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Migration motivation and ethnic identity of migrant couples: tied versus lead movers

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Abstract

This study examines how being a tied or lead mover relates to the ethnic identity of migrant spouses. Tied and lead movers differ in their migration motivations, face different constraints, and opportunities (e.g., social network through work). This is likely to be reflected in different investment strategies and adjustment patterns in the host country. To study the adjustment of tied and lead movers, I rely on the IAB-SOEP Migration Sample, which asks migrant spouses who was the main driver of the migration decision and measures several socio-economic outcomes in Germany. Using the Constant et al. (2009) framework to measure ethnic identity, the results provide descriptive evidence that tied movers in Germany are more likely to be separated and less likely to be integrated and assimilated when compared to lead or equal movers. These findings suggest that for tied movers, the benefits of investing in the host country's culture do not outweigh the costs.

1 Introduction

The challenge migrants face regarding their commitment and sense of belonging to a culture and society (ethnic identity) only becomes salient after migration when pre- and post-migration cultures potentially clash (Constant et al., 2009; Manning & Roy, 2010). Before migrating, most individuals identify with the culture they inherited from their parents in their country of origin. After migrating, individuals are exposed to a different culture and society, and feelings of belonging and commitment will develop.

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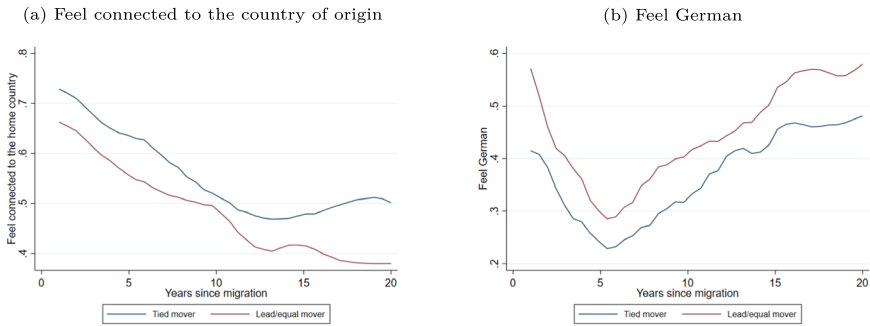
Fig. 1 Self-identification. Notes: 'Feel connected to the country of origin' in (**a**) and 'Feel German' in (**b**) are dummy variables that take the value of one if the respondent feels very strongly or strongly connected to the country, and zero otherwise

Particularly, individuals who migrated for family reasons might be more likely to experience a loss in the sense of belonging, social relations, and professional attainments.

Despite the growing literature in economics on the social and cultural integration of migrants (Battu & Zenou, 2010; Bisin et al., 2008, 2011; Campbell, 2019; Casey & Dustmann, 2010; Constant et al., 2009; Constant & Zimmermann, 2008; Drydakis, 2013; Facchini et al., 2015; Georgiadis & Manning, 2011; Manning & Roy, 2010) there is little evidence on how migrating for economic reasons, or family reasons may differently affect the socio-cultural adjustment of migrants. A 'lead mover' is a family migrant for whom, even if single, the individual benefits from migration compensate for the costs, and hence he or she most closely resembles an economic migrant. In contrast, a 'tied mover' is a family migrant who, if single, would not have chosen to migrate (Mincer, 1978). Tied movers are, therefore, less likely to be selected on characteristics 'relevant' to the labor market where they migrated (Junge et al., 2014; Luthra et al., 2018). Their migration motivation is intrinsically different: they moved to keep the family together and/or to increase household income rather than to increase their own wages or improve their own job. Even though some tied movers choose to work in the host country, some will decide not to participate in the labor market. Particularly in such cases, the benefits of adopting the host country's culture might not compensate for the costs.

Using data from the IAB-SOEP Migration Sample (2013-20),[1] a representative survey of the migrant population in Germany, Fig. 1 shows the raw difference between tied and lead or equal movers with regards to the two most prominent elements of ethnic identity—self-identification with respect to the country of origin (1a) and the host country (1b)—with years since migration.[2] Overall, we see an increasing dis-association from the origin country, while the attachment to Germany follows a U-shaped pattern where the feeling of being German falls over the first five years after arrival before it increases again.[3] Interestingly, this gap does not seem to

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[1] The IAB-SOEP Migration Sample is conducted jointly by the Institute for Employment Research (IAB) in Nuremberg and the German Socio-Economic Panel (SOEP) at DIW Berlin.

[2] The sample has a panel structure but also includes individuals who are interviewed only once.

[3] This pattern is consistent with Oberg (1960) who describes the cultural adjustment as a U-shaped process over time, starting with the honeymoon stage, followed by the culture shock stage (the minimum at the U), adjustment and adaptation stage.

close with years spent in Germany—tied movers are consistently less likely to feel German.

This study aims to address a gap in the literature by evaluating quantitatively the association between being a tied mover and ethnic identity among migrant spouses in Germany. The empirical analysis shows that tied movers in Germany are more likely to be separated and less likely to be integrated and assimilated when compared to lead or equal movers.

After migrating, individuals decide on whether to adapt their identity to the host country by weighing the benefits, such as increasing prospects for integration, and the costs, such as spending time and effort learning a new language, creating a network with natives, among others (Epstein & Heizler, 2015; Verdier & Zenou, 2017; Wang, 2018). As tied and lead movers have different migration motivations (e.g., family versus work) and face different constraints (e.g., human capital) and opportunities (e.g., social network through work), they are likely to face different costs and benefits from investing in the host country's culture.

For evaluating the association between the migration position and ethnic identity, I follow Constant et al. (2009) and define ethnic identity as the balance between the commitment or self-identification with the culture and society of origin and the commitment or self-identification with the host culture and society, achieved by an individual after migration.[4] Ethnic identity is measured in the IAB-SOEP Migration Sample by bundling five elements: (i) language; (ii) future citizenship and locational plans; (iii) ethnic self-identification; (iv) ethnic interaction and (v) media consumption. In each element, individuals are classified into one of four states: assimilated, integrated, marginalized, and separated. The overall measure of assimilation, in terms of ethnic identity, counts the number of elements an individual is considered to be assimilated. The same logic is applied to the overall measure of the other three states.

Using this framework, I find that tied movers are more likely to be separated and less likely to be integrated or assimilated when compared to lead or equal movers. I find no difference in the likelihood of being marginalized. The results are robust to the exclusion of one element of the ethnic identity measure at the time, when looking at each element separately and when adding or excluding a series of control variables. In the extensions section, I compare individuals who migrated as singles to lead or equal movers and tied movers and find that the adjustment of singles is not statistically different from that of lead or equal movers, while tied movers remain significantly different. Singles and lead or equal movers are more likely to have migrated for economic reasons and hence, everything else equal, are more likely to have similar socio-cultural integration patterns than tied movers and singles or tied movers and lead movers.

While being descriptive, the results in this study help to understand the implications of migrating as a tied spouse on post-migration outcomes beyond the labor market integration. Studying the socio-cultural integration patterns of those who would not have come to Germany on their own (e.g., tied movers) is crucial since it influences the economic behavior, return decisions, and life choices of the entire family (Akerlof & Kranton, 2000). Studies in management science have

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[4] Ethnic identity is different from the concept of ethnicity, which is a permanent characteristic related to the country of origin.

found that a primary reason for highly skilled workers sent abroad by their company to return to their home country prematurely is driven by their spouse's struggle with adjusting to the host country (Ali et al., 2003; Caligiuri et al., 1998; Kupka & Cathro, 2007; Lazarova et al., 2015, 2010; McNulty, 2012).[5] This highlights the importance of improving the socio-cultural integration of accompanying spouses for retaining and attracting economic migrants. Furthermore, the ethnic identity of first-generation migrants also helps to understand the second generation's cultural integration and educational outcomes and the overall persistence of ethnic identity (Campbell et al., 2020; Casey & Dustmann, 2010; Monscheuer, 2023). Therefore, countries and policymakers relying on foreign workers to tackle skill shortages should pay attention to the socio-cultural and labor adjustment of all family members.

This paper contributes to two streams of literature on ethnic identity and family migration. It contributes to the literature on the ethnic or national identity of migrants by showing how migrating for different motives relates to the socio-cultural integration of migrants. There is a growing literature in economics on the ethnic or national identity of migrants (e.g., Battu & Zenou, 2010; Bisin et al., 2008; Campbell, 2019; Casey & Dustmann, 2010; Constant et al., 2009; Constant & Zimmermann, 2008; Facchini et al., 2015; Georgiadis & Manning, 2011; Manning & Roy, 2010) which finds that the original culture of immigrants is somehow resilient and although some groups adjust to the majority (natives) others display persistent differences even across generations. Most of these studies focus on the cultural adaptation of immigrants from different countries with different residency permits or citizenship rights. Nevertheless, there is little evidence on how migrating for economic or family reasons affects the socio-cultural adjustment of migrants.[6] Although these two groups benefit differently from adjusting their national identity.

This paper also contributes to the literature on family migration by analyzing the driver of the migration decision in an international context and by studying a different aspect of integration that goes beyond the economic integration of spouses. Early studies in economics have mostly focused on post-migration employment and wages of married women and how these compare with the employment and wages of married men (Baker & Benjamin, 1997; Blau et al., 2003, 2011; Duleep & Sanders, 1993). However, they fail to identify which spouse was the tied mover. Most empirical research on tied movers has focused on internal migration where pre-and post-migration characteristics and labor market outcomes are observable (Cooke, 2003; Juerges, 2006; Mincer, 1978; Nivalainen, 2004; Rabe, 2011; Shauman, 2010).

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[5] These highly skilled workers sent abroad by their company are typically called expatriates. Most reference studies use qualitative interviews or small sample size quantitative analysis and focus on a narrow group of expatriates.

[6] An exception is a UK study by Campbell (2019), who proxies the different time horizons with the original motive for migration. The author argues that refugees and family migrants are more likely to have larger time horizons and hence higher benefits from adopting the host-country national identity. Campbell's definition of family migrant considers children as well. However, the integration process of immigrant children who attended school in the UK is expected to differ from an individual who migrates as an adult. Furthermore, host-country national identity is only one element of the ethnic identity of individuals.

Research on international family joint migration usually proxies tied movers by those who entered the host country with a family visa[7] (Adsera & Chiswick, 2007; Cobb-Clark et al., 2005; Cobb-Clark & Crossley, 2004; Le, 2006) or by relying on retrospective survey questions that ask who was the migration driver (Krieger, 2019; Munk et al., 2022; Nikolka & Poutvaara, 2014). Overall, these studies find that tied movers tend to have worse labor market outcomes than primary movers even if they worked before migration (Adsera & Chiswick, 2007; Krieger, 2019; Le, 2006; Munk et al., 2022) and some suggest that international family joint migration is not fully gender neutral (Junge et al., 2014; Krieger, 2019; Munk et al., 2022). Nevertheless, no empirical study in economics or sociology using nationally representative data has looked into the socio-cultural adaptation of spouses.[8]

This paper is organized as follows: Section 2 lays down the conceptual and empirical framework used in this study, and Section 3 describes the data. Section 4 shows the main results, heterogeneous effects, and robustness checks. Section 5 compares singles to lead or equal movers and tied movers. Lastly, section 6 concludes.

