany? Or is it the other way around and more contact reminds people of the positive aspects of their life in Germany and thus leads to glorification? With the next wave of data becoming available in 2020, further investigations regarding the causal relationship between contact with friends in Germany and emigrants' integration into host country societies will be possible by estimating a model assessing causality using three survey waves (Heady et al., 1991).

As stated earlier, "migrants are often in the situation where many of their most emotionally significant relationships are conducted internationally" (O'Flaherty et al., 2007, p. 819). Thus, analysing these relationships is an important task when assessing migrants' social capital. In this context, this article helps understanding the phenomenon of cross-border friendship and takes a first step towards analysing the link between friendship and migrants' subjective well-being.

REFERENCES

- Allison, P. D. (2012). *Logistic regression using SAS: Theory and application* (2nd edition). SAS Institute, Inc.
- Ang, I., Brand, J. E., Noble, G., & Wilding, D. (2002). *Living Diversity: Australia's Multicultural Future*. Special Broadcasting Service Corporation.
- Apitzsch, U. (2014). Transnationale Familienkooperation. In T. Geisen, T. Studer, E. Yildiz, & E. Yıldız (Eds.), *Migration, Familie und Gesellschaft: Beiträge zu Theorie, Kultur und Politik* (pp. 13–26). Springer VS.
- Auditor, J. G., & Erlinghagen, M. (2021). The happy migrant? Emigration and its impact on subjective well-being. In M. Erlinghagen, A. Ette, N. F. Schneider, & N. Witte (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course*. Springer.
- Bacigalupe, G., & Cámara, M. (2012). Transnational Families and Social Technologies: Reassessing Immigration Psychology. *Journal of Ethnic and Migration Studies*, 38(9), 1425–1438. <https://doi.org/10.1080/1369183X.2012.698211>
- Baldassar, L. (2007). Transnational families and the provision of moral and emotional support: the relationship between trust and distance. *Identities*, 14(4), 385–409. <https://doi.org/10.1080/10702890701578423>
- Bartram, D. (2013). Happiness and 'economic migration': A comparison of Eastern European migrants and stayers. *Migration Studies*, 1(2), 156–175. <https://doi.org/10.1093/migration/mnt006>
- Bauernschuster, S., Falck, O., & Wößmann, L. (2010). Schadet Internetnutzung dem Sozialkapital? *Ifo Schnelldienst*, 63(21), 11–17.
- Baykara-Krumme, H. (2014). Transnationalität im intergenerationalen Wandel: Grenzüberschreitende Bindungen zum "Herkunftsland" Türkei in der dritten Generation. *Diskurs Kindheits- Und Jugendforschung*, 9(3), 269–284. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-409653>
- Baykara-Krumme, H., & Platt, L. (2018). Life satisfaction of migrants, stayers and returnees: reaping the fruits of migration in old age? *Ageing and Society*, 38(4), 721–745. <https://doi.org/10.1017/S0144686X16001227>
- Benítez, J. L. (2012). Salvadoran Transnational Families: ICT and Communication Practices in the Network Society. *Journal of Ethnic and Migration Studies*, 38(9), 1439–1449. <https://doi.org/10.1080/1369183X.2012.698214>

- Blömers, B., & Letschert, S. (2011). Flüchtige Bekannte, Freunde in der Ferne: Nutzerbefragung III: StudiVZ im Vergleich mit anderen Kommunikationskanälen. In C. Neuberger & V. Gehrau (Eds.), *StudiVZ: Diffusion, Nutzung und Wirkung eines sozialen Netzwerks im Internet* (pp. 140–161). VS Verl. für Sozialwiss.
- Brant, R. (1990). Assessing Proportionality in the Proportional Odds Model for Ordinal Logistic Regression. *Biometrics*, *46*(4), 1171. <https://doi.org/10.2307/2532457>
- Bryceson, D., & Vuorela, U [Ulla]. (2002). Transnational families in the twenty-first century. In D. Bryceson, U. Vuorela, D. F. Bryceson, & U. Vuorela (Eds.), *Cross-cultural perspectives on women. The Transnational Family: New European Frontiers and Global Networks*. Berg.
- Chiswick, B. R. (1978). The Effect of Americanization on the Earnings of Foreign-born Men. *Journal of Political Economy*, *96*(5), 897–921.
- Chiswick, B. R., & Miller, P. W. (2007). The International Transferability of Immigrants' Human Capital Skills. *IZA Discussion Papers*, Article 2670.
- Clemens, M. A. (2013). Why Do Programmers Earn More in Houston than Hyderabad? Evidence from Randomized Processing of US Visas. *American Economic Review*, *103*(3), 198–202. <https://doi.org/10.1257/aer.103.3.198>
- Clogg, C. C., & Shihadeh, E. S. (1994). *Statistical models for ordinal variables*. Sage Publications, Inc.
- Cuadros, O., & Berger, C. (2016). The Protective Role of Friendship Quality on the Wellbeing of Adolescents Victimized by Peers. *Journal of Youth and Adolescence*, *45*(9), 1877–1888. <https://doi.org/10.1007/s10964-016-0504-4>
- Dito, B. B., Mazzucato, V., & Schans, D. (2017). The Effects of Transnational Parenting on the Subjective Health and Well-Being of Ghanaian Migrants in the Netherlands. *Population, Space and Place*, *23*(3), e2006. <https://doi.org/10.1002/psp.2006>
- Erlinghagen, M. (2011). Nowhere Better Than Here? The Subjective Well-Being of German Emigrants and Remigrants. *Comparative Population Studies*, *36*(4), 899–925. <https://doi.org/10.4232/10.CPOS-2011-15EN>
- Ette, A., Décieux, J. P., Erlinghagen, M., Auditor, J. G., Schneider, N. F., & Witte, N. (2021). Surveying across borders: the experience of the German Emigration and Remigration Panel Study. In M. Erlinghagen, A. Ette, N. F. Schneider, & N. Witte (Eds.), *The Global Lives of German Migrants: Consequences of International migration Across the Life Course* (pp. 21–39). Springer.

