

Migration Motivation and Ethnic Identity of Migrant Couples in Germany: Tied Versus Lead Movers

Teresa Freitas Monteiro[†]

[†]IAB and Humboldt University of Berlin

— *Work in progress*—

Abstract

This study examines the determinants of the migration position (tied or lead mover) and how it affects the ethnic identity of migrant spouses. Individuals who migrated due to family reasons might be more likely to experience a loss in the sense of belonging, a deterioration of social relations and missed professional opportunities. Tied and lead movers have different migration motivations (family versus work) and face different constraints (e.g., human capital) 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. Using structural equation modelling I look at the determinants of the migration position and I evaluate how it affects the ethnic identity of spouses. Because unobserved factors affecting the migration position could also have an influence on ethnic identity, I rely on IVs that reflect the bargaining power just before migration. The results show that gender remains a main determinant of who is a tied mover within a couple. Women with higher human capital and coming from a country with more gender equal laws and regulations are less likely to be tied movers. Overall, tied movers are more likely to be separated and less likely to be integrated. These findings suggest that for tied movers the psychological costs of distancing from the culture of their country of ancestry do not compensate the benefits from investing in the host country culture.

Keywords: Family, International Migration, Identity, Gender

JEL: D10, D91, F22, J16

1 Introduction

The current study investigates how differences in the migration motivation of individuals who moved as part of a couple affects their cultural adaptation in Germany. The degree of economic, political and cultural integration of migrants remains one of the most pressing topics in the German political debate. The debate is not limited to threats to jobs, but also threats to national identity. The socio-cultural integration of migrants is related to their feelings of belonging, commitment and overall attitude to the culture and society of the host country. As economic integration is related to the acquisition of host country human capital, cultural integration is dependent on the acquisition of host country cultural and social capital. While the cultural integration of migrants depends on their willingness to accept and act according to the host country values and norms. It also depends on the degree of acceptance by the native population. The acceptance of diversity cannot only lead to higher social cohesion, but also to gains in productivity, innovation and higher provision of public goods (Ottaviano and Peri, 2006; Suedekm et al., 2014; Trax et al., 2015).

The challenge that migrants face with regards to their commitment and sense of belonging to a culture and society only becomes salient after migration, when pre- and post-migration cultures (potentially) clash (Constant et al., 2009; Manning and Roy, 2010). Before migrating, most individuals identify themselves 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 different feelings of belonging and commitment will develop.

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. In the psychological literature on female trailing spouses (Shaffer and Harrison, 2001; Jervis, 2011; Slobodin, 2018) it is well 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 and are focused on a specific group of skilled migrants¹. Using a representative survey of the migrant population in Germany, this study aims at contributing to the literature and evaluate quantitatively the ethnic identity of migrant spouses depending on who was the migration driver (tied versus lead or equal mover²). It also aims at looking at the determinants of the migration position among

¹Called expatriates in business and psychological literature

²Tied mover is defined as the spouse who migrated because the partner wanted to migrate and if alone would not have chosen to do so, lead mover is the spouse who made the decision to migrate and both mover refers to the case where both spouses wanted to migrate

couples who migrated internationally.

Following on Constant et al. (2009) ethnic identity can be broadly defined as the balance between commitment, sense of belonging or self-identification with the culture and society of origin and commitment, sense of belonging or self-identification with the host culture and society, achieved by an individual after migration³. Here, ethnic identity is associated with social identity: an individual's sense of self depends on who they are with in society and how people in this society should behave (e.g. social and cultural norms)(Tajfel, 1981; Turner, 1982, Akerlof and Kranton, 2000, 2010). The ethnic identity of immigrants influences preferences (e.g., social networks) and beliefs (e.g., gender roles, religion, family ties). This translates into different economic behaviours and life choices, which can also affect the economic performance of migrants (Akerlof and Kranton, 2000) potentially exacerbating the initial labour market disadvantage of tied movers. Furthermore, the ethnic identity of first generation migrants also helps to understand the cultural integration of the second generation and the overall persistence of ethnic identity.

There is a growing literature in economics on the social and cultural integration of migrants (e.g., Dustmann, 1996; Constant and Zimmermann, 2008; Bisin et al., 2008; Constant et al., 2009; Battu and Zenou, 2010; Casey and Dustmann, 2010; Manning and Roy, 2010; Bisin et al., 2011; Georgiadis and Manning, 2011; Drydakis, 2013; Masella, 2013; Facchini et al., 2015; Campbell, 2019). Overall, these studies find that the original culture of immigrants is somehow resilient, and although some groups converge to the majority (natives) others display persistent differences even across generations. A key insight from this literature is that adopting a new national identity involves social and psychological costs (abandoning ancestry identity) and benefits (increasing prospects for social integration or acceptance)⁴.

Most of these studies focus on cultural adaptation of immigrants from different countries of origin, with different residency permits or citizenship rights. Nevertheless, there is little evidence on how migrating for economic reasons or for family reasons differently affect the socio-cultural adjustment of migrants⁵. Although these

³Ethnic identity is different from the concept of ethnicity, which is a permanent characteristic related to the country of origin

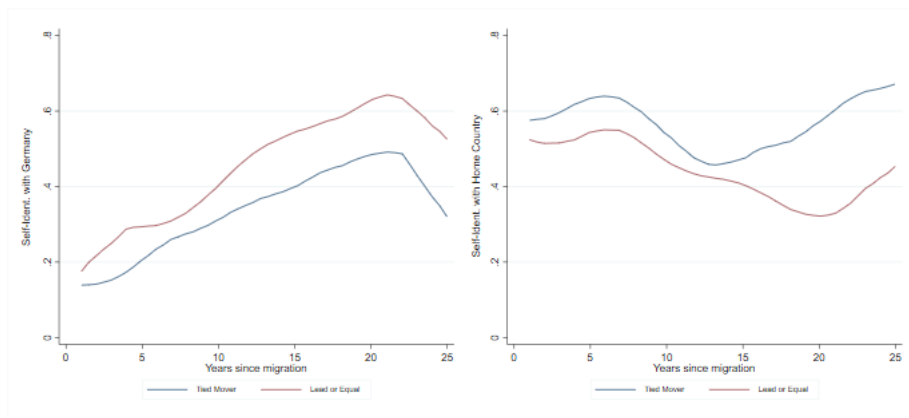
⁴It also implies leaving the comfort of an individual current ethnic identity in favor of an ethnic group with which an individual less familiar with and where acceptance is uncertain.

⁵An exception is an 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 be different from an individual who migrates as an adult. Furthermore, host-country national identity is only one element of the ethnic identity of individuals.

two groups have clear different benefits from adopting a new national identity.

The current study adds to existing literature by analysing not only the different adjustment paths of spouses depending on whom was the migration driver but also by investigating the determinants of the migration position (e.g., tied migrant versus lead or equal migrant) in an international family migration setting⁶. To study the ethnic identity and the migration position of spouses I rely on the migration sample of the German IAB-SOEP, which includes a battery of pre-migration (retrospective) and post-migration information. It includes pre-migration information on which partner was the main driver of the migration decision as well as post-migration outcomes with regards to language skills and self-identification. Figure 1 below exhibits the raw difference between tied and lead or equal movers with regard to the most prominent element of ethnic identity - self-identification with respect to Germany and the country of origin - with years since migration. There is a persistent gap between tied and lead movers, namely tied movers are more likely to feel connected with the country of origin and less likely to feel German.

Figure 1: Self-identification with regards to Germany and the country of origin



Source: IAB-SOEP-M. The survey questions used are "To what extent do you feel German?", "How connected do you feel to your country of origin?"

The issue of family migration decision making in economics was first approached by Sandell (1977) , Mincer (1978) and Polachek and Horvath (1977). These authors recognized that even if the family 'gains' from migration, on an individual level some family members might 'lose' from moving. Mincer (1978) coined the terms 'tied mover' and 'tied stayer'. The first, refers to a family migrant who, if single, would not have chosen to migrate. While the latter, refers to a family non-migrant who, if single, would have chosen to migrate. Using a unitary conceptualization of the household, these models predicted that the spouse with a more discontinuous

⁶Most studies looking at tied and lead movers do so on an internal migration perspective

labour force participation and less market earning power (e.g. motherhood, non-market activities) has smaller gains from migration and hence is more likely to be a tied mover.

Most empirical research on tied movers has focused on internal migration where pre-and post-migration outcomes and characteristics are observable Nivalainen (2004); Juerges (2006); Shauman (2010); Rabe (2011). Research on international family joint migration usually proxies tied movers by those who entered the host country with a family visa⁷ (Cobb-Clark et al., 2005; Le, 2006; Adsera and Chiswick, 2007) or by relying on retrospective survey questions that ask who was the migration driver (Munk et al., 2017; Nikolka and Poutvaara, 2014; Krieger, 2019). Overall, these studies find that tied movers tend to have worse labour market outcomes than primary movers even if they worked before migration (Le, 2006; Adsera and Chiswick, 2007; Munk et al., 2017; Krieger, 2019) and some suggest that international family joint migration is not fully gender neutral (Junge et al., 2014; Munk et al., 2017; Krieger, 2019). Tied movers are less likely to be selected on labour market 'relevant' characteristics (Junge et al., 2014; Luthra et al., 2018). Their migration motivation is intrinsically different: they moved to keep the family together, rather than for improving their wages or job. Hence, one can expect that they will 'invest' more or put more effort on the family, even though they might end up working (Campbell, 2019). Furthermore, if tied movers choose not to participate in the labour market, the psychological costs of distancing from the culture of their country of ancestry might not compensate the benefits provided by an increased contact with native Germans⁸.