2 Conceptual and empirical framework

This section uses the two distinct kinds of literature on tied movers and ethnic identity to formulate a hypothesis on how being a tied mover or a lead mover relates to the socio-cultural adjustment in Germany. Section 2.1 describes a simple model of the family migration decision, which helps to understand the possibly different adjustment patterns of the tied mover in the host country. Because the association between tied mover and the different states of ethnic identity is ambiguous a priori, Section 2.2 discusses non-exhaustively some of the channels that could explain the different adjustment patterns. The direction of the relationship between tied mover and ethnic identity is an empirical question for which I show the main results in Section 4. While I cannot empirically distinguish which channel is driving the results, the sign of the statistical association between ethnic identity and tied mover excludes some channels.

2.1 The decision to migrate and the migration position

Following the seminal studies of Mincer (1978) and Sandell (1977) in economics,[9] and Shihadeh (1991) and Bielby and Bielby (1992) in sociology,[10] the family gains from

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[7] While Visa categories can work as proxies for the migration motivation in countries like Australia or the US, they do not allow to identify tied movers in the context of intra-EU migration.

[8] The psychological literature on female trailing spouses (Jervis, 2011; Lazarova et al., 2015, 2010; Shaffer & Harrison, 2001; Slobodin, 2018) documented how female trailing spouses often experience a sudden loss of sense of belonging, professional achievement, and social interactions that establish identities. However, these studies use small samples or qualitative interviews and focus on a specific group of skilled migrants.

[9] These models were gender neutral in the sense that they considered how much each spouse contributes to the total family earnings, irrespective of gender. They argued that wives were more likely to be tied movers since they had a more discontinuous labor force participation and less earnings power.

[10] Shihadeh (1991) and Bielby and Bielby (1992) argued that gender roles were an important explanation for the observed migration pattern of wives. Women were more likely to be tied movers not because of their lower human capital but because of their prescribed role within societies.

migration can be written has $G_H = G_a + \alpha G_b$. Where $G_i = R_i - C_i$ are the individual $i = a, b$ net gains from migration, R_i the returns from migration and C_i the monetary and psychological costs. One can think of these returns (R_i) as the difference in expected wages between origin and destination country, which depend on human capital and the distribution of wages. $\alpha > 0$ is a relative weight assigned to the returns of spouse b, which can depend on social norms or extra-environmental factors that are thought to affect the marriage market and hence the bargaining power of spouses (e.g., divorce laws, sex ratios). These weights are assumed to be exogenously given, and the couple is still assumed to behave cooperatively, maximizing the weighted sum of the spouse's utilities. For simplification, all potential destinations are aggregated into one, and it is assumed that the sign of G_a is independent of the sign of G_b and that divorce is not possible.

If single, individual i chooses to migrate if $G_i > 0$. The family will migrate as a household if $G_H > 0$. A lead or equal mover is an individual who, if single, would have chosen to migrate, hence $G_i > 0$ and $G_H > 0$. A tied mover is an individual who, if single, would not have chosen to migrate but who migrates as part of a family, hence $G_i \leq 0$ and $G_H > 0$. In such cases, the gains of the lead mover must be large enough to compensate for the losses of the tied mover. On the other hand, if G_a and G_b have the same sign, there is no conflict between family members.

2.2 After migration: ethnic identity and migration position

To define the ethnic identity of migrants, I follow the work of Berry (1980, 1997, 2006) in the psychology literature and Constant and Zimmermann (2008) and Constant et al. (2009) in the economics literature. According to Berry's framework, individuals can be categorized into four acculturation states which reflect the degree of devotion to the culture of origin and the culture of other groups. In the case of immigrants, an individual who strongly identifies with the host country's culture and norms but is only weakly devoted to the home country's culture is considered to have an assimilated identity. An immigrant who exhibits strong identification with both the home and host country's culture and norms is said to have an integrated identity. On the other hand, an individual who is strongly committed to the culture of the country of ancestry but is distant from the majority culture is deemed separated. Lastly, an immigrant who is weakly connected to both the origin and host country's culture is considered to have a marginalized identity.[11]

The ethnic identity of immigrants is associated with the degree of exposure to German society ($ExpGer_i$), exposure to home country society ($ExpHC_i$), background characteristics ($BackC_i$), social and family environment (Fam_i) and being a tied mover ($TiedM_i$).

The effect of being a tied mover on the different states of ethnic identity is ambiguous a priori. A key insight from the literature on the social and cultural integration of migrants is that creating a new national identity may involve costs (effort in creating new social networks) and benefits (increasing prospects for integration), and these costs and benefits may vary by immigrant group (Battu & Zenou, 2010; Bisin et al., 2008, 2011; Campbell, 2019; Casey & Dustmann, 2010; Constant

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[11] Figure 3 illustrates four states of ethnic identity, differentiated by the strength of cultural and social commitments as in Constant et al. (2009). The quadrants A, I, M, and S correspond to Assimilation (A), Integration (I), Marginalization (M) and Separation (S). Migrants usually would start at point (1,0) and undergo a journey through the other states.

et al., 2009; Constant & Zimmermann, 2008; Drydakis, 2013; Dustmann, 1996; Georgiadis & Manning, 2011; Manning & Roy, 2010; Masella, 2013). The different migration motives and expected benefits between lead movers and tied movers imply that these two groups will have different incentives to invest in the host country's culture.

As a simplification, the investment of migrants in the host (home) country culture can be thought of as an investment in natives (co-ethnic) network, where the cost of investing in the natives' network in terms of effort and time is higher than the cost of investing in migrants' network (Epstein & Heizler, 2015; Verdier & Zenou, 2017; Wang, 2018).[12] The benefits of investing in the host country's culture can be related to better individual labor market outcomes, the ability to participate in leisure activities, or improving children's outcomes, among others. For this reason, even if tied movers have little to gain in labor market terms from investing in the host country's culture, they might have a high incentive to invest in the host country's culture if the perceived benefits for their children are very high, for instance. In this section, I discuss (non-exhaustively) some benefits and costs and how depending on their importance, we might either observe a lower or higher propensity to integrate and assimilate among tied movers when compared to lead or equal movers. In Section 4, I will empirically study which channel is more likely to prevail.

As discussed in the introduction, tied movers are less likely to be selected on host country labor market 'relevant' characteristics (Junge et al., 2014; Luthra et al., 2018). Their migration motivation is intrinsically different: they moved to keep the family together and/or to increase household income rather than to increase their own wages or improve their own job prospects. By definition, a tied mover is an individual who, if alone, would not have chosen to migrate: individual gains do not compensate for the costs. While lead movers are those for whom benefits compensate the costs and whose gains are also likely to compensate for at least part of the spouse's losses. Therefore, if the bargaining power of the lead mover is not disproportionally large, one possibility is that tied movers have lower potential earnings at entry to Germany than lead movers. By having lower expected benefits than lead movers, tied movers might be less likely to invest in the natives' network. Furthermore, in the longer term, by shying away from the labor market,[13] tied movers might also be less likely to be exposed to people from the host country, which leads them to have fewer opportunities to build social networks with natives.

A second related possibility is that, for instance, couples with a lead and tied mover have decided to increase the family size such that it becomes an optimal strategy to have one spouse focusing on the labor market (lead mover) and the other spouse concentrating on the family (tied mover).[14] If tied movers perceive that the benefits for the child of having a second integrated or assimilated parent are low, they

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[12] Alternatively one can think of it as the cost of identity formation or learning a new language or culture.

[13] As documented in Table 7 using the IAB-SOEP migration sample, tied movers are considerably less likely to be full-time employed (33.8%) when compared to lead or equal movers (45.7%). This has also been documented previously in the literature (Adsera & Chiswick, 2007; Krieger, 2019; Le, 2006; Munk et al., 2022).

[14] Although the decision to have kids is the most common reason, there can be other life-changing situations that could explain a change in the allocation of work in the family.

might also be less likely than lead movers to invest in the natives' network in Germany. A third possibility is that tied movers' dis-utility from spending time investing in the natives' network rather than being able to spend time with their children or taking care of household chores is higher than that of lead or equal movers. In these three cases, we expect to observe that being a tied mover is positively associated with separation or marginalization and negatively associated with integration and assimilation.

However, if the bargaining power of the lead mover is very large or if the difference in potential gains at entry to Germany is small, investing in creating a network and learning the German language might be worthwhile - there are no large differences in benefits or costs between tied and lead or equal movers. Similarly, even if it is an optimal strategy for the tied mover to concentrate on the family, tied movers might internalize the benefits accruing to children of having an integrated or assimilated parent (provided that the benefits are large). Furthermore, having the ability to actively participate in their children's education or local leisure activities might provide tied movers with an incentive to invest in the host country's culture. Another possibility is that, upon arrival, tied movers might want to take up a job which offers fair pay but little future growth in order to finance the lead movers' investments in human capital (Baker & Benjamin, 1997; Blau et al., 2003; Cobb-Clark & Crossley, 2004). In such a situation, the benefits (costs) of investing in the host country's culture might be high (low). In these three cases, we expect to observe that tied movers are as likely or less (more) likely to be separated or marginalized (integrated or assimilated) compared to lead movers. Ultimately, the direction of the link between being a tied mover and ethnic identity is an empirical question.

The ethnic identity of migrant i interviewed at time t can be expressed as:

$$EIden_{it} = \alpha TiedM_i + \lambda BackC_i + \gamma ExpGer_{it} + \rho ExpHC_i + \beta Fam_{it} + \varepsilon_i \quad (1)$$

Where $EIden_i$ is a measure of ethnic identity and $TiedM_i$ equals one if spouse i took the role of a tied mover and zero if i took the role of a lead or equal mover. $BackC_i$ includes gender, country of origin, and religion.[15] $ExpGer_{it}$ includes a dummy for whether vocational training was acquired in Germany (previous to the survey year), a dummy for university or school in Germany (previous to the survey year), age at immigration, age at immigration squared, years since migration and years since migration squared. Because different states in Germany might have different institutions that help different types of migrants to integrate (e.g., associations, information centers), $ExpGer_{it}$ also includes the federal state of residency fixed effects and year of survey t fixed effects. $ExpHC_i$ considers years of employment in the home country and years of education in the home country. Fam_{it} includes the number of children at survey year t, if there is a child in kindergarten at t and if there is a child in school at t. Equation (1) is estimated using ordinary least squares as in Constant et al. (2009), and standard errors are clustered at the household level.

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[15] The religious affiliations are atheist, Islamic, Christian or other religious community.

3 Data

The empirical analysis relies on data from the IAB-SOEP Migration Sample (Bruecker et al., 2014),[16] a representative survey of migrants in Germany that started in 2013 and is conducted yearly. The first IAB-SOEP Migration Sample (M1 sample) was established in 2013 with around 2,723 households. The M1 sample targeted individuals who migrated to Germany between 1995 and 2010 and has a higher proportion of households containing migrants from the EU-New Member States and Southern European Countries. In 2015, there was a refreshment sample (M2 sample) to account for changing immigration patterns. The M2 sample added 1,096 new households who immigrated to Germany between 2010 and 2013. All persons living in the same household were interviewed in both M1 and M2 samples.[17] The first six survey waves were carried out between 2013 and 2020, where the 2014 and 2016–2020 survey waves were follow-up questionnaires. Most questions are asked the first time individuals are interviewed, in 2013 and 2015, but new questions have also been introduced in the follow-up questionnaires. Not all questions were asked every wave.[18]

The strength of the IAB-SOEP Migration Sample relies on the battery of pre- and post-migration-specific questions that are rarely available in (general) population surveys or administrative datasets. Namely, it allows for identifying if a couple was together before migration and who was the lead or tied mover. It also distinguishes between home and host country education and work experience, among others.