- Fox, M., Gibbs, M., & Auerbach, D. (1985). Age and Gender Dimensions of Friendship. *Psychology of Women Quarterly*, 9, 489–502.
- Gauze, C., Bukowski, W. M., Aquan-Assee, J., & Sippola, L. K. (1996). Interactions between Family Environment and Friendship and Associations with Self-Perceived Well-Being during Early Adolescence. *Child Development*, 67(5), 2201–2216.
- Gibson, J., & McKenzie, D. (2012). The Economic Consequences of ‘Brain Drain’ of the Best and Brightest: Microeconomic Evidence from Five Countries. *The Economic Journal*, 122(560), 339–375. <https://doi.org/10.1111/j.1468-0297.2012.02498.x>
- Gibson, J., McKenzie, D., Rohorua, H., & Stillman, S. (2018). The Long-term Impacts of International Migration: Evidence from a Lottery. *The World Bank Economic Review*, 32(1), 127–147. <https://doi.org/10.1093/wber/lhx003>
- Granovetter, M. (1973). The Strength of Weak Ties. *American Journal of Sociology*, 78(6), 1360–1380. <https://doi.org/10.1016/B978-0-12-442450-0.50025-0>
- Guarnizo, L. E., Portes, A., & Haller, W. (2003). Assimilation and Transnationalism: Determinants of Transnational Political Action among Contemporary Migrants. *American Journal of Sociology*, 108(6), 1211–1248.
- Guo, M., Arranda, M. P., & Silverstein, M. (2009). The impact of out-migration on the intergenerational support and psychological wellbeing of older adults in rural China. *Ageing and Society*, 29(7), 1085–1104. <https://doi.org/10.1017/S0144686X0900871X>
- Hawkey, L. C., Duvoisin, R., Ackva, J., Murdoch, J. C., & Luhmann, M. (2016). Loneliness in Older Adults in the USA and Germany: Measurement Invariance and Validation. *Working Paper Series, NORC at the University of Chicago*, Article 4.
- Heady, B., Veenhoven, R., & Wearing, A. (1991). Top-down versus bottom-up theories of subjective well-being. *Social Indicators Research*, 24, 81–100.
- Hendricks, L., & Schoellman, T. (2018). Human Capital and Development Accounting: New Evidence from Wage Gains at Migration *The Quarterly Journal of Economics*, 133(2), 665–700. <https://doi.org/10.1093/qje/qjx047>
- Hiebert, D., & Ley, D. (2006). Characteristics of immigrant transnationalism in Vancouver. In V. Satzewich & L. Wong (Eds.), *Transnational identities and practices in Canada* (pp. 71–90). UBC Press.
- Hughes, M. E., Waite, L. J., Hawkey, L. C., & Cacioppo, J. T. (2004). A Short Scale for Measuring Loneliness in Large Surveys: Results From Two Population-Based Studies. *Research on Aging*, 26(6), 655–672. <https://doi.org/10.1177/0164027504268574>