Tied and lead movers have different motivations (family versus work) and face different constraints (e.g., human capital) and opportunities (e.g., social network through work). This is likely to be reflected in different investment strategies in the host country.

In this paper, I summarize and connect two previous research branches on ethnic identity and family migration. Using the migration sample of the German SOEP and by relying on structural equation modelling I look at the determinants of the migration position (being a tied versus lead or equal mover) and I evaluate how it affects the ethnic identity of spouses. Because unobserved factors affecting the migration position might also have an influence on the degree of ethnic identity, I rely on instrumental variables that reflect the bargaining power and the labour

⁷While 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

⁸The literature on social identity posits that there are psychological costs from failing to conform to one's own group identity (Akerlof and Kranton, 2000, 2010)

market status of each spouse just before migration. Extra-environmental factors such as the laws and regulations that restrict women's economic opportunities can have an influence on the relative bargaining strength of each spouse and therefore affect the intra-household migration decision process. While this variable is likely to affect the decision to migrate and hence the migration position, it should not affect the ethnic identity of each spouse once the migration position is controlled for.

Preliminary findings suggest that gender remains a main determinant of who is a tied mover within a couple. In line with the human capital theory, the spouse with higher human capital is more likely to be a tied mover. Extra-environmental factors have an influence on the relative bargaining strength of each spouse and affect the intra-household migration decision process. Furthermore, tied movers are more likely to be separated and less likely to be integrated. The results are robust to the inclusion of partner's ethnic identity and to the share of migrants from the same origin country residing in the same NUTS3 region. When making a simple comparison with singles, I find that the adjustment of singles is not statistically different from that of lead or equal movers, while tied movers remain significantly different.

I proceed in the next section by reviewing briefly the work in two different strands of literature: tied mover and ethnic identity of migrants. I then use them to motivate my empirical framework and main hypothesis. Section 3 describes the data. Section 4, exposes the benchmark structural equation modelling and some extensions. Section 5, analyses the link between the migration position and ethnic identity, as well as the role of potential migrant networks, spouse ethnic identity and personal experiences of discrimination. Lastly, section 6 concludes.

2 Conceptual Framework

The goal of this section is to use the two separate literatures on tied movers and ethnic identity to formulate a hypothesis on how being a tied mover or a lead mover (having different migration motives) affects the social-cultural adjustment at the destination country. I use the theoretical concepts and the empirical findings of two literatures to motivate my empirical specification.

2.1 Before migration: the decision to migrate and the migration position

Mincer (1978) and Sandell (1977) used a unitary conceptualization of the household which assumes that households behave as if they were single decision-making units, where a 'head' of the household, assumed to be altruistic, is given control over family resources such that it considers the gains and losses from migration of all family members. Consider a household composed of two spouses, a husband (m) and a wife (f). Individual $i = m, f$ net gains from migration can be described by $G_i = R_i - C$, where R_i are the returns to market skills from migration⁹ and to local amenities and C the monetary and psychological costs (e.g., including socio-cultural adjustment costs). For simplification, all potential destinations are aggregated into one and it is assumed that the sign of G_m is independent of the sign of G_f and that divorce is not possible¹⁰.

If single, individual i chooses to migrate if $G_i > 0$. As a household, the family will migrate if $G_H = G_m + G_f > 0$. If G_m and G_f have the same sign, there is no conflict between family members. Suppose that individual gains from migration are positive, $G_m > 0$ and $G_f > 0$. Then even if single, both spouses would have chosen to migrate, such that family migration is optimal from an individual and household perspective and does not create conflicting interests.

Mincer's model of family migration has been criticized because it assumes the existence of a 'benevolent' dictator who maximizes family well being. Assuming that family migration is a collective and consensual decision can be a rather strong assumption in many scenarios since it ignores the possibility of conflict of individual interests between spouses.

In sociology, Lichter (1983) emphasized the role of martial power (Blood and Wolfe, 1960) in the family decision to migrate, which yields similar predictions the one developed by Mincer (1978). Later in the 90s, Shihadeh (1991) and Bielby and Bielby (1992) argued that gender roles were the main 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.

Mincer's model is gender neutral in the sense that it considers how much each spouse contributes to the total family earnings, independently of the gender of the spouse. On the other hand, the gender role theory rejects the idea that each partner's potential gain/loss is weighted equally in the calculation of family well-being. It

⁹This is usually specified as the difference in expected wages between home country and destination country

¹⁰The model is easily extend to the case where divorce is possible

argues that decision making within the household is asymmetric with respect to spouses, and this asymmetry is generated by differences in the gender of spouses and the prevailing society norms. Gender role theories argue that wives do not have the same decision power within the family because they are socialized to place family first and personal goals second (Bielby and Bielby, 1992; Cooke, 2008). Given the gender roles within societies, these theories argue that wives characteristics are not good predictors of family migration.

The role of gender norms and bargaining power can be incorporated into the Mincer (1978) human capital model by assigning a relative weight to the returns of a partner. For instance: $G_H = G_m + \alpha G_f$, where $\alpha > 0$ 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 ratios¹¹). These weights are assumed to be exogenously given and the couple is still assumed to behave cooperatively, maximizing the weighted sum of spouse's utilities¹². In this scenario migration can occur even if the net returns of the husband do not outweigh the loss of the wife. This is because the wife does not have sufficient bargaining power to prevent the move, e.g. $\alpha < 1$ such that even if $|G_m| < |G_f|$ it can still be that $G_H = G_m + \alpha G_f > 0$. This is the main result of gender role theories, which argue that generally $0 < \alpha < 1$.

Most empirical studies analysing couple migration decision look at the selection of tied movers and lead movers with regards to human capital and/or gender (Cooke, 2003; Nivalainen, 2004; Juerges, 2006; Shauman, 2010; Rabe, 2011). However, I only observe migrant couples and I do not have same level information on couples who remained in the home country. As such, I can only look at couples who already made the migration decision and analyse what determines which spouse within the couple took the role of a tied mover or a lead/equal mover.

Therefore, in this study the probability of being a tied mover is defined as $P(TiedM_i) = P(G_H > 0 \cap G_i \leq 0)$. Consider a couple composed by spouse m and f , where f declared to be the tied mover. The tied mover is an individual who if single would not have chosen to migrate but who migrates as part of a family, hence $G_f = R_f - C \leq 0$ and $G_H = R_m + \alpha R_f - C(1 + \alpha) > 0$. If α is close or equal to one this implies that the potential returns of spouse m are larger than the potential returns of spouse f ¹³, (e.g. since $G_f < 0$ it must be that $G_m > |G_f| \Leftrightarrow R_m - C > |R_f - C|$). One can think of these returns simply as the difference in expected wages between

¹¹See Grossbard-Shechtman (1984); Chiappori et al. (2002)

¹²Note that it is equivalent to write $G_H = (1 - \mu)G_m + \mu G_f$, $\alpha = \frac{\mu}{1 - \mu}$

¹³The results would hold similarly if one assume that the costs are a negative function of human capital

origin and destination country, which depend on human capital. If $\alpha = 1$ then one would expect spouse m to have higher human capital than f . While if $\alpha < 1$ this can still be the case, if α is very small it might mean that spouse f has higher human capital than m but still migrates.

Following the insights from the tied mover literature, the probability of spouse i being a tied mover within a couple can be written as:

$$P(TiedM_i) = \Phi(\alpha I_i S_i + \eta(G_j - G_i) + \varepsilon_{1i}) \quad (1)$$

where I_i equals one if $i = f$ and zero otherwise. Although simpler, this specification allows for a more parsimonious empirical model and it captures the essential features. The probability that individual i is a tied mover depends on how large the his/her net gains are relative to the net gains of the spouse and depends on whether it has a 'penalty' or 'benefit', e.g., if the net gains of i are weighted differently from j . G_i is defined as a function of human capital characteristics before migration ($HcBFM$) such that $G_j - G_i = f(HcBFM_j, HcBFM_i)$ and S_i is specified as a function of social norms or some extra-environmental factor. $\Phi(\cdot)$ is the c.d.f. of the normal distribution.

2.2 After migration: ethnic identity and migration position

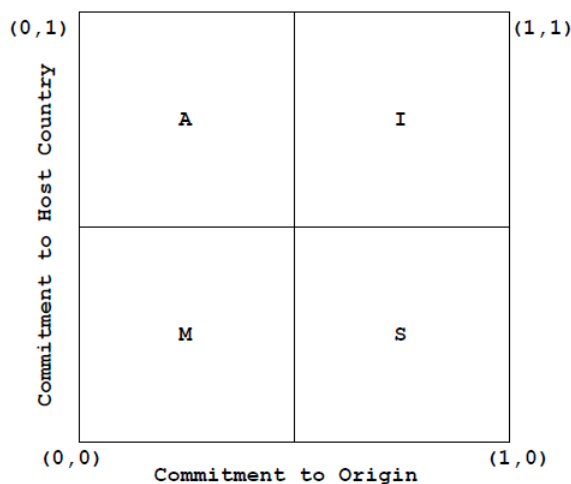
To create a measure of the ethnic identity of migrants I follow on the work of Constant and Zimmermann (2008) and Constant et al. (2009). The authors define ethnic identity as the balance between the commitment with the culture and society of the home and host countries.

Their measure of ethnic identity is closely related to an acculturation framework developed in the psychology literature by Berry (1980, 1997, 2006). According to Berry's framework, individuals can be categorized into acculturation states which reflect the degree of devotion to the culture of origin and the culture of other groups. The affiliation to the culture of origin and the affiliation to culture of other groups are independent from one another. In the case of immigrants, an individual who strongly identifies with the host country culture and norms but is only weakly devoted to the home country culture is considered to have an assimilated identity. While an immigrant who exhibits strong identification to both the home and host country culture and norms is considered 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 culture is considered

to have a marginalised identity.