For the current study, I excluded individuals who migrated when they were 18 years old or younger and those who migrated at 64 years or older. Individuals entering Germany as asylum seekers were also excluded since their migration motivation tends to be very different from those whose main migration motive is either economic or family-related. I will mostly rely on questions and answers from the first-time individuals were interviewed (e.g., 2013 and 2015). This means that I will use a repeated cross-section of individuals and will not use the longitudinal character of the IAB-SOEP Migration Sample (motivation and further details in Section 3.2).

3.1 Identifying tied movers

The tied mover analysis relies on three main questions regarding the relationship status before and after migration. These questions are described in Table 1 below.

Only individuals who replied 'Yes' to the two first questions are considered to have migrated in a couple. These individuals constitute the main sample used in this

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[16] I use anonymous data of the IAB-SOEP Migration Sample Survey Data, 2013-20. The IAB-SOEP Migration Sample is a joint project of the Institute for Employment Research (IAB) and the German Institute for Economic Research (DIW Berlin). The questionnaires are similar to the well-established German Socio-Economic Panel Survey (GSOEP) at DIW Berlin, but with a special focus on migrants. Data access was provided via a Scientific Use File supplied by the Research Data Centre (FDZ) of the German Federal Employment Agency (BA) at the IAB.

[17] The M1 sample interviewed 4964 adults and 2481 children and the M2 sample interviewed 4847 adults and 2403 children.

[18] Some were asked only every two waves, and others were asked only once.

Table 1 Determining who is a tied mover

1. Were you in a serious relationship before moving to Germany? Yes/No

2. Did this relationship continue after you moved to Germany? Yes/No

3. What played the decisive role in your decision to move here—who was the **driving force** in that decision? I was/My partner/Both to an equal extent

study. Combining these questions with the "driving force" question, I classify each individual who migrated as a couple as a lead mover ('I was'), equal mover ('Both to an equal extent'), or tied mover ('My partner').[19]

The final sample comprises 2132 individuals who have reported migrating as tied movers (621), as lead movers (659), and as equal movers (852).[20] For the analysis, I grouped lead and equal movers since for them the expected individual returns from migration are positive and even if single, they would have chosen to move. In contrast, tied movers would not have chosen to migrate to Germany if single. Both spouses are observed for most couples (89%), but in some cases, there is information on only one spouse (11%). In only 0.74% of the cases both replied they were the lead movers, and in 1.41% both replied they were tied movers. Given that these are small discrepancies, I use the raw answers to be consistent with individual perceptions of who was the migration driver.

Table 7 in the Appendix reports individual characteristics. Understanding the characteristics of tied and lead or equal movers is essential for interpreting the main results. Following the literature on internal family migration (Cooke, 2003; Juerges, 2006; Mincer, 1978; Nivalainen, 2004; Rabe, 2011; Shauman, 2010), I consider differences in human capital, gender and other characteristics reflecting social norms. Relevant pre-migration information is built using IAB-SOEP Migration Sample retrospective biographical questions. In some cases, pre-migration information is missing. To avoid decreasing the sample size, I allowed some of the questions to be coded as 'missing pre-migration information.' I show that this does not influence my results.

Around 69.6% of tied movers were female, while only 49.3 of lead or equal movers were female. Lead or equal movers were more likely to speak good German and to have a vocational degree than tied movers before migration. They were also more likely to be full-time employed in the year just before migration and to have more years of full-time employment experience before migration. However, around 21.0% of tied movers had a university degree before migration, compared to 18.9% among lead or equal movers. This pattern is driven by the fact that a higher share of females has a university degree from the home country (20.9% compared to 18.0%

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[19] Because this question was not asked in the first wave of the survey in 2013, some individuals didn't reply to this question. In these cases, if a reply from the spouse was available in later waves, I used this information.

[20] A drawback of the survey is that I cannot assess if the two partners observed at the time of the survey are exactly the same partners who migrated together as a couple. However, since they must have migrated in a couple (e.g., they replied to the migration driver question) this reduces the odds that the majority changed partners thereafter. In four out of the eight survey waves, respondents were asked "Are you still in this relationship today?" to which 634 individuals in my sample replied. Of these, only 5% replied that the relationship has not continued until today.

among men) and that a higher share of females is also a tied mover. The largest regions of origin are 'Russia and other former Soviet Union states' and the '2004 EU enlargement'[21] with 19.1% and 16.2%, respectively. Around 54.0% of respondents consider themselves Christian, 24.5% of no religious denomination, 17.6% Islamic, and 3.9% belong to other religious communities.

3.2 Constructing the ethnosizer

Based on the theoretical framework described in Section 2.2, Constant et al. (2009) construct a measure of ethnic identity, which they call the two-dimensional *ethnosizer*. Using data from the German Socio-Economic Panel (GSOEP) the authors construct the two-dimensional ethnosizer by identifying pairs of questions in the GSOEP, which transmit information on individual commitment to the German culture and to the culture of origin. The GSOEP data used by the authors differs from the one used in this study since it referred to a sample of migrants from the guest-worker population, which at the time was represented in the regular GSOEP, and measures ethnic identity in 2001.[22] The IAB-SOEP Migration Sample is representative of the current migrant population in Germany. The two samples have many overlapping questions, but in some cases, their phrasing differs and the IAB-SOEP Migration Sample contains a much larger set of migration-specific questions (such as the tied mover).

Following on the work of Constant et al. (2009), I consider five elements: (i) language; (ii) future citizenship and locational plans; (iii) ethnic self-identification; (iv) ethnic interaction and (v) media consumption. In each element, individuals are classified into one of the four states: assimilation, integration, marginalization, and separation. The overall measure of assimilation counts the number of elements an individual is considered to be assimilated (similarly for the other three states). If an individual is assimilated in all five elements, they receive a 5 in assimilation and a 0 in all other states.

Each element is constructed using the information on the commitment to the host and origin cultures. A variable reflecting devotion to German culture is paired with a similar variable characterizing the commitment to the home country's culture. To construct the first element (language), I rely on information about self-reported speaking proficiency in German and in the language of origin. For the future citizenship and locational plans element, I combine the questions on the intentions to apply for German citizenship with the one on the intention to return to the country of ancestry.[23] The ethnic self-identification element is based on the questions asking how connected the respondent feels to the country of origin and to what extent they feel German. The ethnic interaction element relies on questions that ask respondents if they have visited foreigners and if they have visited Germans in the past year, while the media consumption element relies

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[21] The 2004 EU enlargement concerns the following countries: Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia.

[22] When the GSOEP started in 1984, immigrants represented about 27% of the sample. The main groups of foreigners were individuals from Turkey, Greece, Yugoslavia, Spain, and Italy (sample B). In 1994 a boost sample was established (D1 and D2) to consider the flow of ethnic Germans from the former Soviet countries, among others.

[23] This variable is the inverse of a question which asks respondents if they wish to stay permanently in Germany.

Table 2 Ethnic identity components

	Lead/equal mover %	Tied mover %	Total %	Obs.	Element
1. Knowledge of the language from the country of origin					(i)
1.1. Nod bad, bad or very bad	2.515	1.932	2.345	50	
1.2. Good of very good	97.485	98.068	97.655	2082	
2. Knowledge of German language					(i)
2.1. Nod bad, bad or very bad	42.952	51.047	45.310	966	
2.2. Good of very good	57.048	48.953	54.690	1166	
3. Plans to return to country of origin[a]					(ii)
3.1. No	81.866	78.744	80.957	1726	
3.2. Yes	18.134	21.256	19.043	406	
4. Plans to acquire German citizenship					(ii)
4.1. Improbable or definitely not	25.961	34.861	28.475	506	
4.2. Has, will definitely or probably acquire	74.039	65.139	71.525	1271	
5. Feel connected to the country of origin					(iii)
5.1. In some respects, hardly or not at all	51.423	41.385	48.499	1034	
5.2. Very strongly or strongly	48.577	58.615	51.501	1098	
6. Feel German					(iii)
6.1. In some respects, hardly or not at all	61.946	70.692	64.493	1375	
6.2. Completely or mostly	38.054	29.308	35.507	757	
7. Visited foreigners in the previous year					(iv)
7.1. No	12.111	12.560	12.242	261	
7.2. Yes	87.889	87.440	87.758	1871	
8. Visited Germans in the previous year					(iv)
8.1. No	23.958	26.087	24.578	524	
8.2. Yes	76.042	73.913	75.422	1608	
9. News media consumption					(v)
9.1. Exclusively or mostly lang. origin	36.341	41.365	37.789	653	
9.2. Equally often German and lang. origin	49.350	44.378	47.917	828	
9.3. Exclusively or mostly German	13.577	13.855	13.657	236	
9.4. Does not apply, does not use	0.732	0.402	0.637	11	

[a]This variable is the inverse of a question which asks respondents if they wish to stay permanently in Germany

on a question that asks respondents about the language used when consuming news.[24] Table 2 below provides basic statistics for each question.

An individual is classified as integrated in terms of ethnic identity if they feel 'very strongly' or 'strongly' connected to both Germany and the country of origin, while he or she is considered assimilated if he or she feels 'very strongly' or 'strongly' connected to Germany but 'in some respects', 'barely' or 'not at all' to the country of ancestry. Immigrants who answered that they feel 'very strongly' or 'strongly' connected to their country of origin and 'in some respects', 'barely', or 'not at all' to Germany are

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[24] The questions used for the language and migration history elements were asked in the 2013–2019 waves of the IAB-SOEP Migration Sample. The questions used for the ethnic self-identification elements were asked in the 2013, 2014, 2016, 2018 and 2020 waves. The media question was only asked in 2014, 2016, 2018, and 2020, and the questions on ethnic interaction in 2013, 2015, 2017, 2018, and 2019. For this reason, I interpolated some components between two waves so that I could measure them in the same year. Since I use only cross-section, this is not a significant problem.

Table 3 Construction of ethnic identity elements

The numbers correspond to the answer given to the questions in Table 2

(i) Language	**(ii) Future citizenship and locational plans**
Assimilated if 1.1. and 2.2.	Assimilated if 3.1. and 4.2.
Integrated if 1.2. and 2.2.	Integrated if 3.2. and 4.2.
Separated if 1.2. and 2.1.	Separated if 3.2. and 4.1.
Marginalized if 1.1. and 2.1.	Marginalized if 3.1. and 4.1.
(iii) Ethnic self-identification	**(iv) Ethnic interaction**
Assimilated if 5.1. and 6.2.	Assimilated if 7.1. and 8.2.
Integrated if 5.2. and 6.2.	Integrated if 7.2. and 8.2.
Separated if 5.2. and 6.1.	Separated if 7.2. and 8.1.
Marginalized if 5.1. and 6.1.	Marginalized if 7.1. and 8.1.
(v) Media consumption	
Assimilated if 9.3.	
Integrated if 9.2.	
Separated if 9.1	
Marginalized if 9.4.	

regarded as separated. Those answering that they feel connected 'in some respects', 'barely', or 'not at all' to both Germany and the country of origin are considered to be marginalized. The same rationale is applied to the other elements. Tables 2 and 3 show how the answers to the survey questions are paired to construct each element.