- Iarmolenko, S., Titzmann, P. F., & Silbereisen, R. K. (2016). Bonds to the homeland: Patterns and determinants of women's transnational travel frequency among three immigrant groups in Germany. *International Journal of Psychology, 51*(2), 130–138.
<https://doi.org/10.1002/ijop.12141>
- Kaasa, A., & Parts, E. (2008). Individual-Level Determinants of Social Capital in Europe. *Acta Sociologica, 51*(2), 145–168. <https://doi.org/10.1177/0001699308090040>
- Lee, G. R., & Ishii-Kuntz, M. (1987). Social Interaction, Loneliness, and Emotional Well-Being among the Elderly. *Research on Aging, 9*(4), 459–482.
- Lesage, J. P., & Ha, C. L. (2012). The Impact of Migration on Social Capital: Do Migrants Take Their Bowling Balls with Them? *Growth and Change, 43*(1), 1–26.
<https://doi.org/10.1111/j.1468-2257.2011.00575.x>
- Liang, J., Dvorkin, L., Kahana, E., & Florence, M. (1980). Social integration and morale: A re-examination. *Journal of Gerontology, 35*(5), 746–757.
- Lin, N. (1999). Building a network theory of social capital. *Connections*(22), Article 1, 28–51.
- Luhmann, M., & Hawkey, L. C. (2016). Age differences in loneliness from late adolescence to oldest old age. *Developmental Psychology, 52*(6), 943–959.
<https://doi.org/10.1037/dev0000117>
- Madianou, M., & Miller, D. (2011). Mobile phone parenting: Reconfiguring relationships between Filipina migrant mothers and their left-behind children. *New Media & Society, 13*(3), 457–470. <https://doi.org/10.1177/1461444810393903>
- Mau, S., & Mewes, J. (2007). Transnationale soziale Beziehungen. Eine Kartographie der deutschen Bevölkerung. *Soziale Welt, 58*(2), 203–222. <https://doi.org/10.5771/0038-6073-2007-2-203>
- O’Flaherty, M., Skrbis, Z., & Tranter, B. (2007). Home Visits: Transnationalism among Australian Migrants. *Ethnic and Racial Studies, 30*(5), 817–844.
<https://doi.org/10.1080/01419870701491820>
- O’Connell, A. A. (2006). *Logistic regression models for ordinal response variables. Quantitative applications in the social sciences: Vol. 146*. Sage Publ.
- O’Connor, P. M. (2009). Bodies in and out of place: embodied transnationalism among invisible immigrants - the contemporary Irish in Australia. *Population, Space and Place, 20*(2), n/a-n/a. <https://doi.org/10.1002/psp.577>

- Pajnik, M., & Bajt, V. (2012). Migrant Women's Transnationalism: Family Patterns and Policies. *International Migration*, 50(5), 153–168. <https://doi.org/10.1111/j.1468-2435.2010.00613.x>
- Portes, A., Guarnizo, L. E., & Landolt, P. (1999). The study of transnationalism: pitfalls and promise of an emergent research field. *Ethnic and Racial Studies*, 22(2), 217–237. <https://doi.org/10.1080/014198799329468>
- Prilleltensky, I. (2008). Migrant well-being is a multilevel, dynamic, value dependent phenomenon. *American Journal of Community Psychology*, 42(3-4), 359–364. <https://doi.org/10.1007/s10464-008-9196-6>
- Ryan, L., Klekowski von Koppenfels, A., & Mulholland, J. (2015). 'The distance between us': a comparative examination of the technical, spatial and temporal dimensions of the transnational social relationships of highly skilled migrants. *Global Networks*, 15(2), 198–216.
- Safi, M. (2010). Immigrants' Life Satisfaction in Europe: Between Assimilation and Discrimination. *European Sociological Review*, 26(2), 159–176. <https://doi.org/10.1093/esr/jcp013>
- Schans, D. (2009). Transnational family ties of immigrants in the Netherlands. *Ethnic and Racial Studies*, 32(7), 1164–1182. <https://doi.org/10.1080/01419870902763852>
- Wahba, J., & Zenou, Y. (2012). Out of sight, out of mind: Migration, entrepreneurship and social capital. *Regional Science and Urban Economics*, 42(5), 890–903. <https://doi.org/10.1016/j.regsciurbeco.2012.04.007>
- Wilding, R. (2006). 'Virtual' intimacies? Families communicating across transnational contexts. *Global Networks*, 6(2), 125–142. <https://doi.org/10.1111/j.1471-0374.2006.00137.x>
- Williams, R. (2006). Generalized Ordered Logit/Partial Proportional Odds Models for Ordinal Dependent Variables. *The Stata Journal*, 6(1), 58–82. <https://doi.org/10.1177/1536867X0600600104>
- Williams, R. (2016). Understanding and interpreting generalized ordered logit models. *The Journal of Mathematical Sociology*, 40(1), 7–20. <https://doi.org/10.1080/0022250X.2015.1112384>

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