Figure 1 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.

Figure 2: The ethnosizer as a two-dimensional understanding of ethnic identity



Source: Constant et al. (2009)

In their original framework, Constant and Zimmermann (2008) considered five elements (i) language; (ii) future citizenship and locational plans; (iii) ethnic self-identification; (iv) nationality of friends; and (v) media. Individuals are then classified to one of the four states (A, I, S or M) in each element. The overall measure of assimilation, for instance, counts in how many elements an individual is considered to be assimilated. If an individual is assimilated in all five elements, receives a 5 in assimilation and a 0 in all other states. The practical implementation of the ethnosizer is detailed in the next section.

Beyond the ethnosizer, there is a growing literature in economics on the social and cultural integration of migrants which as used different proxies for cultural or ethnic identity (e.g., Dustmann, 1996; Constant and Zimmermann, 2008; Bisin et al., 2008; Constant et al., 2009; Battu and Zenou, 2010; Casey and Dustmann, 2010; Manning and Roy, 2010; Bisin et al., 2011; Georgiadis and Manning, 2011; Drydakis, 2013; Masella, 2013; Facchini et al., 2015; Campbell, 2019). Most use one single variable as an indicator for cultural or ethnic identity. For first generation migrants the most common is self-reported national identification but also friendship ties, use of

native language, fertility, female employment, children’s choice of names, residential patterns, civil and political engagement, citizenship intentions, attachment to religion, among others (Facchini et al, 2015; Dydakis, 2013; Casey and Dustmann, 2010; Manning and Roy, 2010; Constant and Zimmermann, 2008; Dustmann, 1996). The Constant and Zimmermann (2008) captures succinctly some of these measures and hence is my preferred measure, although I also show the results separately for each element. Overall, the studies on the social and cultural integration of migrants find that the original culture of immigrants is somehow resilient, and although some groups converge to the majority (natives) others display persistent differences even across generations. A key insight from this literature is that adopting a new national identity involves social and psychological costs (abandoning ancestry identity) and benefits (increasing prospects for social integration or acceptance).

Ethnic identity depends of both pre-and post-migration factors. The adjustment to the host country among immigrants is expected to be associated with the degree of exposure to German society ($ExpGer_i$), exposure to home country society ($ExpHC_i$), background characteristics ($BackC_i$) and social and family environment (Fam_i). Exposure to the German society (e.g., education acquired in Germany) is expected to positively associated with assimilation and integration and negatively associated with separation and marginalization. On the other hand, the direction of the effect of the exposure to the country of origin is less clear. Years of home country labour market and education could in principle reduce the constraints on the ability to adapt to the German society by easing the acquisition of new social, cultural and communication skills. Background characteristics are those acquired upon birth or that came with the migrant from the country of origin. These include factors such cultural distance (e.g., country of origin, religion) or characteristics that reflect the ability to create new social networks (e.g., age).

Among other possible factors, the social and family environment considers the main variable of interest: being a tied mover. As explained in the introduction, tied movers are less likely to be selected on labour market ‘relevant’ characteristics (Junge et al., 2014; Luthra et al., 2018). Their migration motivation is intrinsically different: they moved to keep the family together, rather than for improving their wages or job. One can therefore expect that tied movers will ‘invest’ more or put more effort on the family, even though they might end up working (Campbell, 2019). Furthermore, if tied movers choose not to participate in the labour market, the psychological costs of distancing from the culture of their country of ancestry might not compensate the benefits provided by an increased contact with native Germans¹⁴. Hence, the

¹⁴The literature on social identity posits that there are psychological costs from failing to conform

main hypothesis of this study is that being a tied mover is positively associated with separation or marginalization and negatively associated with integration and assimilation.

A reason to expect lower integration or assimilation is because by definition tied movers did not expect to 'gain' in labour market terms from migration. A tied mover is an individual who if alone, would not have chosen to migrate: individual gains do not compensate 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 losses of the spouse. Therefore, if the bargaining power of the lead mover is not disproportionately large, it is not unreasonable to suppose that tied movers have a lower potential wage at entry to Germany than lead movers.

The different migration motive and expected earnings between lead or equal movers and tied movers means that these two groups will have different incentives to investing in the host country culture. 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 natives network is larger than the cost of investing in migrant's network (Epstein and Heizler, 2014)¹⁵. Hence, by having lower expected benefits than lead movers, tied movers are less likely to invest in the natives network. Furthermore, in the longer term, by shying away from the labour market tied movers are also less likely to be exposed to people from the host country and they have less opportunities to build social networks with natives¹⁶.

Since the four states of the ethnosizer can take count values, as in Constant et al. (2009) I use a robust Poisson regression model: $EIden_i \sim Poisson(\mu_i)$ where $\mu_i = f(ExpGer_i, ExpHC_i, Fam_i, BackC_i)$.

Following the conceptual framework developed in this section, the system of equations of interest is the following:

$$\begin{aligned}
 P(TiedM_i) &= \Phi(\alpha I_i S_i + \eta(G_j - G_i) + \varepsilon_{1i}) \\
 EIden_i &= exp(\kappa' ExpGer_i + \zeta' ExpHC_i + \psi' Fam_i + \nu' BackC_i) + \varepsilon_{2i} \quad (2)
 \end{aligned}$$

The main explanatory variable of interest in the second equation is being a tied mover which is included in Fam_i .

to one's own group identity (Akerlof and Kranton, 2000, 2010)

¹⁵Alternatively one can think of it as the cost of identity formation

¹⁶While I cannot access directly the role of social networks, this is a possible mechanism

3 Data

The data used in this study comes from two samples of the German Socio-Economic Panel (GSOEP). The GSOEP has a longitudinal character and contains information on (almost) every member of each household taking the survey. It contains self-reported variables such as age, gender, household composition, education, employment status, occupation, earnings, health, satisfaction, attitudes, among others. In 2013 and 2015, two samples on immigrants were introduced - the IAB-SOEP migration sample - which contains information on several immigrant groups. The sample has a higher proportion of households containing migrants from the EU-New Member States and Southern European Countries. The first six survey waves were carried out between 2013 and 2018, with between 3,400-5,000 persons taking part in each of them. The migrant sample contains the main questions of the regular SOEP survey plus a battery of pre-migration information. Namely, it allows to identify 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 and information on pre-migration labour force status, occupation, language skills and number of children. The survey also contains set of (post) migrant specific questions such as language proficiency, return intentions, German identity, connection to the home country, intentions of acquiring citizenship among others.

For the current study I excluded individuals who migrated when they were 18 years old or younger and those who migrated with 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.

3.1 Identifying tied movers in the IAB-SOEP-M

The tied mover analysis relies on three main questions regarding the relationship status before and after migration.

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	

Only individuals who replied "Yes" to the two first questions were considered. Using these two questions I then separate respondents by those who migrated as

singles and those who migrated in couple. Combining these questions with the "driving force" question, I then classify each individual who migrated in couple as a lead mover ("I was"), equal mover ("Both to an equal extent") or tied mover ("My partner")¹⁷.

Pre-migration information and mainly partner pre-migration information is missing for some cases. With the exception of home country education and labour market experience, pre-migration information is only used in the first stage of the analysis. To avoid decreasing the sample size I allowed some of the questions to be coded as "missing information". This mainly refers to cases where partner information is missing but individual data is not missing and can be used to analyse its ethnic identity.

The final sample consists of individuals who migrated as tied movers, as lead movers and as equal mover. For the analysis, I merge lead and equal movers since in both cases the individual wanted to move and is expected to have positive returns from moving. There are also few cases of equal movers.

Both spouses are observed for the majority of the couples, but in some cases there is information on only one spouse. The final sample comprises of 1,841 individuals of which 1,006 are females and 835 are males.

Explanatory variables

As I can only compare tied movers with lead/both movers, what matters is the human capital of an individual relative to its spouse. Consider a couple with spouse *a* and spouse *b*. If spouse *a* has only secondary education, this could seem predictive of being a tied mover. However, if spouse *b* has primary education only, then spouse *a* is actually more likely to be a lead mover, everything else equal.

To proxy for differences in human capital and labour market situation before migration I use information on age, formal higher education (vocational training and university degree), employment and occupational situation one year before migrating and German skills. While the goal is to have a parsimonious model, as seen in the previous section I allow for some differences by gender to reflect the potentially different social norms as seen in equation 1. These include a dummy for gender, and gender interacted with religion, region of origin and the presence of young children (for which mothers might be expected to bear higher responsibility) and an extra-

¹⁷Because this question was not asked in 2013, for those with no information for whom a reply from the spouse in later waves was available was used in combination with a question regarding the migration motive. If the individual replied that migrated due to family or partnership (economic or political) reasons and the spouse said that was the lead or equal (tied) mover, then this individual was considered tied (lead/equal) mover

environmental factor that reflects how gender equal are the laws in the country of origin in the migration year (WBL Index).

Table 10 in the appendix reports some basic pre-migration statistics using retrospective information which will be used in the analysis. Relevant pre-migration information is built using IAB-SOEP-MIG retrospective biographical questions which ask individuals if they were studying or working since they were 15 until they current age, year by year. This allows me to construct a variable that indicates the years of education since the age of 15 in the home country and years of labour market experience in the home country. Lead/both movers are slightly older than tied movers. While 69.75 percent of tied movers were female, only 30.25 percent of tied movers. Lead/both movers were more likely to speak good German than tied movers before migration (BFM). They were also more likely to be full time employed in the year just before migration (YBM) and to have more years of full time employment experience.