The main empirical analysis in this study uses a repeated cross-section. There are several reasons why I choose to do so. First, the questions from the IAB-SOEP Migration Sample used to construct the ethnic identity indicators are not asked in every wave. Second, in such a short period (2013–2020), there is relatively little variation in ethnic identity between waves. Third, since this study aims to evaluate the relationship between being a tied mover (a time constant variable) and ethnic identity, using a fixed effects estimation would absorb the effect of this variable. For the cross-sectional sample, for each individual, I use information from the interview in which the ethnic identity questions were asked for the first time. This is when there is a higher response rate, and most of the pre-migration questions are asked.

Table 8 in the Appendix reports the mean values for each element of the ethno-sizer. A higher or relatively equal share of lead or equal movers is assimilated or integrated compared to tied movers.

The summary statistics of the individual characteristics used in the analysis are shown in Table 7 in Appendix A. Overall, the proportion of lead or equal and tied movers acquiring education in Germany is low. This is not entirely surprising since individuals in this study migrated at the age of 32 years on average and as part of a family formed in their home country. Nevertheless, tied movers are more likely to have taken an apprenticeship, while lead or equal movers are more likely to have studied at a higher education institution. The mean years since migration for all individuals is ten years, and the largest migration cohort is 'after 2011'.

Beyond the ethnosizer, there is a growing literature in economics on the social and cultural integration of migrants, which has used different proxies for cultural or ethnic identity.[25] Most studies use one single variable as an indicator for cultural or ethnic identity. For first-generation migrants, the most common measure is self-reported national identification but also friendship ties, use of native language, fertility, female employment, and children's choice of names, among others (Blau et al., 2011; Casey & Dustmann, 2010; Drydakis, 2013; Dustmann, 1996; Facchini et al., 2015; Manning & Roy, 2010). Constant et al. (2009) framework captures some of these measures succinctly and hence is my preferred measure, although I also show the results separately for each component.[26]

4 Results

4.1 Main results

Table 4 shows the results of estimating Eq. (1) using the ethnosizer as a measure of ethnic identity. Besides focusing on the role of being a tied mover, I also consider the importance of gender in particular because 69.6% of tied movers are female. These findings thus demonstrate the role of the migration position beyond gender. Panel A uses only tied mover as an explanatory variable; panel B uses only gender; panel C considers both tied mover and gender as explanatory variables and panel D adds country of origin fixed effects, survey year fixed effects, federal state fixed effects and the other individual controls as described in Section 2.2. Looking at the results in panel D, tied movers score on average 0.178 points less in assimilation and 0.131 points less in integration than lead or equal movers, everything else equal. On the other hand, tied movers score on average 0.285 points more in separation than lead or equal movers.[27] These results are significant at 0.01%.[28] However, being a tied mover does not affect the strength of marginalization. This result is not entirely surprising since marginalized individuals are those who do not identify and do not have a sense of commitment to their

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[25] See for example Battu and Zenou (2010), Bisin et al. (2008, 2011), Campbell (2019), Casey and Dustmann (2010), Constant et al. (2009), Constant and Zimmermann (2008), Drydakis (2013), Dustmann (1996), Georgiadis and Manning (2011), Manning and Roy (2010), Masella (2013).

[26] Other studies using indexes similar to the ethnosizer include Constant and Zimmermann (2008) for Germany, Nekby and Rodin (2010) for Sweden, Drydakis (2013) for Greece, Gorinas (2014) for Denmark, Delaporte (2019) for France, Carillo et al. (2023) for Italy and Piracha et al. (2023) for Australia.

[27] Note that for any explanatory variable, the sum of the coefficients across the four scores must add up to zero. This happens by construction since individuals are assigned to an acculturation state in each of the five elements. Hence, the sum across the four acculturation states must equal five such that by being classified as "integrated" in one element, for instance, an individual "loses" one point in one of the other three states. If tied movers score higher in separation on average than lead or equal movers, they must at least score lower in one of the other states.

[28] In Fig. 4 in the Appendix, I show the breakdown by each element composing the ethnosizer. For the acculturation states in which the coefficient on being a tied mover is significant (assimilation, integration, and separation), the coefficient on each element goes in the same direction as the overall index. It is not possible to compare the scales since each element is a dummy variable (0–1), and the ethnosizer sums over the five elements.

Table 4 Ethnic identity measured by the ethnosizer

	Assi. (1)	Integ. (2)	Marg. (3)	Separ. (4)
No controls				
Panel A: Tied mover only				
Tied Mover	−0.212***	−0.113**	0.031	0.295***
	(0.041)	(0.049)	(0.035)	(0.058)
Panel B: Gender only				
Female	−0.081**	0.143***	0.007	−0.070
	(0.034)	(0.039)	(0.028)	(0.047)
Panel C: Tied mover & gender				
Tied Mover	−0.203***	−0.147***	0.030	0.320***
	(0.042)	(0.049)	(0.035)	(0.059)
Female	−0.046	0.168***	0.002	−0.124***
	(0.035)	(0.040)	(0.029)	(0.047)
Observations	2132	2132	2132	2132
All controls	(1)	(2)	(3)	(4)
Panel D: Tied mover & gender				
Tied Mover	−0.178***	−0.131***	0.024	0.285***
	(0.040)	(0.046)	(0.036)	(0.055)
Female	−0.026	0.128***	0.008	−0.110**
	(0.035)	(0.042)	(0.031)	(0.047)
Panel E: Tied mover & gender interacted				
Tied Mover	−0.035	−0.172**	0.018	0.189**
	(0.072)	(0.076)	(0.062)	(0.096)
Female	0.031	0.111**	0.006	−0.148***
	(0.043)	(0.050)	(0.038)	(0.055)
Tied Mover × Female	−0.224**	0.064	0.010	0.149
	(0.091)	(0.100)	(0.080)	(0.121)
Observations	2132	2132	2132	2132
Country of origin FE	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes
Federal state FE	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes

FE refers to fixed effects. Individual controls include age at immigration and its square, years since migration and its square, religious affiliation, education in the home country, training in Germany, University in Germany, employment years in the home country, number of children, if there is a child in school and if there is a child in kindergarten. The reference individual is male and a lead/equal mover

Standard errors in parentheses are clustered at the household level; *$p < 0.10$; **$p < 0.05$; ***$p < 0.01$

home country. By living in a couple, both tied and lead or equal movers have the presence of a spouse and potentially of children, and hence are unlikely to feel completely disconnected from the home country.

Panel B of Table 4 shows that, without controlling for the migration position, females migrating with a partner score on average 0.083 less in assimilation and 0.143 more in integration than males. However, once adding being a tied mover as a control in panel C, we see that females are not less likely to be assimilated than males and that, in reality, they are less likely to be separated.[29] These results remain stable when adding the fixed effects and other individual characteristics (panel D of Table 4) and show that part of the negative relationship between gender and assimilation was driven mainly by the fact that 69.6% of females in the sample are tied movers.

In Constant et al. (2009) seminal study, females score on average 0.121 less in assimilation than males and are not statistically different from males in the other three states. However, the results in Table 4 are not directly comparable to those in Constant et al. (2009) since the authors use a much older migration cohort, measure the ethnic identity more than a decade earlier and include females who migrated as single and are single at the time of the survey. Although it is beyond the scope of this study to analyze the evolution of the female labor market and socio-cultural adjustment over the past decades, in Section B.1 in the Appendix I use a sample of single and married individuals and use an empirical specification closer to Constant et al. (2009). The results suggest that the difference in the adjustment of females is driven by the fact that more than ten years separate the sample used in Constant et al. (2009) (GSOEP 2001-2003) and the sample used in this study (IAB-SOEP Migration Sample 2013-2020). In Constant et al. (2009) sample, over 70% of the individuals migrated before 1995, and about 35% came from Turkey. In the IAB-SOEP Migration Sample used in this study over 70% of the individuals migrated after 2000 and less than 6% originated from Turkey (almost 50% came from Eastern Europe and the Balkans).[30]

Between the 1960s and the 2000s, major economic, political, and social changes occurred within and across countries. This led to changes in the relationship between gender and social norms and employment among natives - some of whom eventually emigrated. Similarly, changes in the economic conditions in Germany (e.g., the sick man of Europe), immigration restrictions (e.g., pre- and post-EU) and Visa schemes (e.g., the 1960s Guest worker program) have attracted different types of migrants from different countries of origin (Bertoli et al., 2016). Hence, migrants coming to Germany in different migration cohorts differ in terms of observable and unobservable characteristics (Berbee & Stuhler, 2023; Sprengholz et al., 2021). These differences are likely to explain the distinct socio-cultural adjustments (Borjas, 1987) and hence the differences between this study and Constant et al. (2009). A possible explanation for the difference between this study and Constant et al. (2009) is that the

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[29] In both columns (1) and (4), the differences in the female coefficient between Panel B and Panel C of Table 4 are statistically different from each other at 1%.

[30] Furthermore, Constant et al. (2009) measure the socio-cultural integration of females in 2001 while in this study I measure socio-cultural integration between 2013-20.

home-host country gap in gender norms and cultural values has diminished such that female migrants now find it easier to integrate into Germany.
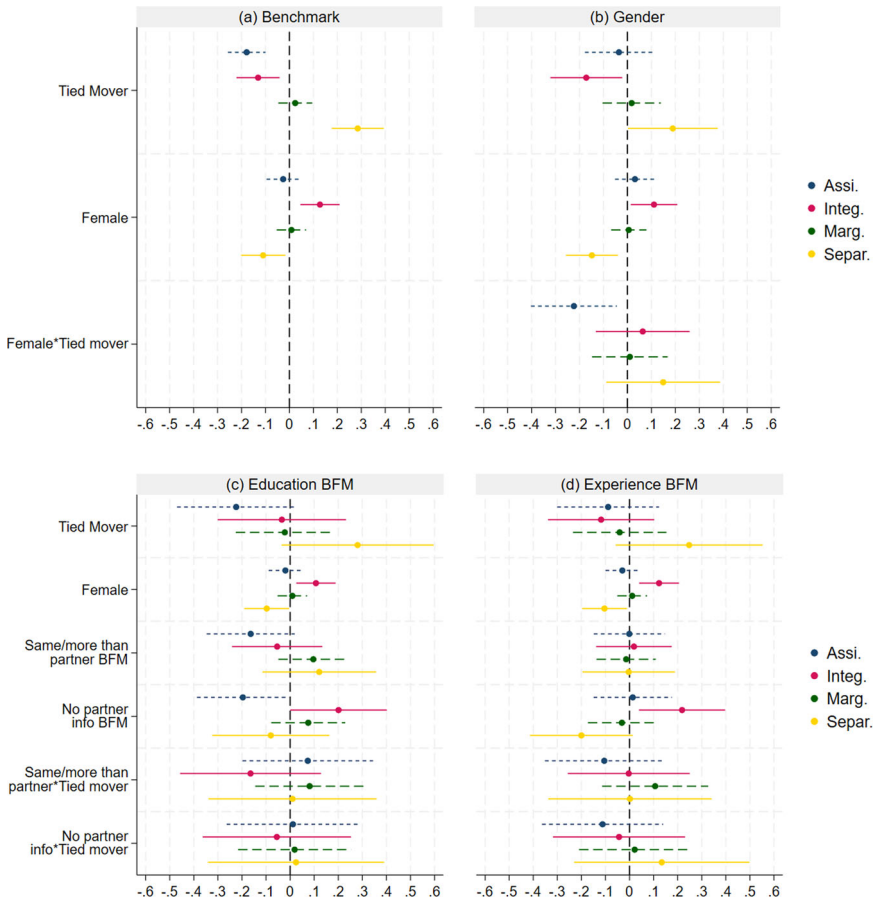
4.2 Heterogeneity analysis

This section displays the heterogeneous associations between tied mover and ethnic identity by the differences in human capital between spouses before migration and gender. According to the literature on internal family migration (Bielby & Bielby, 1992; Cooke, 2003; Juerges, 2006; Mincer, 1978; Nivalainen, 2004; Rabe, 2011; Shauman, 2010) and the model described in Section 2.1, differences in human capital[31] and gender are the main determinants of who takes the role of the tied spouse within a couple. Hence, these characteristics reflect pre-migration differences in the potential earnings at entry to Germany which determine the incentives to invest in the host country's culture and overall returns to migration. Furthermore, an advantage of using pre-migration characteristics is that these do not suffer from reverse causality problems since they are determined before arrival to Germany and are not impacted by the decision to invest in Germany's culture.