As explained in the previous section, extra-environmental factors that affect the outside opportunities of each spouse can have an influence on their relative bargaining strength and therefore affect the intra-household migration decision process. To proxy for such factors in the home country one year before migration, I rely on the Women, Business and Law (WBL) Index. The WBL index comes from a World Bank Group project which collects data on the laws and regulations that restrict women's economic opportunities. The dataset covers 190 countries and is available for the period 1970-2019. The WBL index scores are based on the average of each economy's scores in eight topics: mobility, workplace, pay, marriage, parenthood, entrepreneurship, assets and pension (see A1 for details). A higher WBL score indicates more gender equal laws. The WBL varies not only by country of origin but also within country by year of immigration. As a higher WBL score indicates more gender equal laws. Everything else equal, a woman coming from a country (or time period) with a higher value is more likely to have a higher intra-household bargaining power than a woman coming from a country (or time period) with a lower value.

3.2 Constructing the Ethnic Identity indicator with the IAB-SOEP-M

Constant and Zimmermann (2008) and Constant et al. (2009) call the measure of ethnic identity described in section 2.2. the two-dimensional "ethnosizer". Using data from the GSOE the authors construct the four measures of the two-dimensional ethnosizer by identifying pairs of questions in the GSOEP, which transmit infor-

mation on individual commitment to the German culture and to the culture of origin. In their original framework, Constant and Zimmermann (2008) considered five elements (i) language; (ii) future citizenship and locational plans; (iii) ethnic self-identification; (iv) nationality of friends; and (v) media.

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 were represented in the regular GSOEP. The IAB-SOEP-MIG however is the current sample representing the migrant population in Germany and while it asks a set of additional questions, such as the tied mover one, it does not ask others. The questions used for the language, migration history and ethnic self-identification elements were asked in the 2013, 2014, 2016 and 2018 waves of the IAB-SOEP-MIG. However, the media question was only asked in 2014 and 2016 and the nationality of the three closest friends was only asked in the 2016 wave and therefore there are very few observations ¹⁸. Although these are two extremely relevant indicators, I will focus on the first three which still capture some of the most important identification outcomes. In fact, much of the literature in economics looks only at the ethnic self-identification (Dustmann, 1996; Casey and Dustmann, 2010; Manning and Roy, 2010; Campbell, 2019).

Following on the work of Constant and Zimmermann (2008), each element is constructed using information on commitments to both the host and origin cultures. A variable reflecting devotion to German culture is hence paired with a similar variable characterizing the commitment to the culture of the home country. To construct the first element (language), I rely on information about the speaking proficiency in German and in the language of origin. For the migration history 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. The ethnic self-identification elements is based on the questions asking how connected the respondent feels to the country of origin and to what and extend does he or she feels German.

An individual is classified as integrated in terms of ethnic-identification if it feels 'very strongly' or 'strongly' connected to both Germany and the country of origin, while it is considered assimilated if it 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 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

¹⁸The 2016 wave only has a longitudinal character, no new individuals were interviewed

to be marginalized. A same rational is applied for the language and the migration history elements.

The main analysis in this study will be based on a repeated cross-section. There are several reasons why I choose to do so. First the IAB-SOEP-MIG questions being used for the ethnic identity indicators are not asked in every wave. Second, there is relatively small variation in ethnic identity between waves in such a short time span. Third, since the aim of this study is to evaluate the impact of being a tied mover (a time constant variable) on ethnic identity, using a fixed effects estimation would absorb the effect this variable. Fourth, using panel data creates problems of selective attrition. Nevertheless, I will also present the results using the pooled data.

For the cross-sectional sample, I give priority to the first time individuals appear in a IAB-SOEP-MIG wave that asks the ethnic identity questions. This is when there is a higher response rate and when the pre-migration questions are asked.

Explanatory variables

As seen in section 2, ethnic identity depends of both pre-and post-migration factors. Namely, ethnic identity is defined as a function of the exposure to German society ($ExpGer_i$), exposure the home country society ($ExpHC_i$), family environment (Fam_i) and other background characteristics ($BackC_i$).

Exposure to the German society includes factors such as years of residence, education or training acquired in Germany and whether there are children attending school or kindergarten (which exposes parents to natives). Exposure to the country of origin includes years of home country labour market and education. Background characteristics are those acquired upon birth or that came with the migrant from the country of origin. These include age at migration, gender, region of origin and religion. The social and family environment considers the number of children and the main variable of interest, being a tied mover.

Table 11 shows the summary statistics of the post-migration variables used in the analysis. Overall, the proportion of both lead/equal and tied movers acquiring education in Germany is rather low. This is not entirely surprising since individuals in this study migrated as part of a family formed in the home country and an average age of 32 years old. 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. Lead and equal movers are more likely to have a good command of German and are much more likely to feel German than tied movers. Similarly, lead and equal movers are less likely to feel strongly connected to their

country of origin or to want to return to the country of ancestry within the next 15 years. Tied movers are more likely to not want to acquire German citizenship.

4 Empirical Framework

4.1 Benchmark specification

In this analysis, there are two main outcomes of interest: one determined before migration (being a tied mover) and another determined after migration (ethnic identity). To jointly estimate the system of equations represented in (2) I rely on a maximum likelihood estimation of generalized structural equation modelling (GSEM)¹⁹. The dependent variable in the first equation (being a tied mover) also appears in the the second equation (ethnic identity) directly and hence is an endogenous variable. Therefore, I include exclusion restrictions to provide plausibly exogenous variation in the likelihood of being a tied mover²⁰.

Figure 2 shows a simplified directed acyclic graph or DAG (Pearl, 2009) which describes the framework under analysis. The circles in blue represent pre-migration variables and the ones in red post-migration. Some pre-migration factors ($X2$) will have an effect on the ethnic identity, a post-migration outcome. U represents possible unobserved factors which open a backdoor path between $TiedM$ and $EIdent$. To estimate this model consistently, there needs to be some pre-migration variable that affects the ethnic identity only through the effect on the probability of being a tied mover ($X1$).

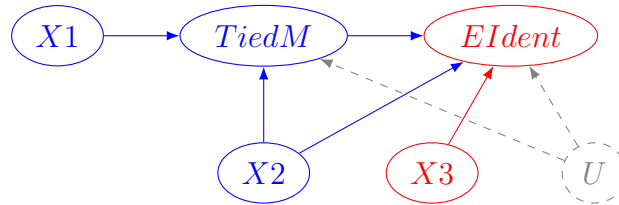


Figure 3: Path Graph

¹⁹A GSEM is a triangular system of non-linear or linear equations that share unobserved random components. GSEM handles endogeneity by including common, unobserved components into the equations for different variables. In my case one dependent variable is binary and the other is count, where one of them is endogenous (being a tied mover)

²⁰Note that, unlike the traditional 2SLS not all explanatory variables used in the ethnic identity equation are included in the the tied mover equation. The reason is that being a tied mover is the outcome of a decision made before or at migration and hence only variables describing pre-migration characteristics should be included (e.g., the first stage equation has an economic interpretation).

The system of equations with the specific pre-and post-migration variables is the following:

$$\begin{aligned}
P(TiedM_i) = & \Phi(\alpha_0 + \alpha_1 Gender_i + \alpha_2 Gender_i * WBL_i + \alpha_3 Gender_i * Origin_i \\
& + \alpha_4 Gender_i * Religion_i + \alpha_5 Gender_i * Child7BFM_i \\
& + \eta' GapBFM_i + \varepsilon_{1i}) \tag{3}
\end{aligned}$$

$$\begin{aligned}
EIden_i = & exp(\beta_0 + \beta_1 TiedM_i + \beta_2 Gender_i + \beta_3 AgeMig_i + \beta_4 AgeMigSq_i \\
& + \beta_5 YSM_i + \beta_6 YSMSq_i + \beta_7 Origin_i + \beta_8 Religion_i \\
& + \varsigma' HcBFM_{2i} + \vartheta' HcAFM_i + \tau' HhAFM_i + \beta_9 SYear_i) + \varepsilon_{2i} \tag{4}
\end{aligned}$$

Where $TiedM_i$ denotes the migration position, it takes the value of one if spouse i is a tied versus and zero if is lead or both mover. $EIden_i$ reflects the four states of the ethnosizer. $GapBFM_i$ is a vector of observed pre-migration differences in human capital between i and its spouse. It includes a variable reflecting if i is older than its spouse, if i has no university degree or vocational training and the spouse has, if i had better or worse knowledge of German (speaking) than its spouse and if i was not full time employed one year before migration and the spouse was. $Child7BFM$ is a variable that equals one if there were children under the age of 7 in the household before migration (for which mothers might be expected to bear higher responsibility). $HcBFM_i$ is a vector of observed human capital variables of individual i before migration which includes years of employment and years of education. WBL is the women business and law index, YSM years since migration and $AgeMig$ age at immigration, where Sq denotes the square. $HcAFM_i$ is a vector of human capital acquired after migration which includes vocational training and university or school in Germany. $HhAFM_i$ is a vector of observed household information after migration which includes the number of children, if there is a child in kindergarten and if there is a child in school. $Origin_i$ refers to region of origin and $Religion_i$ equals zero if an individual is atheist, one if follows Islamic religion, two if Christian and three if other religion. ε_{1i} and ε_{2i} are random errors possibly correlated due to a common unobserved component. $EIden_i \sim Poisson(\mu)$ and $TiedM_i \sim Probit(p)$.

A necessary condition for identification of this system of equations is the order condition. This condition requires that for each equation in the system the number of excluded exogenous variables is equal or larger than the number of included endogenous variable minus one. If is equal the equation is just identified, if is larger the equation is over-identified. In practice, this means that for each particular

equation there must be as many exogenous variables which are not included in that equation, that can act as instrumental variables for each of the endogenous variables in each particular equation.

While variable such as the difference in age, gender or region of origin are included in both equations, pre-migration variables such as the gap in employment just one year before migration and extra-environmental factors in the home country reflected by the WBL index are plausibly exogenous. These variables would only affect ethnic identity through their effect on the migration position. Hence they are good candidates for instrumental variables.

Bad controls

Controlling for labour market outcomes in equation $EIden_i$ above would be problematic since employment or labour market participation are themselves outcomes of the variable of interest (e.g., being a tied mover). Hence in this case, labour market outcomes in Germany are "bad controls". As Angrist and Pischke (2009, p.64) explain "Bad controls are variables that are themselves outcome variables in the notional experiment at hand. That is, bad controls might just as well be dependent variables too. Good controls are variables that we can think of having been fixed at the time the regressor of interest was determined." In the directed acyclic graphs literature, including such a control is said to open a new backdoor path which introduces new patterns of bias.

Labour market variables before migration can be thought of as "good controls" as they are unaffected by being a tied mover. Nevertheless, I show the results controlling for current labour market status as a robustness check.

5 Results

5.1 Cross section

5.1.1 Benchmark

Table 2 shows the marginal effects from the first equation in the system of equations. Gender is still an important determinant of the migration position and bargaining power also seems to play a role. Nevertheless, consistent with the human capital theory, the spouse with lower education, worse German or who was not employed before migration is more likely to be a tied mover. Women in countries with more gender equal laws (higher WBL) seem to be less likely to be tied movers.

Table 2: Marginal effects, probability of being tied mover

	dx/dy	SE
Female	0.193***	(0.0271)
Islamic religion*Male	0.0373	(0.0675)
Islamic religion*Female	-0.106*	(0.0624)
Christian religion*Male	-0.0132	(0.0339)
Christian religion*Female	-0.0663*	(0.0388)
Another religious*Male	-0.00870	(0.103)
Another religious*Female	-0.132	(0.102)
EU 2004 enlargement*Male	0.0218	(0.0419)
EU 2004 enlargement*Female	-0.0840	(0.0602)
EU 2007& 2013 enlarge.*Male	0.00633	(0.0389)
EU 2007& 2013 enlarge.*Female	0.0228	(0.0582)
Russia & other former SU*Male	0.143**	(0.0561)
Russia & other former SU*Female	-0.0913	(0.0657)
Turkey & Arab Countries*Male	0.228*	(0.118)
Turkey & Arab Countries*Female	0.0660	(0.111)
Central Asia*Male	0.277***	(0.0726)
Central Asia*Female	-0.295***	(0.0660)
Others*Male	0.0998*	(0.0572)
Others*Female	-0.00119	(0.0707)
WBL Index*Male	0.00282*	(0.00157)
WBL Index*Female	-0.00307**	(0.00153)
Children bellow 7*Male	-0.0389	(0.0295)
Children bellow 7*Female	-0.0262	(0.0336)
Older than partner	0.0109	(0.0342)
No vocational t. or uni., partner has BFM	0.0697*	(0.0362)
No educ info. BFM	0.00317	(0.0616)
Better German than partner BFM	-0.0826***	(0.0316)
Worse German than partner BFM	0.0917***	(0.0355)
No German skills info. BFM	0.0212	(0.0657)
Not FT employ, partner FT employ BFM	0.0780**	(0.0353)
No employment info. BFM	0.00372	(0.0308)
Observations	1,841	

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Notes: SU refers to Soviet Union, BFM denotes before migration, WBL the women business and law and FT employ. full time employment. The control group for gender is male, for religion no denomination, and for the region is EU15 plus Switzerland and Norway . The base category for the gap in German skills before migration is same skills, for education and employment in the year before migration the control group are all other combinations (both have, both do not have, respondent has partner does not have).

Table 3 shows the results for the ethnic identity. The reference individual is male, who was a lead/equal mover, from an EU15 country, interviewed in 2013, with less than 3 years of education after the age of 15 in the home country, without a child in pre-school or school without a vocational, apprenticeship, further school or education in Germany.

Similar to Constant and Zimmermann (2008), age at entry decreases the score for assimilation and integration and increases for marginalization and separation. Nevertheless, as individuals spend more time in Germany they are more likely to become assimilated or integrated. Muslims are less likely to be integrated and more likely to be separated. Immigrants with more than 6 years of education after 15 years old in the home country are more likely to be integrated and less likely separated. As for pre-migration labour market determinants, those with more years of full time employment are more likely to be integrated and less likely to be separated. Females are more likely to be integrated and less likely to be separated, everything else equal. As expected, being a tied mover is a decisive factor in the process of ethnic adjustment in Germany. Tied movers are less likely to be integrated or assimilated and more likely to be separated or marginalised. Defining the incidence rate as the rate at which events occur, tied movers are expected to have a rate 0.78 lower for assimilation, 0.90 lower for integration and 1.16 greater for both separation and marginalization than lead or equal movers, everything else constant.

The difference in the direction of the sign between female and tied mover, reflects how being able to distinguish between the two is important.

Table 3: Ethnic Identity

	(1)	(2)	(3)	(4)
	Assi.	Integ.	Marg.	Separ.
Tied Mover	-0.243*** (0.0653)	-0.110** (0.0551)	0.148** (0.0718)	0.148*** (0.0565)
Female	0.0009 (0.0535)	0.107* (0.0552)	-0.0169 (0.0694)	-0.111* (0.0597)
Age at migration	0.0010 (0.0374)	-0.0993*** (0.0304)	0.0404 (0.0416)	0.0384 (0.0313)
Age at migr. squared	-0.0000 (0.0005)	0.0012** (0.0005)	-0.0007 (0.0006)	-0.0003 (0.0005)
Years since migration	0.114*** (0.0227)	0.0854*** (0.0164)	-0.0397** (0.0163)	-0.0874*** (0.0117)
Years since migration sq.	-0.0027*** (0.0008)	-0.0025*** (0.0006)	0.0009* (0.0005)	0.0021*** (0.0003)
Islamic religion	-0.342 (0.264)	-0.116 (0.141)	0.0171 (0.181)	0.185 (0.134)
Christian religion	0.0504 (0.0751)	-0.0442 (0.0654)	-0.0470 (0.0926)	0.0103 (0.0745)
Another religious comm.	0.181 (0.234)	-0.441* (0.245)	0.185 (0.239)	0.120 (0.192)

EU 2004 enlargement	1.115*** (0.250)	-0.0873 (0.111)	-0.390** (0.156)	-0.110 (0.111)
EU 2007 & 2013 enlarge.	1.222*** (0.250)	0.0799 (0.104)	-0.139 (0.146)	-0.470*** (0.117)
Russia & other former SU	1.272*** (0.233)	-0.140 (0.103)	-0.225* (0.133)	-0.318*** (0.109)
Turkey & Arab Countries	0.819** (0.364)	-0.0413 (0.175)	-0.0943 (0.220)	-0.130 (0.164)
Central Asia	1.487*** (0.231)	-0.248** (0.111)	-0.352** (0.152)	-0.560*** (0.127)
All Others	0.629** (0.284)	-0.00945 (0.118)	-0.174 (0.168)	-0.0777 (0.116)
Years of FT employ BFM	0.0180 (0.0142)	0.0221* (0.0125)	0.00138 (0.0153)	-0.0195* (0.0113)
Years of FT employ BFM sq.	-0.0001 (0.0005)	-0.0007 (0.0005)	0.0003 (0.0005)	0.0002 (0.0004)
4-6 years of education BFM	0.0327 (0.0822)	0.212** (0.0889)	-0.00502 (0.0976)	-0.184** (0.0774)
above 6 years of education BFM	0.0479 (0.0982)	0.407*** (0.0947)	-0.0383 (0.104)	-0.280*** (0.0840)
Apprent/vocational t. in Germany	0.118 (0.0871)	0.112 (0.0687)	0.0546 (0.118)	-0.389*** (0.134)
School/university in Germany	-0.103 (0.121)	0.124 (0.0805)	-0.131 (0.150)	-0.0517 (0.117)
Number Children	-0.0180 (0.0517)	-0.0104 (0.0360)	0.0974** (0.0448)	-0.0249 (0.0464)
A child in school	0.0693 (0.0977)	-0.0533 (0.0804)	0.0321 (0.0963)	-0.0185 (0.0994)
A child in pre-school	0.125 (0.120)	-0.0997 (0.0839)	-0.0648 (0.108)	0.0212 (0.0983)
Constant	-2.497*** (0.650)	0.879* (0.496)	-0.736 (0.693)	0.269 (0.522)
Year FE	Yes	Yes	Yes	Yes
Observations	941	941	941	941

Standard errors in parentheses, * $p < 0.10$, ** $p < 0.05$ and *** $p < 0.01$

Notes: the reference individual is male, lead/equal mover, from an EU15 country or Switzerland or Norway, at survey year 2013, with less than 3 years of education after 15 years old in the home country, without a vocational, apprenticeship, further school or education in Germany, without a child in pre-school or school

As a robustness check, table 13 in the appendix shows the results for each individual variable composing the ethnosizer using the same specification as in the ethnosizer. These results are not directly comparable as they cannot be analysed in terms of being integrated or separated. Table 13 shows that tied movers are more likely to feel connected with the country of origin and to have intentions to return to the country of origin in less than 15 years. However, tied movers are less likely to have a good command of German, feel German or intending to acquire German citizenship. These results are consistent with the ones using the ethnosizer.

5.1.2 Extensions

Besides own personal characteristics and human capital there are other factors related to the social environment that might favour or hinder the integration of migrants. Namely, the specific federal state of residency, the size of ethnic enclaves, the commitment of other household members and personal experiences of discrimination by natives.