Since I can only compare tied movers with lead or both movers, what matters for the migration position is if a spouse has higher or lower human capital than the partner. Hence, I use information on education and employment before migration to proxy for differences in human capital. For pre-migration education, I allow for the following categories i) tied mover has no vocational training, technical college or university, but the partner has one of these degrees (e.g., tied mover has lower education than the partner); ii) tied mover has a vocational training, technical college or university, irrespective of the partners' degree (e.g., tied mover has the same or higher education than the partner); and iii) no partner or own information on pre-migration education. Similarly, for pre-migration employment, I construct the following categories i) tied mover is not full-time employed before migration but the partner is full-time employed (e.g., tied mover has less experience than the partner); ii) tied mover is full-time employed before migration, irrespective of the spouses' status (e.g., tied mover has the same or more experience than the partner); and iii) no partner or own information on pre-migration employment. These pre-migration characteristics signal differences in the potential benefits of investing in the host country's culture.

Panel (a) of Fig. 2 shows the coefficients on tied mover and female as in panel D of Table 4, and panel (b) adds the interaction between tied mover and female also displayed in panel E of Table 4. Panel (b) shows that the negative correlation between tied mover and assimilation is stronger for females than for males (-0.224). This difference is significant at 5% and suggests that female-tied movers find it more difficult to completely detach from their home country. There is no significant difference between female- and male-tied movers in the other acculturation states. Panel (c) of Fig. 2 displays the results when adding the categorical variable on the differences in education between partners before migration and its interaction with the tied mover variable. Although the association between tied movers and assimilation

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[31] These lead to differences in expected returns from migration between spouses.

Fig. 2 Heterogeneity analysis. Notes: **a** displays the coefficients on tied mover and female from the estimation of Eq. 1. **b** adds the interaction between tied mover and female to Eq. 1. **c** adds to Eq. 1 a categorical variable that equals 0 if the respondent has lower education before migration than the partner, 1 if has the same or higher education than the partner, and 2 if there is missing partner information plus the interaction between this variable and tied mover. **d** is similar to (**c**) but using employment before migration instead of education. BFM denotes before migration. Bars identify 95% confidence intervals

(separation) is less negative (positive) for those who are similarly or more educated than the partner than for those who are less educated than the partner, these differences are not statistically significant at 10%. Panel (d) of Fig. 2 displays the results when adding the categorical variable on the differences in employment status between partners before migration and its interaction with the tied mover variable. There is no statistically significant difference between tied movers with higher or the same labor market experience as their partner and tied movers with lower labor market experience than their partner.

Overall, these results suggest that there is no particular difference in the incentives to invest in the host country's culture between tied movers with higher or the same human capital than the partner before migration and those with lower human capital.

4.3 Robustness checks

In this section, I perform a series of robustness checks to analyze the stability and credibility of my results. First, I estimate the relationship between being a tied mover and ethnic identity using a Poisson regression. Secondly, I analyze the stability of the results when excluding individuals with missing information, excluding potentially bad controls (education acquired in Germany), and adding other potentially bad controls (employment status in Germany). Thirdly, I show that my results are robust to different constructions of the ethnosizer. Finally, I show the main results when comparing tied to lead movers only and using household fixed effects. Overall, I can conclude that the main results remain stable.

4.3.1 Poisson regression

Because the four ethnosizer measures can take count values (from 0 to 5), I use a Poisson regression as in Constant and Zimmermann (2008). Table 11 in the Appendix displays the coefficients on tied mover and female and shows that the main conclusions hold.

4.3.2 Excluding information and adding extra controls

Table 5 shows the results for the ethnosizer when excluding individuals with missing pre-migration information (panel A, columns (5)–(8)), excluding the potentially bad controls 'having acquired vocational training in Germany' and 'having attended university or school in Germany' (panel B, columns (1)–(4)), and when adding potentially bad control related to the labor market status in Germany (panel B, columns (5)–(8)).[32] These changes do not impact the sign or magnitude of the coefficients on the main variables of interest. The baseline category in panel B, columns (5)–(8), is full-time employment. Consistent with the previous findings in the literature (Carillo et al., 2023; Constant et al., 2009; Drydakis, 2013), non-employed individuals are less likely to be integrated and assimilated and more likely to be separated or marginalized than full-time employed individuals. The coefficients on tied mover remain remarkably stable after controlling for employment status. Hence, it is unlikely that migrating as a tied spouse only captures labor market status at the destination.

4.3.3 Excluding one element at the time and looking at individual components

Figure 5 in Appendix C compares the results of the relationship between tied mover and the ethnosizer when using all elements and when excluding one element at the time. We can see that the main results remain stable and that no particular element is driving the results. Table 12 in the Appendix shows the results for each variable composing the ethnosizer using the same specification as in Eq. (1). These outcomes are not directly comparable as they cannot be analyzed in terms of being assimilated,

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[32] I consider these variables to be potentially bad controls since they could themselves be an outcome variable - being tied more could affect employability and the incentive to acquire education in Germany.

Table 5 Ethnosizer: Excluding missing information or education in Germany and controlling for employment status in Germany

Panel A:

	Benchmark OLS				Excl. indiv. with missing information			
	Assi.	Integ.	Marg.	Separ.	Assi.	Integ.	Marg.	Separ.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Tied Mover	−0.178***	−0.131***	0.024	0.285***	−0.193***	−0.140***	0.047	0.285***
	(0.040)	(0.046)	(0.036)	(0.055)	(0.043)	(0.048)	(0.038)	(0.059)
Female	−0.026	0.128***	0.008	−0.110**	−0.018	0.181***	−0.019	−0.144***
	(0.035)	(0.042)	(0.031)	(0.047)	(0.037)	(0.044)	(0.033)	(0.051)
Observations	2132	2132	2132	2132	1874	1874	1874	1874

Panel B:

	Excl. education in Germany				Controlling for employment			
	Assi.	Integ.	Marg.	Separ.	Assi.	Integ.	Marg.	Separ.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Tied Mover	−0.176***	−0.134***	0.026	0.285***	−0.173***	−0.121***	0.017	0.278***
	(0.040)	(0.046)	(0.036)	(0.056)	(0.040)	(0.046)	(0.036)	(0.055)
Female	−0.023	0.127***	0.009	−0.113**	0.022	0.184***	−0.034	−0.172***
	(0.036)	(0.042)	(0.031)	(0.047)	(0.040)	(0.048)	(0.035)	(0.053)
Part-time					−0.085	0.017	0.050	0.018
					(0.062)	(0.068)	(0.055)	(0.077)
Not employed					−0.113**	−0.229***	0.078*	0.264***
					(0.051)	(0.057)	(0.045)	(0.066)
Other labor market status					−0.140**	−0.145*	0.221***	0.065
					(0.068)	(0.082)	(0.065)	(0.098)
Observations	2132	2132	2132	2132	2132	2132	2132	2132
Country of origin FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Federal state FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

FE refers to fixed effects. Individual controls include age at immigration and its square, religious affiliation, education in the home country, training in Germany, University in Germany, employment years in the home country, number of children, if there is a child in school and if there is a child in kindergarten. The reference individual is male and a lead/equal mover. In columns (5)–(8) of panel B the reference individual is full-time employed

Standard errors in parentheses are clustered at the household level; *$p<0.10$; **$p<0.05$; ***$p<0.01$

integrated, marginalized, or separated. The results in Table 12 are consistent with the results using the ethnosizer and show that tied movers are more likely to feel connected with the country of origin and to consume media in the language of the country of origin. However, tied movers are less likely to have a good command of German, feel German, or intend to acquire German citizenship.

4.3.4 Comparing tied movers to lead movers only and using household fixed effects

Table 13 in the Appendix adds household fixed effects to the specification used in panel D in Table 4, such that I am comparing lead and the tied movers who belong to the same household. This implies dropping all equal movers since there is no variation within the household in this group. The main conclusion from Table 4 holds, and the magnitude of the coefficients is fairly similar even though in this case I am only comparing tied movers to lead movers. The results in Table 13 also provide reassurance that the main results are not driven by the inclusion of equal movers in the base group.[33]

This section provided some robustness checks that show that migrating as a tied mover is negatively associated with being integrated or assimilated in Germany but is positively associated with being separated. Despite the relationship between the tied mover variable and ethnic identity being robust to the inclusion of different control variables, I cannot rule out that there exist unobserved individual characteristics driving the migration position and the level of integration or assimilation in Germany. Hence, a causal interpretation cannot be given to these results. Designing a causal setup for studying post-migration outcomes of tied and lead movers would be difficult and largely unreliable. The counterfactual of a spouse taking the role of a tied mover would be to take the role of a lead or equal mover. However, in such a counterfactual, we would not observe this spouse and their family in Germany—by definition, a tied spouse is a family migrant who would not have chosen to migrate to the observed location. Nevertheless, we know very little about the consequences of migrating internationally as a tied mover on post-migration outcomes, and this study helps to shed some light on the subject.

5 Including married individuals who arrived as singles

In this section, I extend my analysis to include individuals who migrated as singles and see how these compare with tied and lead or equal movers. In principle, individuals who migrated without having to take the family into consideration are a very different group. Nevertheless, they might offer interesting insights since single, and lead or equal movers had more similar gains from coming to Germany than tied movers.

A lead or an equal mover is a spouse who, if single, would still have chosen to migrate. Hence, both single movers and lead or equal movers are expected to gain individually from migration. One can, therefore, expect that the adjustment pattern of lead or equal movers is closer to that of single migrants than that of tied migrants.

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[33] Equal movers are, in a sense, lead movers. They are called equal movers because both partners are lead movers.

Table 6 Including singles

	Assi.	Integ.	Marg.	Separ.
	(1)	(2)	(3)	(4)
Single mover	−0.026	0.006	0.025	−0.006
	(0.046)	(0.054)	(0.041)	(0.059)
Tied mover	−0.176***	−0.122***	0.021	0.278***
	(0.039)	(0.045)	(0.036)	(0.054)
Female	−0.060**	0.106***	0.052*	−0.098**
	(0.030)	(0.035)	(0.027)	(0.039)
Observations	2861	2861	2861	2861
Country of origin FE	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes
Federal state FE	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes

FE refers to fixed effects. Individual controls include age at immigration and its square, years since migration and its square, religious affiliation, education in the home country, training in Germany, University in Germany, employment years in the home country, number of children, if there is a child in school and if there is a child in kindergarten. The reference individual is male and a lead/equal mover

Standard errors in parentheses are clustered at the household level; *$p < 0.10$; **$p < 0.05$; ***$p < 0.01$

In this Section, I consider the ethnic identity of individuals who arrived as singles in Germany and who lived in a couple at the time of the survey. I choose individuals who live in a couple to make them more comparable to lead or equal movers and tied movers (who also live as a couple). In total, 729 individuals migrated as singles and lived in a couple at the time of the survey. The baseline category remains a lead or equal mover. The results in Table 6 show that single movers who, at the time of the survey live in a couple in Germany are not statistically different from lead or equal movers. The coefficient on being a tied mover remains fairly similar.

6 Conclusion and discussion

This study examined the identity formation of first-generation migrant spouses depending on who was the tied or lead mover. The results show that tied movers are more likely to be separated and less likely to be integrated and assimilated than lead or equal movers. The heterogeneity analysis further suggests that female-tied movers are less likely to be integrated than men-tied movers. These findings suggest that for tied movers, the psychological costs of distancing from the culture of their country of ancestry do not compensate for the benefits of investing in the host country's culture.

I have shown that the main results are robust to a series of robustness checks and presented suggestive evidence that single migrants are not different from lead or equal migrants. This result is not entirely surprising, as both groups expected to gain

individually from migration. As highlighted in the introduction, a causal inter-pretation cannot be given to these results. Nevertheless, the descriptive findings in this study help to understand the implications of migrating as a tied spouse on post-migration outcomes which go beyond the labor market integration.

Migration into Germany has grown substantially over the past decade. The degree of economic, political, and cultural integration of migrants became one of the most pressing topics in the German political debate. A good understanding of the different integration processes is thus essential to design effective integration policies. The descriptive findings in this study suggest that tied migrants are more likely to struggle to assimilate and integrate into German culture and society. Integrating entire families might have important consequences for retaining migrants in Germany and using their full labor market potential.

In the robustness checks section, I have shown that not being employed correlates with lower integration among tied movers. Therefore, luring accompanying spouses to participate in the labor force could prove highly beneficial for host countries. On the one hand, this is likely to improve the socio-cultural adjustment of the tied mover, which can help retain the leading spouse and improve the adjustment of younger children. On the other hand, it increases the overall labor supply of workers, which can benefit a country such as Germany, which aims to attract highly skilled workers and less skilled workers such as caregivers or craftsmen. Nevertheless, labor market participation is only one way to improve the socio-cultural adjustment of tied movers. As discussed in the conceptual framework, this might not be the best strategy since accompanying spouses have different benefits from entering the labor force and might also have different preferences. Hence, local governments could more actively provide a wider range of counseling services to the families of migrant workers. This can be done either directly upon registration in the local municipality (like in some cantons in Switzerland) or through companies that hire foreign workers. Some of the services could include cross-cultural training (to tackle the cultural shock observed in Fig. 1), support in finding jobs or volunteering activities where a good command of the native language is not necessary, acquiring further education, providing information, or sponsoring the participation in local social or sports clubs, for instance. [34]

Since many couples migrate with children or decide to have children after migration, government policies such as expanding childcare or providing more information regarding the access, price, and conditions of childcare might help tied movers adjust to the host country. While these could ease tied movers' transition to the German labor market, we cannot assume that all tied movers wish to enter the labor force. As discussed in the conceptual framework, it could be an optimal family strategy to have the tied mover focusing on the family.

This study contributed to the literature by studying the social-cultural adjustment of tied movers. Future research should aim at understanding how different migration policies and socio-economic conditions affect the self-selection of migrant couples.

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[34] Some of these measures have been suggested in the management literature, which finds that the spouses accompanying high-skilled workers assigned to a job overseas by their company (e.g., expatriates) struggle with adjusting to the host country and are more susceptible to challenges in family functioning (Kupka & Cathro, 2007; Lazarova et al., 2015; Mäkelä & Suutari, 2015; McNulty, 2012; Mäkelä et al., 2011). They focus on big corporations but could be applied more generally.

This would improve the interpretation of the association between being a tied mover and ethnic identity and labor market integration. Studying the effect of the different adjustment patterns of the tied mover on the lead spouse and children should also help paint a more complete picture of the importance of ethnic identity for the retention of migrant families and the persistence of ethnic identity across generations.

Further studies are necessary to understand the external validity of my findings. Different socio-economic conditions and integration policies in host countries may lead to very different self-selection patterns and ethnic identity clashes among migrant couples. While similar findings can be expected in other European countries with a similar migration population, this might not be the case when looking at migrant families in Africa or Latin America.

Compliance with ethical standards

7 Appendix A: Statistics

Tables 7, 8, Fig. 3

Table 7 Individual characteristics

	Lead/ equal mover	Tied mover	Total	Obs.
Panel A: Time constant				
Female				
Male	50.695	30.435	44.794	955
Female	49.305	69.565	55.206	1177
Region of origin				
Central & North EU + Switzerland + Norway	1.655	1.449	1.595	34
South EU	8.802	9.018	8.865	189
2004 EU enlargement	16.082	16.425	16.182	345
2007–2013 EU enlargement	15.156	14.171	14.869	317
Russia + other former Soviet Union	19.060	19.324	19.137	408
Former Yugoslavia	8.140	7.407	7.927	169
Turkey	5.162	9.179	6.332	135
Arab Countries	6.750	4.670	6.144	131
Central Asia	10.920	9.018	10.366	221
Others	8.273	9.340	8.583	183
Belongs to church/religious community				
No denomination	23.759	26.409	24.531	523
Islamic religion	17.207	18.519	17.589	375
Christian religion	54.732	52.174	53.987	1151
Another religious comm.	4.302	2.899	3.893	83
Panel B: Pre-migration				
German Skills BFM				
Poor German	71.476	79.549	73.827	1574
Fair German	14.494	11.111	13.508	288
Good German	13.236	8.857	11.961	255
No information	0.794	0.483	0.704	15
Vocational training in home country				
No vocational training	68.140	71.380	69.104	1380
Vocational training	31.860	28.620	30.896	617
University degree in home country				
No university degree	81.041	78.956	80.421	1606
University degree	18.959	21.044	19.579	391
Years of full-time employment BFM				
0–1 years	20.979	24.638	22.045	470
2–5 years	16.413	18.519	17.026	363

Table 7 continued

	Lead/ equal mover	Tied mover	Total	Obs.
6–12 years	22.700	23.027	22.795	486
13 or more years	31.502	25.604	29.784	635
No information	8.405	8.213	8.349	178
Full-time employed in the year BFM				
Not full-time employed	34.613	41.546	36.632	781
Full-time employed	58.769	53.140	57.129	1218
No information	6.618	5.314	6.238	133
Children bellow age 7 BFM				
No children bellow age 7 BFM	72.005	71.498	71.857	1532
Children bellow age 7 BFM	27.995	28.502	28.143	600
Migration cohort				
Before 1995	14.957	14.815	14.916	318
1996–2000	18.134	19.646	18.574	396
2001–2005	21.046	19.485	20.591	439
2006–2010	18.597	21.417	19.418	414
After 2011	27.267	24.638	26.501	565
Age at migration	31.922	31.403	31.777	2132
Panel C: Post-migration				
Attended School in Germany				
No School	89.080	92.915	90.197	1923
School	10.920	7.085	9.803	209
Apprent./vocational training in Germany				
No apprent./vocational training	90.073	89.694	89.962	1918
Apprent./vocational training	9.927	10.306	10.038	214
University in Germany				
No university	98.412	99.356	98.687	2104
University	1.588	0.644	1.313	28
Employment status in Germany				
Full-time employed	45.731	33.816	42.261	901
Part-time employed	12.972	14.654	13.462	287
Not employed	33.355	39.775	35.225	751
Other labor market status	7.942	11.755	9.053	193
Years since migration	10.119	10.082	10.108	2132

Table 8 Ethnic identity and elements

	Lead/equal mover	Tied mover	Total
Language: Assi.	0.017	0.006	0.014
Language: Integ.	0.554	0.483	0.533
Language: Marg.	0.009	0.013	0.010
Language: Separ.	0.421	0.498	0.444
Future citizen. and loc. plans: Assi.	0.424	0.337	0.398
Future citizen. and loc. plans: Integ.	0.038	0.023	0.033
Future citizen. and loc. plans: Marg.	0.395	0.451	0.411
Future citizen. and loc. plans: Separ.	0.144	0.190	0.157
Self-identification: Assi.	0.234	0.158	0.212
Self-identification: Integ.	0.147	0.135	0.144
Self-identification: Marg.	0.281	0.256	0.273
Self-identification: Separ.	0.339	0.451	0.371
Ethnic interaction: Assi.	0.040	0.047	0.042
Ethnic interaction: Integ.	0.721	0.692	0.712
Ethnic interaction: Marg.	0.081	0.079	0.081
Ethnic interaction: Separ.	0.158	0.182	0.165
Media consumption: Assi.	0.402	0.356	0.389
Media consumption: Integ.	0.296	0.309	0.300
Media consumption: Marg.	0.006	0.003	0.005
Media consumption: Separ.	0.296	0.332	0.306
Ethnosizer: Assi.	1.116	0.903	1.054
Ethnosizer: Integ.	1.756	1.643	1.723
Ethnosizer: Marg.	0.771	0.802	0.780
Ethnosizer: Separ.	1.357	1.652	1.443
Observations	2132	2132	2132
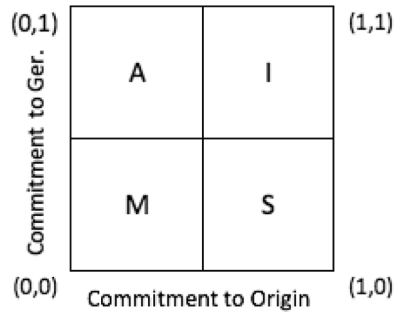
Fig. 3 The ethnosizer as a two-dimensional measurement of the size of ethnic identity. The figure illustrates four states of ethnic identity, differentiated by the strength of cultural and social commitments as in Constant et al. (2009). The quadrants A, I, M, and S correspond to Assimilation (A), Integration (I), Marginalization (M) and Separation (S). Migrants usually would start at point (1,0) and undergo a journey through the other states

8 Appendix B: Main results

8.4 B.1: Reproducing Constant et al. (2009)

Table 10 builds the ethnosizer and uses the empirical specification similar to that in Constant et al. (2009). It includes all individuals, both those migrating in a couple and those migrating as singles. The first major difference in the Constant et al. (2009) is the timing of the survey. Constant et al. (2009) use the 2001 GSOEP as a base year, and 2002–2003 for the questions not available at the base year (Table 9). This study uses 2013–2020, which is more than 10 years apart. Between these two time periods, there are remarkable differences in the regions of origin (35% of migrants come from Turkey in Constant et al. (2009), 6% come from Turkey in the IAB-SOEP sample) and in the migration cohort (over 70% of migrants in Constant et al. (2009) migrated before 1995, 70% of migrants in the IAB-SOEP sample migrated after 2000). This is expected since the GSOEP covered mostly the Guest worker population while the IAB-SOEP Migration Sample was designed to capture the recent migration waves where over 40% come from Eastern Europe. The second difference is the Constant et al. (2009) computation of the ethnic interaction element which uses the nationality of the three closest friends. While in the GSOEP this question was asked every two years, in the IAB-SOEP Migration Sample it was only asked in two waves.[35] Table 10 uses the nationality of the three closest friends and, therefore has a relatively small sample. The third difference has to do with Constant et al. (2009) empirical specification, which includes a smaller set of individual controls. Constant et al. (2009) include only age at immigration and its square, age and its square, religious affiliation, education in the home country, and broad region of origin (Turkey, Ex-Yugoslavia, Greece, Italy, Spain and Others). Because I measure ethnic identity at different points in time, I add survey year fixed effects.