Spouse information

The integration or assimilation of a spouse might also have an effect on an individual connectedness to the host country culture and society. As a couple, individuals' are likely to share common experiences outside work such as meeting friends or other social events. A spouse who feels closer to German society, due to contacts through work for instance, might be able to push his or her partner to attend events or proportionate contacts that are closer to the German culture. Furthermore, individuals' in couple usually share their frustrations or sources of happiness with one another. Feelings of empathy and care for a spouse are likely to have an influence on an individuals' own happiness and feeling of belonging. For instance, consider an individual whose spouse feels alienated from German society, who has great difficulty in learning the language, who misses other family and friends and therefore expresses strong desires to return back to the home country. Because people in couple tend to care for each other, this individual is more likely to also want to return to the home country for the sake of his or her spouse well-being. Hence, it would not be unexpected if the integration (separation) or assimilation (marginalization) of partners is positively correlated.

Migrants' whose spouse is assimilated are more likely to be assimilated and less likely to be marginalized or separated. Similarly, migrants' whose partner is integrated are less likely to be marginalized and more likely to be integrated. An individual with a spouse who is separated is more likely to also be separated and less likely to be marginalized. These results are as expected, individuals' in couple are likely to benefit from each other knowledge and social connections. They are also more likely to share frustrations and decide on future plans together - hence exerting influence on each other.

Table 14 in the appendix shows the results for the difference in the ethnosizer between partners, when information on both is available. Although not comparable in terms of magnitude, the results of tied mover are significant and in line with those in table 4.

Table 4: Ethnic Identity, with partner Ethnic Identity

	(1)	(2)	(3)	(4)
	Assimi.	Integ.	Marg.	Separ
Tied Mover	-0.256*** (0.0664)	-0.116** (0.0550)	0.148** (0.0729)	0.170*** (0.0584)
Partner Separated	-0.182 (0.203)	0.0971 (0.151)	-0.496** (0.199)	0.293** (0.145)
Partner Integrate	-0.0962 (0.194)	0.346** (0.158)	-0.409** (0.186)	0.000228 (0.148)
Partner Assimilated	0.303* (0.183)	0.0890 (0.138)	-0.319* (0.166)	-0.240* (0.141)
No Partner Info.	0.0552 (0.179)	0.176 (0.140)	-0.233 (0.156)	-0.0272 (0.133)
Constant	-2.347*** (0.668)	0.693 (0.493)	-0.273 (0.679)	0.0833 (0.498)
Year FE	Yes	Yes	Yes	Yes
Indiv. Characteristics	Yes	Yes	Yes	Yes
Observations	941	941	941	941

Standard errors in parentheses, * p<0.10, ** p<0.05 and *** p<0.01

Federal state of residency and potential migrant network

Migrants' place of residence in Germany and the size of the co-ethnic network can also have an effect on migrant's ethnic identity. Different regions in Germany might have different institutions that help migrants to integrate (e.g., associations, language centres) or the average local population might have different stigmas regarding migrants, making them feel more or less welcome. Co-ethnic networks may favour the integration of migrants by helping them to find a job, obtain informal insurance and other financial and non-financial support (Edin et al., 2003; Damm, 2009; Danzer and Yaman, 2013; Battisti et al., 2018; Gerxhani, 2020). However, large co-ethnic group allow migrants to live in an environment closer to their country of ancestry and hence they might provide lower incentives to exert effort to integrate into the German culture and society (Eriksson, 2020). Particularly, if tied movers choose not to participate in the labour market, the psychological costs of distancing from the culture of their country of ancestry might not compensate the benefits provided by an increased contact with native Germans²¹

To account for such effects, I add as additional controls the German federal state of residence and the share of migrants from the same country of origin living in the

²¹The literature on social identity posits that there are psychological costs from failing to conform to one's own group identity (Akerlof and Kranton, 2000, 2010)

same NUTS3 region. The share of migrants from the same country origin reflects the available co-ethnic network rather than the actual co-ethnic network. The data on the share of migrants from the same origin relative to the NUTS3 population is provided by the German Statistische Bundesamt (destatis).

Although significant at only 11 percent, a higher share of migrants from the same country of origin has a negative effect on integration and a positive effect on separation. For assimilation and marginalization it seems not to have a significant effect. The coefficients on tied mover remain robust.

Table 5: Ethnic Identity, with Fed. State and Potential Network

	(1)	(2)	(3)	(4)
	Assi.	Integ.	Marg.	Separ.
Tied Mover	-0.262*** (0.0659)	-0.113** (0.0556)	0.131* (0.0726)	0.159*** (0.0567)
Potential Co-ethnic Net.	-0.114 (0.107)	-0.0503 (0.0534)	-0.0411 (0.0576)	0.0926* (0.0522)
Hamburg	-0.229 (0.292)	0.149 (0.249)	0.422 (0.383)	-0.288 (0.355)
Lower Saxony	-0.388 (0.239)	-0.0422 (0.236)	-0.128 (0.291)	0.401* (0.208)
Bremen	-0.731 (0.704)	0.511* (0.293)	-0.00358 (0.443)	0.0668 (0.343)
North Rhine-Westph.	-0.320 (0.216)	0.197 (0.215)	0.192 (0.263)	0.0100 (0.198)
Hesse	-0.373 (0.236)	0.165 (0.222)	0.307 (0.277)	0.00563 (0.222)
Rhineland-Palatinate	-0.487* (0.251)	0.416* (0.234)	0.121 (0.300)	-0.0132 (0.223)
Baden-Wuerttemberg	-0.341 (0.226)	0.140 (0.219)	0.181 (0.276)	0.0540 (0.204)
Bavaria	-0.444** (0.217)	0.105 (0.213)	0.316 (0.264)	0.0884 (0.200)
Saarland	0.104 (0.322)	-1.117 (0.950)	-0.168 (0.488)	0.390 (0.244)
Berlin	-1.136*** (0.387)	0.299 (0.242)	0.161 (0.380)	0.313 (0.259)
Brandenburg	-0.265 (0.244)	-0.105 (0.273)	0.374 (0.313)	0.0620 (0.249)
Meckl.-West Pomerania	-19.94*** (0.822)	0.100 (0.441)	0.140 (0.753)	0.862*** (0.256)
Saxony	-0.436 (0.273)	0.163 (0.232)	0.691** (0.295)	-0.411 (0.256)
Saxony-Anhalt	-0.442* (0.248)	0.387 (0.246)	-0.227 (0.435)	-0.0933 (0.443)
Thuringia	-0.760** (0.343)	0.128 (0.259)	0.491 (0.321)	0.233 (0.249)
Constant	-1.495** (0.701)	0.693 (0.569)	-0.732 (0.744)	-0.327 (0.595)
Year FE	Yes	Yes	Yes	Yes
Indiv. Characteristics	Yes	Yes	Yes	Yes
Observations	941	941	941	941

Standard errors in parentheses, * p<0.10, ** p<0.05 and *** p<0.01

5.2 Panel Data

The results in the following table show the effect of being a tied mover on ethnic identity using the panel structure of the data. The model is estimated using a pooled

poisson. The magnitude of the coefficients is slightly larger for marginalization and assimilation, but overall the results are close the ones found using cross sectional data.

Table 6: Ethnic Identity: Panel Data

	(1)	(2)	(3)	(4)
	Assi.	Integ.	Marg.	Separ.
Tied Mover	-0.332*** (0.0583)	-0.103** (0.0486)	0.179*** (0.0575)	0.184*** (0.0476)
Constant	-2.207***	0.638	-0.206	0.104
Indiv. Characteristics	Yes	Yes	Yes	Yes
Observations	1,763	1,763	1,763	1,763

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

5.3 Robustness checks

5.3.1 Full time employment

As a robustness check, I include the employment status in Germany. The results in table 7 full time employed individuals are more likely to be integrated and assimilated less likely to separate or marginalized. The results for part-time employed individuals are similar but only significant for integration. The overall results for tied movers remain robust.

Table 7: Ethnic Identity, including employment

	(1)	(2)	(3)	(4)
	Assi.	Integ.	Marg.	Separ.
Tied Mover	-0.238*** (0.0651)	-0.0947* (0.0548)	0.134* (0.0724)	0.135** (0.0565)
FT employed	0.148** (0.0725)	0.206*** (0.0680)	-0.178** (0.0889)	-0.158** (0.0735)
PT employed	0.0852 (0.0917)	0.158* (0.0825)	-0.141 (0.115)	-0.0730 (0.0931)
Constant	-2.559*** (0.649)	0.769 (0.499)	-0.634 (0.691)	0.355 (0.514)
Year FE	Yes	Yes	Yes	Yes
Indiv. Characteristics	Yes	Yes	Yes	Yes
Observations	941	941	941	941

Standard errors in parentheses, * $p < 0.10$, ** $p < 0.05$ and *** $p < 0.01$

5.3.2 Including individuals who arrived as singles

Single and lead or equal movers had similar migration motives when making the migration decision. Recall that a lead or an equal mover is a spouse, who if single

would still have chosen to migrate. Hence, one could expect that the adjustment pattern of lead or equal movers is closer to that of single migrants than that of tied migrants.

In this section I also consider the ethnicity of individuals who arrived as singles. To do so I estimate separately the ethnic identity equation. The results are not directly comparable since tied mover is not instrumented for, but they are suggestive and add further confidence. The sample size is now of 1635 individuals. The baseline category remains being a lead or equal mover. The results show that with the exception of marginalized, single movers are not different from lead or equal mover. The results for tied movers remain fairly similar even though the coefficient on integration is no longer significant.