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[35] For this reason, I use a question regarding visits to Germans and Foreigners in the main analysis.

The results in Table 10 suggest that the disparity in the sign of the coefficient on females for the integration score between this study and Constant et al. (2009) is not driven by how the ethnosizer is computed nor by the empirical specification. Even using the same specification and computing the ethnosizer using the same questions as in panel A, there are differences in the coefficient on Females. More than 10 years set apart the results between panel A and panel C in Table 10, this encompassed not only changes in the composition of the migration population in Germany but also major changes in gender equality and women's rights—both at origin and in Germany. This is likely to have changed the benefits of labor market integration and the benefits/costs of socio-cultural integration.

Table 9 Comparison between Constant et al. (2009) sample and the sample used in this study

	Reproduction of CZG 2009		IAB-SOEP	
	GSOEP 2001–2003		M sample 2013–2020	
	All migrants		Migrant couples	
	Mean	SD	Mean	SD
	(1)	(2)	(1)	(2)
Panel A: Region of origin				
Turkey	0.278	0.448	0.075	0.264
Ex-Yugoslavia	0.145	0.352	0.092	0.289
Greece	0.054	0.227	0.030	0.171
Italy	0.099	0.299	0.040	0.197
Spain	0.021	0.143	0.017	0.128
Other ethnicity	0.403	0.491	0.746	0.436
Panel B: Migration cohort				
Before 1995	0.919	0.272	0.179	0.383
1996–2000	0.081	0.272	0.197	0.398
2001–2005	0.000	0.000	0.195	0.396
2006–2010	0.000	0.000	0.179	0.383
After 2011	0.000	0.000	0.251	0.434
Observations	1490		2803	

Notes: CZG refers to Constant et al. (2009). These are own calculations using the GSOEP and trying to reproduce the sample used in Constant et al. (2009)

**Table 10** Constant et al. (2009) specification and outcome

	Assimilation (1)	Integration (2)	Marginalization (3)	Separation (4)
Panel A: Original CZG 2009, GSOEP 2001–2003, all migrants				
Female	−0.121**	−0.043	0.081	0.084
(*t*-test)	(−0.81)	(−2.26)	(1.22)	(1.61)
Observations	1269	1269	1269	1269
Panel B: Reproduction of CZG 2009, GSOEP 2001–2003, all migrants				
Female	−0.112***	−0.034	0.109***	0.038
	(0.040)	(0.043)	(0.036)	(0.052)
Observations	1490	1490	1490	1490
Panel C: IAB-SOEP M sample 2013–2020, with year FE, all migrants				
Female	−0.098***	0.135***	0.009	−0.047
	(0.032)	(0.035)	(0.029)	(0.039)
Observations	2803	2803	2803	2803
CZG 2009 region of origin FE	Yes	Yes	Yes	Yes
CZG 2009 indiv. controls	Yes	Yes	Yes	Yes
Year FE (panel B)	Yes	Yes	Yes	Yes

FE refers to fixed effects. Individual controls include age at immigration and its square, age and its square, religious affiliation and education in the home country, similar to those in Constant et al. (2009). Constant et al. (2009) region of origin groups countries into five categories: Turkey, Ex-Yugoslavia, Greece, Italy, Spain and Others. The ethnosizer in this table is computed similarly to that in Constant et al. (2009)

Standard errors in parentheses are clustered at the household level; *$p < 0.10$; **$p < 0.05$; ***$p < 0.01$

8.5 B.2: Individual elements

Figure 4
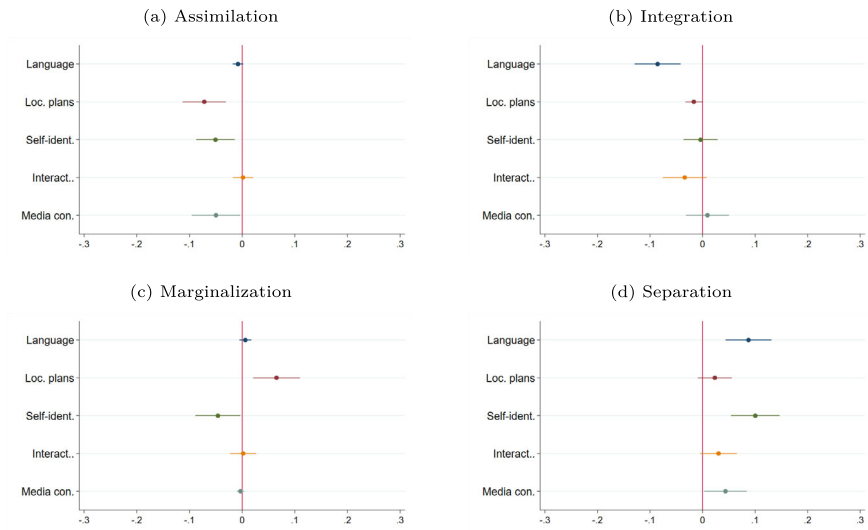
Fig. 4 Individual elements. Notes: The plots in the figure display the coefficients on tied mover from the estimation of Eq. (1) on each element of the ethonizer. Each element is a dummy variable. "Language" refers to element (i) language; "Loc. plans" to (ii) future citizenship and locational plans; "Self-ident." to (iii) ethnic self-identification; "Interact" to (iv) ethnic interaction and "Media con." to (v) media consumption, as described in Section 3. Bars identify 95% confidence intervals

9 Appendix C: Robustness checks

Table 11 Poisson regression: ethnic identity measured by the ethnosizer

	Assi.	Integ.	Marg.	Separ.
	(1)	(2)	(3)	(4)
Tied Mover	−0.180***	−0.080***	0.032	0.183***
	(0.040)	(0.027)	(0.045)	(0.036)
Female	−0.030	0.077***	0.006	−0.075**
	(0.031)	(0.023)	(0.040)	(0.033)
Observations	2132	2132	2132	2132
Country of origin FE	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes
Federal state FE	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes

FE refers to fixed effects. Individual controls include age at immigration and its square, years since migration and its square, religious affiliation, education in the home country, training in Germany, University in Germany, employment years in the home country, number of children, if there is a child in school and if there is a child in kindergarten. The reference individual is male and a lead/equal mover

Standard errors in parentheses are clustered at the household level; $*p < 0.10$; $**p < 0.05$; $***p < 0.01$

Table 12 Individual components of the Ethnosizer

	Lang. C. Origin	German Lang.	Return to C. Origin	Acquire Ger. Citizenship	Feel Conn. to C. Origin
	(1)	(2)	(3)	(4)	(5)
Tied Mover	0.002	−0.093***	0.007	−0.286***	0.197***
	(0.007)	(0.022)	(0.017)	(0.063)	(0.053)
Female	−0.003	0.083***	−0.014	−0.026	0.018
	(0.007)	(0.021)	(0.015)	(0.055)	(0.047)

	Feel German	Visited Foreigners	Visited Germans	Media in Lang. Orig.	Media in German
	(6)	(7)	(8)	(9)	(10)
Tied Mover	−0.168**	−0.004	−0.032	0.044**	0.009
	(0.066)	(0.016)	(0.020)	(0.021)	(0.021)
Female	−0.116**	0.021	0.024	−0.029	0.048***
	(0.058)	(0.013)	(0.016)	(0.018)	(0.018)
Observations	2132	2132	2132	2132	2132
Country of origin FE	Yes	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes	Yes
Federal state FE	Yes	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes	Yes

FE refers to fixed effects. Individual controls include age at immigration and its square, years since migration and its square, religious affiliation, education in the home country, training in Germany, University in Germany, employment years in the home country, number of children, if there is a child in school and if there is a child in kindergarten. The reference individual is male and a lead/equal mover

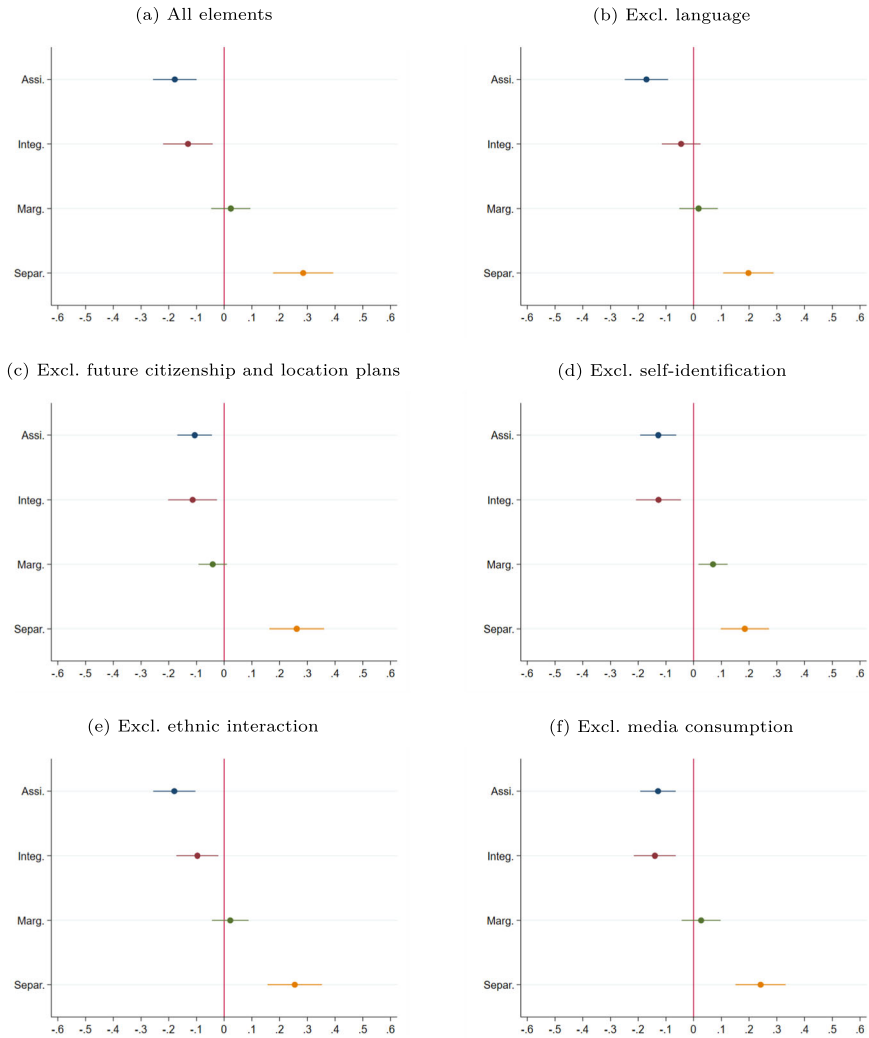Standard errors in parentheses are clustered at the household level; $*p < 0.10$; $**p < 0.05$; $***p < 0.01$

Table 13 Ethnic identity: tied vs. lead movers

| | Assi. | Integ. | Marg. | Separ. |
	(1)	(2)	(3)	(4)
Tied Mover	−0.184***	−0.227***	0.071	0.341***
	(0.054)	(0.060)	(0.046)	(0.072)
Female	−0.034	0.049	0.013	−0.029
	(0.043)	(0.050)	(0.037)	(0.057)
Observations	1477	1477	1477	1477
Household FE	Yes	Yes	Yes	Yes
Country of origin FE	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes
Federal state FE	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes

FE refers to fixed effects. Individual controls include age at immigration and its square, years since migration and its square, religious affiliation, education in the home country, training in Germany, University in Germany, employment years in the home country, number of children, if there is a child in school and if there is a child in kindergarten. The reference individual is male and a lead/equal mover

Standard errors in parentheses are clustered at the household level; $*p < 0.10$; $**p < 0.05$; $***p < 0.01$

Fig. 5 Excluding one component at the time effects. The plots in the figure display the coefficients on tied mover from the estimation of Eq. (1) on different constructions of the ethnosizer. Panel (**a**) shows the results as in Table 4, using all elements described in Table 3. Panel (**b**) excludes the element (i) language from the ethnosizer, panel (**c**) excludes element (ii) future citizenship plans, panel (**d**) excludes element (iii) ethnic self-identification, panel (**e**) excludes element (iv) ethnic interaction and panel (**f**) excludes element (v) media interaction from the ethnosizer. Each element is described in Tables 2 and 3. Bars identify 95% confidence intervals. Excl. refers to excluding and loc. to location

References

Adsera, A., & Chiswick, B. R. (2007). Are there gender and country of origin differences in immigrant labor market outcomes across European destinations? *The Journal of Population Economics*, *20*, 495–526.