Table 8: Ethnic Identity, including singles

	(1)	(2)	(3)	(4)
	Assi.	Integ.	Marg.	Separ.
Single Mover	-0.0543 (0.0640)	-0.00692 (0.0455)	0.171** (0.0685)	-0.0750 (0.0569)
Tied Mover	-0.246*** (0.0652)	-0.0854 (0.0546)	0.128* (0.0716)	0.147*** (0.0566)
Constant	-1.907*** (0.504)	-0.0235 (0.369)	-0.233 (0.461)	0.105 (0.381)
Indiv. Characteristics	Yes	Yes	Yes	Yes
Observations	1635	1635	1635	1635

Standard errors in parentheses, * p<0.10, ** p<0.05 and *** p<0.01

Further suggestive results

I have found in the previous section that tied movers are less likely to be integrated and assimilated and more likely to be separated or marginalized. And a potential reason for this pattern is that tied movers have an intrinsically different migration motive from lead or equal movers (work vs keep family together). Given such result one could wonder if there are less satisfied with their life in Germany.

In table 9 I show some simple means and t-statistics. As expected, a lower share of tied movers is full time employed than lead movers. Tied movers also seem to dedicate more time to housework and care (children and elderly) on weekdays on average. However, tied movers do not seem to be less satisfied with their lives in Germany than lead movers on average. It can be the case that, local migrant networks supply lead movers with social environment they require to remain fairly satisfied in Germany.

Table 9: Mean hours and life satisfaction

	Full time employed	Part time employed	Hours housework and care per weekday	Life satisfaction (0-10)
Lead or equal mover	0.5279	0.1215	3.2566	7.6470
Tied Mover	0.3678	0.1441	4.0926	7.5220
t-stat	6.4766	-1.3488	-5.1361	1.3751
p-value	0.0000	0.1776	0.0000	0.1693

Notes: Hours worked includes zeros, Care includes both child and elderly care

6 Conclusion

This study examined the ethnic identity of first-generation migrant spouses depending on who was the migration driver (tied or lead mover). The challenge that migrants face with regards to their commitment and sense of belonging to a culture and society (ethnic identity) only becomes salient after migration, when origin and host cultures might clash. Particularly, when the migration decision is due to family reasons, individuals might be more likely to experience a loss in the sense of belonging, a deterioration of social relations and missed professional opportunities. Tied and lead movers have different migration motivations (family versus work) and face different constraints (e.g., human capital) 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 determinants and the adjustment of tied and lead movers, I relied on the IAB-SOEP migration sample, which asks migrant spouses who was the main driver of the migration decision. Following the seminal work of Mincer (1978) I constructed a framework to look at probability of being a tied mover within a migrant couple. To define ethnic identity, I followed on Constant et al. (2009) who defined ethnic identity as the balance between commitment, sense of belonging or self-identification with the culture and society of origin and commitment, sense of belonging or self-identification with the host culture and society, achieved by an individual after migration.

Using generalized structural equation modelling I looked at the determinants of the migration position and I evaluated how it affects the ethnic identity of spouses. Because unobserved factors affecting the migration position could also have an influence on the degree of ethnic identity, I relied on instrumental variables that reflect the bargaining power and the labour market situation just before migration.

The results suggest that gender remains a main determinant of who is a tied mover within a couple. In line with the human capital theory, the spouse with lower human capital is more likely to be a tied mover. Extra-environmental factor such

as the laws and regulations that restrict women's economic opportunities (WBL) have an influence on the relative bargaining strength of each spouse and affect the intra-household migration decision process. Overall, tied movers are more likely to be separated and marginalized and less likely to be integrated and assimilated. The results are robust to the inclusion of partner's ethnic identity and to the share of migrants from the same origin country residing in the same NUTS3 region. These findings suggest that for tied movers the psychological costs of distancing from the culture of their country of ancestry do not compensate the benefits from investing in the host country culture. I also presented suggestive evidence that single migrants are not different from lead or equal migrants. This result is not surprising, as both groups expected to gain individually from migration.

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 findings in this study suggest that tied migrants are more likely to struggle in integrating into the German culture and society. Although not explicitly analysed in this study, the lower integration among tied movers can not only hinder even further they labour market prospects but it might also affect the integration of their children, through inter-generational transmission of culture.

7 Appendix

Table 10: Pre-Migration Statistics

	Lead/Equal M.	Tied M.	Total
Absolute number	1,246	595	1,841
Average in years			
Age at immigration	32.51	31.94	32.32
Gender			
Male	52.57	30.25	45.36
Female	47.43	69.75	54.64
Children bellow 7 BFM			
No Children	69.50	71.93	70.29
Children bellow 7 years	30.50	28.07	29.71
Region of Origin			
EU15+2	13.08	11.09	12.44
EU 2004 enlargement	20.71	16.47	19.34
EU 2007&2013 enlarge.	20.47	20.67	20.53
Russia & other former SU	15.33	16.97	15.86
Turkey & Arab Countries	5.54	10.25	7.06
Central Asia	11.16	8.74	10.37
Others	13.72	15.80	14.39
Religion			
No denomination	22.23	24.87	23.09
Islamic religion	11.56	14.79	12.60
Christian religion	63.40	56.97	61.33
Another religious comm.	2.09	2.02	2.06
Spoken German skills BFM			
Poor German	70.47	80.67	73.76
Fair German	14.77	11.09	13.58
Good German	12.84	7.39	11.08
Vocational Training in HC			
No Vocational T	64.45	69.41	66.05
Vocational Training	33.07	28.91	31.72
University Degree in HC			
No University D.	77.69	74.45	76.64
University Degree	19.82	23.87	21.13
FTE in year before migration			
Not FTE	31.38	39.66	34.06
Full Time Emp.	65.49	55.80	62.36
No employment info.	3.13	4.54	3.59

Table 11: Post-Migration Statistics

	Lead/Equal M.	Tied M.	Total
Average in years			
Yrs of full time employ. BFM	10.01	8.70	9.54
Years since migration	11.18	10.74	11.02
Number of children	1.20	8.70	1.22
Years of educ after 15 before mig			
0-3	23.96	24.71	24.23
4-6	38.44	32.65	36.34
above 6	36.94	41.76	38.68
Not known	0.67	0.88	0.74
At least one child is in school			
No child in school	59.77	55.64	58.28
A child in school	40.23	44.36	41.72
At least one child is in pre-school			
No child in pre-school	80.99	81.03	81.01
A child in pre-school	19.01	18.97	18.99
Apprent./voc. training in Ger			
No apprent/voc in Ger	89.43	87.15	88.61
Apprent/voc in Ger	10.57	12.85	11.39
Attendend School/Uni in Germany			
No School/Uni in Ger	90.50	92.01	91.04
School/Uni in Ger	9.50	7.99	8.96
Good spoken & written lang. origin			
Fair or lower	1.60	2.04	1.76
Very good or good	98.40	97.96	98.24
Good spoken & written German			
Fair or lower	39.96	46.08	42.18
Very good or good	60.04	53.92	57.82
Feel German			
Completely	15.36	9.40	13.21
For the most part	25.75	20.06	23.70
In Some Respects	35.08	39.97	36.85
Barely	14.74	17.24	15.65
Not at All	9.06	13.32	10.60
Connected with co. of origin			
Very Strong	18.83	23.51	20.52
Strong	27.09	31.66	28.74
In Some Respects	32.95	31.82	32.54
Barely	15.28	10.19	13.44
Not at All	5.86	2.82	4.76
Return to country of origin			
Stay in Ger for 15 years or longer	85.88	81.03	84.13
Return to c. of origin in less than 15 yrs	14.12	18.97	15.87
Acquire German citizenship			
Definitely Not	17.67	25.71	20.58
Improbable	12.17	16.77	13.83
Yes, Probably	13.14	15.67	14.06
Yes, Definitely	13.14	12.07	12.76
Acquired	43.87	29.78	38.78

Notes: BFM stands for before migration, YBM year before migration and HC for home country)

Table 12: Ethnic Identity and Components

	Lead/equal Mover	Tied Mover	Total
Language: Assimilated	0.013	0.005	0.010
Language: Integrated	0.586	0.530	0.566
Language: Marginalized	0.004	0.015	0.008
Language: Separated	0.397	0.450	0.417
Self-identification: Assimilated	0.276	0.157	0.233
Self-identification: Integrated	0.136	0.133	0.135
Self-identification: Marginalized	0.262	0.287	0.271
Self-identification: Separated	0.326	0.423	0.361
Migration history: Assimilated	0.528	0.382	0.475
Migration history: Integrated	0.040	0.032	0.037
Migration history: Marginalized	0.331	0.429	0.367
Migration history: Separated	0.100	0.157	0.121
Ethnosizer: Assimilated	0.817	0.544	0.718
Ethnosizer: Integrated	0.762	0.695	0.738
Ethnosizer: Marginalized	0.597	0.731	0.646
Ethnosizer: Separated	0.824	1.031	0.899

Table 13: Individual Components of Ethnosizer

	(1) Language C. Origin	(2) German Language	(3) Feel German	(4) Feel Conn. to C. Origin	(5) Return to Origin	(6) Acquire Ger. Citizenship
Tied Mover	-0.0129 (0.00908)	-0.106** (0.0527)	-0.0745*** (0.0243)	0.0380* (0.0195)	0.222* (0.125)	-0.150*** (0.0408)
Constant	0.0611 (0.0765)	-0.0474 (0.517)	0.850*** (0.246)	1.848*** (0.173)	-0.292 (0.950)	-0.412 (0.466)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Indiv. Charac.	Yes	Yes	Yes	Yes	Yes	Yes
Observations	941	941	941	941	941	941

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Notes: In equation (1) the dependent variable takes the value of 1 if an individual has a good command (either spoken or written) of the language of the country of origin, 0 otherwise. In equation (2) the dependent variable takes the value of 1 if an individual has a good command (either spoken or written) of German language, 0 otherwise. The dependent variable in equation (3) "Feel German" and (4) "Feel Connected" ranges from 1 to 5, where 1 reflects "not at all" and 5 "completely". In equation (5) the dependent variable takes the value of 1 if an individual has intends to return to the country of origin, 0 if does not intend or intends in more than 15 years. The dependent variable in equation (6) reflects the intention of acquiring german citizenship, it takes the value of 0 if "Definitely Not", 1 if "Improbable", 2 if "Yes Probably", 3 if "Yes Definitely" and 4 if has already acquired German citizenship.