Akerlof, G. A., & Kranton, R. E. (2000). Economics and identity. *The Quarterly Journal of Economics*, *11*, 715–753.

Ali, A., Van der Zee, K., & Sanders, G. (2003). Determinants of intercultural adjustment among expatriate spouses. *International Journal of Intercultural Relations*, 27, 563–580.

Baker, M., & Benjamin, D. (1997). The role of family in immigrants' labor-market activity: An evaluation of alternative explanations. *American Economic Review*, 87, 705–727.

Battu, H., & Zenou, Y. (2010). Oppositional identities and employment for ethnic minorities: Evidence from England. *The Economic Journal*, 120, F52–F71.

Berbee, P., & Stuhler, J. (2023). The integration of migrants in the German labor market: Evidence over 50 years. ZEW Discussion Paper No. 23-020.

Berry, J. W. (1980). *Acculturation: Theory, models and some new findings, chap. Acculturation as varieties of adaptation* (pp. 9–25). Westview.

Berry, J. W. (1997). Immigration, acculturation and adaptation. *Applied Psychology: An International Review*, 46, 5–68.

Berry, J. W. (2006). *Cambridge handbook of acculturation psychology, chap. Contexts of Acculturation* (pp. 27–42). Cambridge University Press.

Bertoli, S., Dequiedt, V., & Zenou, Y. (2016). Can selective immigration policies reduce migrants' quality? *Journal of Development Economics*, 119, 100–109.

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, 1241–1267.

Bisin, A., Patacchini, E., Verdier, T., & Zenou, Y. (2008). Are Muslim immigrants different in terms of cultural integration? *Journal of the European Economic Association*, 6, 445–56.

Bisin, A., Patacchini, E., Verdier, T., & Zenou, Y. (2011). Formation and persistence of oppositional identities. *European Economic Review*, 55, 1046–1071.

Blau, F., Kahn, L., Moriarty, J., & Souza, A. (2003). The role of the family in immigrants' labor-market activity: An evaluation of alternative explanations: Comment. *American Economic Review*, 93, 429–447.

Blau, F., Kahn, L., & Papps, K. L. (2011). Gender, source country characteristics, and labor market assimilation among immigrants. *Review of Economics and Statistics*, 93, 43–58.

Borjas, G. J. (1987). Self-selection and the earnings of immigrants. *American Economic Review*, 77, 531–553.

Bruecker, H. et al. (2014). The new IAB-SOEP migration sample: An introduction into the methodology and the contents. SOEP Survey Papers 216: Series C. Berlin: DIW/SOEP.

Caligiuri, P. M., Hyland, M. A. M., Joshi, A., & Bross, A. S. (1998). Testing a theoretical model for examining the relationship between family adjustment and expatriates' work adjustment. *Journal of Applied Psychology*, 83, 598–614.

Campbell, S. (2019). National identity among economic and non-economic immigrants. *Review of Economics of the Household*, 17, 411–438.

Campbell, S., Nuevo-Chiquero, A., Popli, G., & Ratcliffe, A. (2020). Parental ethnic identity and child test scores. *Fiscal Studies*, 41, 851–881.

Carillo, M. R., Lombardo, V., & Venittelli, T. (2023). Social identity and labor market outcomes of immigrants. *Journal of Population Economics*, 36, 69–113.

Casey, T., & Dustmann, C. (2010). Immigrants' identity, economic outcomes and the transmission of identity across generations. *The Economic Journal*, 120, 31–35.

Cobb-Clark, D., Connolly, M., & Worswick, C. (2005). Post-migration investments in education and job search: A family perspective. *Journal of Population Economics*, 18, 663–690.

Cobb-Clark, D. A., & Crossley, T. F. (2004). Revisiting the family investment hypothesis. *Labour Economics*, 11, 373–393.

Constant, A. F., Gataullina, L., & Zimmermann, K. F. (2009). Ethnosizing immigrants. *Journal of Economic Behavior & Organization*, 69, 274–287.

Constant, A. F., & Zimmermann, K. F. (2008). Measuring ethnic identity and its impact on economic behavior. *Journal of the European Economic Association*, 6, 424–433.

Cooke, T. J. (2003). Family migration and the relative earnings of husbands and wives. *Annals of the Association of American Geographers*, 93, 338–349.

Delaporte, I. (2019). Ethnic identity and the employment outcomes of immigrants: Evidence from France. CESifo Working Paper Series 7651.

Drydakis, N. (2013). The effect of ethnic identity on the employment of immigrants. *Review of Economics of the Household*, 11, 285–308.

Duleep, H., & Sanders, S. (1993). The decision to work by married immigrant women. *Industrial Labor Relations Review*, 46, 677–690.

Dustmann, C. (1996). The social assimilation of immigrants. *Journal of Population Economics*, 9, 37–54.

Epstein, G. S., & Heizler, O. (2015). Ethnic identity: A theoretical framework. *IZA Journal of Migration*, *4*, 9.

Facchini, G., Patacchini, E., & Steinhardt, M. (2015). Migration, friendship ties, and cultural assimilation. *Scandinavian Journal of Economics*, *117*, 619–649.

Georgiadis, A., & Manning, A. (2011). Change and continuity among minority communities in Britain. *Journal of Population Economics*, *24*, 541–568.

Gorinas, C. (2014). Ethnic identity, majority norms, and the native-immigrant employment gap. *Journal of Population Economics*, *27*, 225–250.

Jervis, S. (2011). *Relocation, gender, and emotion: A psycho-social perspective on the experiences of military wives*. Routledge.

Juerges, H. (2006). Gender ideology, division of housework, and the geographic mobility of families. *Review of Economics of the Household*, *4*, 299–323.

Junge, M., Munk, M. D., & Poutvaara, P. (2014). International migration of couples. IZA Discussion Papers 8352.

Krieger, M. (2019). Tied and troubled: Revisiting tied migration and subsequent employment. *Journal of Marriage & Family*, *82*, 934–952.

Kupka, B., & Cathro, V. (2007). Desperate housewives—social and professional isolation of German expatriated spouses. *International Journal of Human Resource Management*, *18*, 951–968.

Lazarova, M., McNulty, Y., & Semeniuk, M. (2015). *Expatriate family narratives on international mobility: Key characteristics of the successful moveable family* (pp. 29–51). Springer International Publishing.

Lazarova, M., Westman, M., & Shaffer, M. A. (2010). Elucidating the positive side of the work-family interface on international assignments: A model of expatriate work and family performance. *Academy of Management Review*, *35*, 93–117.

Le, A. (2006). *Public policy and immigrant settlement, chap. Female migrants' participation in the Australian Labour Market* (pp. 87–117). Edward Elgar.

Luthra, R., Platt, L., & Salamonska, J. (2018). Types of migration: The motivations, composition, and early integration patterns of "new migrants" in Europe. *International Migration Review*, *52*, 368–403.

Mäkelä, L., & Suutari, V. (2015). *The work and personal life interface in the international career context: An introduction* (pp. 1–9). Springer International Publishing.

Manning, A., & Roy, S. (2010). Culture clash or culture club? national identity in Britain. *The Economic Journal*, *120*, F72–F100.

Masella, P. (2013). National identity and ethnic diversity. *Journal of Population Economics*, *26*, 437–454.

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*, 417–434.

Mincer, J. (1978). Family migration decisions. *Journal of Political Economy*, *86*, 749–773.

Mäkelä, L., Känsälä, M., & Suutari, V. (2011). The roles of expatriates' spouses among dual career couples. *Cross Cultural Management: An International Journal*, *18*, 185–197.

Monscheuer, O. (2023). National identity and the integration of second-generation immigrants. *Labour Economics*, *82*(C), 102327.

Munk, M., Nikolka, T., & Poutvaara, P. (2022). International family migration and the dual-earner model. *Journal of Economic Geography*, *22*(2), 263–287.

Nekby, L., & Rodin, M. (2010). Acculturation identity and employment among second and middle generation immigrants. *Journal of Economics Psychology*, *31*, 35–50.

Nikolka, T., & Poutvaara, P. (2014). Family decision-making on international migration. Annual Conference 2014, German Economic Association.

Nivalainen, S. (2004). Determinants of family migration: Short moves vs long moves. *Journal of Population Economics*, *17*, 157–175.

Oberg, K. (1960). Cultural shock: Adjustment to new cultural environments. *Practical Anthropology*, *7*, 177–182.

Piracha, M., Tani, M., Cheng, Z., & Wang, B. Z. (2023). Social assimilation and immigrants' labour market outcomes. *Journal of Population Economics*, *36*, 37–67.

Rabe, B. (2011). Dual-earner migration in Britain: Earnings gains, employment, and self-selection. *Journal of Population Economics*, *24*, 477–497.

Sandell, S. H. (1977). Women and the economics of family migration. *Review of Economics and Statistics*, *59*, 406–414.

Shaffer, M. A., & Harrison, D. A. (2001). Forgotten partners of international assignments: Development and test of a model of spouse adjustment. *Journal of Applied Psychology*, *86*, 238–54.

Shauman, K. A. (2010). Gender asymmetry in family migration: Occupational inequality or interspousal comparative advantage? *Journal of Marriage & Family*, *72*, 375–392.

Shihadeh, E. S. (1991). The prevalence of husband-centered migration: Employment consequences for married mothers. *Journal of Marriage and Family*, *53*, 432–444.

Slobodin, O. (2018). 'Out of time': A temporal view on identity change in trailing spouses. *Time & Society*, *28*(2), 1489–1508.

Sprengholz, M., Diehl, C., Giesecke, J., & Kreyenfeld, M. (2021). From "guest workers" to EU migrants: A gendered view on the labour market integration of different arrival cohorts in Germany. *Journal of Family Research*, *33*, 252–283.

Verdier, T., & Zenou, Y. (2017). The role of social networks in cultural assimilation. *Journal of Urban Economics*, *97*, 15–39.

Wang, Z. (2018). The incompatibility of local economic prosperity and migrants social integration: evidence from the Netherlands. *Annals of Regional Science*, *64*, 57–78.