Table 14: Gap in Ethnic Identity Between Partners

	(1)	(2)	(3)	(4)
	Assi.	Integ.	Marg.	Separ.
Tied Mover	-0.0741*** (0.0162)	-0.0433** (0.0181)	0.0557*** (0.0164)	0.0603*** (0.0199)
Constant	1.731*** (0.123)	2.116*** (0.149)	1.609*** (0.128)	1.672*** (0.174)
Year FE	Yes	Yes	Yes	Yes
Indiv. Characteristics	Yes	Yes	Yes	Yes
Observations	284	284	284	284

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Notes: The regressions are simple robust poisson

The dependent variable is the difference between individual i ethnosizer and her partner ethnosizer.

References

- A. Adsera and B. R. Chiswick. Are there gender and country of origin differences in immigrant labor market outcomes across european destinations? *J. of Pop. Econ.*, 20(3), 495-526, 2007.
- G. A. Akerlof and R. E. Kranton. Economics and identity. *The Quarterly J. of Econ.*, 11(3), 715-753, 2000.
- G. A. Akerlof and R. E. Kranton. *Identity economics. How our identities shape our work, wages, and well-being*. Princeton University Press, 2010.
- M. Battisti, G. Peri, and A. Romiti. Dynamic effects of co-ethnic networks on immigrants's economic success. *NBER Working Papers No. 22389*, 2018.
- H. Battu and Y. Zenou. Oppositional identities and employment for ethnic minorities: evidence from england. *The Economic J.*, 120(542), F52-F71, 2010.
- J. W. Berry. *Acculturation: Theory, models and some new findings*, chapter Acculturation as varieties of adaptation, pages 9–25. Boulder: Westview, 1980.
- J. W. Berry. Immigration, acculturation and adaptation. *Applied Psychology: An International Review*, 46, 5-68, 1997.
- J. W. Berry. *Cambridge handbook of acculturation psychology*, chapter Contexts of Acculturation, pages 27–42. Cambridge University Press, 2006.
- W. T. Bielby and D. D. Bielby. I will follow him: Family ties, gender-role beliefs, and reluctance to relocate for a better job. *American J. of Sociology*, 97(5), 1241-1267, 1992.

- A. Bisin, E. Patacchini, T. Verdier, and Y. Zenou. Are muslim immigrants different in terms of cultural integration? *J. of the European Economic Association*, 6(2-3), 445-56, 2008.
- A. Bisin, E. Patacchini, T. Verdier, and Y. Zenou. Formation and persistence of oppositional identities. *European Economic Review*, 55(8), 1046-1071, 2011.
- R. O. Blood and D. M. Wolfe. *Husbands and wives: The dynamics of family living*. Oxford, England: Free Press Glencoe, 1960.
- S. Campbell. National identity among economic and non-economic immigrants. *Rev Econ Household* 17, 411-438, 2019.
- T. Casey and C. Dustmann. Immigrants's identity, economic outcomes and the transmission of identity across generations. *The Economic J.*, 120(542), F31-F51, 2010.
- P.-A. Chiappori, B Fortin, and G. Lacroix. Marriage market, divorce legislation, and household labor supply. *Journal of political Economy*, 110(1), 2002.
- D. Cobb-Clark, M. Connolly, and C. Worswick. Post-migration investments in education and job search: a family perspective. *J. of Pop. Econ.*, 18(4), 663-690, 2005.
- A. F. Constant and K. F. Zimmermann. Measuring ethnic identity and its impact on economic behavior. *J. of the European Economic Association*, 6(2-3), 424-433, 2008.
- A. F. Constant, L. Gataullina, and K. F. Zimmermann. Ethnosing immigrants. *J. of Economic Behavior and Organization*, 69(3), 274-287, 2009.
- T. J. Cooke. Family migration and the relative earnings of husbands and wives. *Annals of the Association of American Geographers*, 93(2), 338-349, 2003.
- T. J. Cooke. Migration in a family way. *Pop., Space and Place*, 14(2), 255-265, 2008.
- A. P. Damm. Ethnic enclaves and immigrant labor market outcomes: Quasi-experimental evidence. *J. of Labor Econ.*, 27(2), 281-314, 2009.
- A. M. Danzer and F. Yaman. Do ethnic enclaves impede immigrants's integration? evidence from a quasi-experimental social-interaction approach. *Review of International Econ.*, 21(2), 311-25, 2013.

- Nick Drydakis. The effect of ethnic identity on the employment of immigrants. *Rev Econ Household* 11:285-308, 2013.
- C. Dustmann. The social assimilation of immigrants. *J. of Pop. Econ.*, 9(1), 37-54, 1996.
- P.-A. Edin, P. Fredriksson, and O. ÅĖslund. Ethnic enclaves and the economic success of immigrants - evidence from a natural experiment. *Quarterly J. of Econ.*, 118(1), 329-57, 2003.
- K. Eriksson. Ethnic enclaves and immigrant outcomes: Norwegian immigrants during the age of mass migration. *European Review of Economic History*, 24(3), 427-446, 2020.
- G. Facchini, E. Patacchini, and M. Steinhardt. Migration, friendship ties, and cultural assimilation. *Scand. J. of Econ.* 117(2), 619-649, 2015.
- A. Georgiadis and A. Manning. Change and continuity among minority communities in Britain. *J. of Pop. Econ.* 24(2): 541-568, 2011.
- Y. Gerxhani, K. Kosyakova. The effect of social networks on migrants' labor market integration: a natural experiment. *IAB Discussion Paper 202003*, 2020.
- A. Grossbard-Shechtman. A theory of allocation of time in markets for labour and marriage. *The Economic Journal*, 94, 863-882, 1984.
- S. Jervis. *Relocation, Gender, and Emotion: A Psycho-Social Perspective on the Experiences of Military Wives*. Routledge, 2011.
- H. Juerges. Gender ideology, division of housework, and the geographic mobility of families. *Review of Econ. of the Household*, 4(4), 299-323., 2006.
- M. Junge, M. D. Munk, and P. Poutvaara. International migration of couples. *IZA Discussion Papers* 8352, 2014.
- M. Krieger. Tied and troubled: Revisiting tied migration and subsequent employment. *J. of Marriage and Family*, 2019.
- A.T. Le. *Public Policy and Immigrant Settlement*, chapter Female Migrants's Participation in the Australian Labour Market, pages 87 -117. Edward Elgar, Cheltenham, UK,, 2006.
- D. T. Lichter. Socioeconomic returns to migration among married women. *Social Forces*, 62, 489-503, 1983.

- R. Luthra, L. Platt, and J. Salamonska. Types of migration: The motivations, composition, and early integration patterns of “new migrants” in europe. *International Migration Review*, 2018.
- A. Manning and S. Roy. Culture clash or culture club? national identity in britain. *The EconomicJ.*, 120(542), F72-F100, 2010.
- P. Masella. National identity and ethnic diversity. *J. of Pop. Econ.*, 26(2), 437-454, 2013.
- J. Mincer. Family migration decisions. *J. of Political Economy*, 86(5), 749-773, 1978.
- M. Munk, T. Nikolka, and P. Poutvaara. International family migration and the dual-earner model. *CReAM Discussion Paper Series 1703*, 2017.
- T. Nikolka and P. Poutvaara. Family decision-making on international migration. *Annual Conference 2014 (Hamburg): Evidence-based Economic Policy 100384*, German Economic Association, 2014.
- S. Nivalainen. Determinants of family migration: Short moves vs long moves. *J. of Pop. Econ.*, 17, 157-175, 2004.
- G. Ottaviano and G. Peri. The economic value of cultural diversity: evidence from us cities. *J. of Economic Geography* 6, 9-44, 2006.
- S. Polachek and F. Horvath. *Research in labor economics, Vol. 1*, chapter A Life Cycle Approach to Migration: Analysis of the Perspicacious Peregrinator, pages 103–149. JAI Press, 1977.
- B. Rabe. Dual-earner migration in britain: Earnings gains, employment, and self-selection. *J. of Pop. Econ.* 24(2), 477-497, 2011.
- S. H. Sandell. Women and the economics of family migration. *The Review of Econ. and Statistics*, 59(4), 406-414, 1977.
- M. A. Shaffer and D. A. Harrison. Forgotten partners of international assignments: Development and test of a model of spouse adjustment. *J. of Applied Psychology*, 86(2), 238-54, 2001.
- K. A. Shauman. Gender asymmetry in family migration: Occupational inequality or interspousal comparative advantage? *J. of Marriage and Family*, 72(2), 375-392, 2010.

- E. S. Shihadeh. The prevalence of husband-centered migration: Employment consequences for married mothers. *J. of Marriage and Family*, 53(2), 432-444, 1991.
- O. Slobodin. "Out of time": A temporal view on identity change in trailing spouses. *Time and Society*, 28(2), 2018.
- J. Suedekm, K. Wolf, and U. Blien. Cultural diversity and local labour markets. *Regional Studies*, 48(1), 173-191, 2014.
- M. Trax, S. Brunow, and J. Suedekum. Cultural diversity and plant-level productivity. *Regional Science and Urban Econ.*, 53, 85-96, 2015.