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Tied and Troubled: Revisiting Tied Migration and Subsequent Employment

Objective: This article looks at couples' migration decision making processes and their gender-specific employment consequences after migration to Germany.

Background: International migration has evolved into a common experience for couples around the globe. Previous research has focused on the internal migration of couples and families. This article is the first to consider couples' international migration decisions drawing on the theoretical concepts of Mincer's tied migration theory and gender role beliefs.

Method: Using data from the German Socio-Economic Panel Survey, this study explores the labor market integration of tied, lead, and equal immigrants. Labor market integration is measured in terms of the probability to be employed and the time to first employment in Germany. The author investigates these outcomes via differences-in-differences and survival analysis regression techniques.

Results: Male tied, relative to lead and equal immigrants, are significantly less likely to be employed shortly after migration as well as in the long run. By contrast, no significant differences in the employment probability showed between female tied migrants and their reference groups after migration. Yet, lead migrants of both genders enter the German labor market earlier than tied as well as equal movers.

Conclusion: This study provides the first evidence on the significance of circumstances in couples' migration decisions making for (gender-specific) returns to migration and in that highlights key aspects of international couple migration.

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Migration and relocation are ways to improve one's living conditions. Taking advantage of such life-changing opportunities is relatively easy for singles but has proven difficult for couples and especially so in light of women's increasing labor market participation (Abraham, Auspurg, & Hinz, 2010; McHugh, Gober, & Reid, 1990). In the context of multi-person households, it thus becomes a challenge to find a new place of residence that improves the living conditions of every household member alike.

Theoretically, this issue was first highlighted within Mincer's (1978) tied migration theory. According to the tied migration theory, couples move to promote their collective welfare. This endeavor can, yet, must not necessarily coincide with the individual preferences of both partners. Instead, one partner—the so-called lead migrant—may expect to gain from migration, whereas the other—the so-called tied migrant—may not. This is in contrast to situations in which both partners—called equal migrants in this study—expect to benefit from moving. This gender-neutral view on couples'

migration decisions was first challenged by Shihadeh (1991) and Bielby and Bielby (1992), who hypothesized traditional gender roles to reproduce throughout the process of migration. Following this logic, it is more difficult for women than for men to initiate migration as well as to prevent it when expecting losses.

To date, analyses of couples' migration decisions remain scarce. On one hand, one body of literature has explored how couples decide on migration. These studies conclude that men dominate that decision (Bielby & Bielby, 1992). Couples' migration decision making and its impacts have, however, been assessed once: Taylor (2007) found tied migration to reduce the employment probability for both men and women. These insights have been obtained from analyses of internal migration only—that is, residential mobility in a country.

In a globalized world, international migration is evolving into a common experience for many couples and their families (Organization for Economic Co-operation and Development [OECD], 2017). Insights into internal couple migration are, however, not necessarily transferrable to the experiences of immigrant couples. This is due to two reasons. First, the (im)material costs faced by international migrants, given differing legal frameworks, languages, and work cultures across countries, significantly exceed the costs from internal migration. Second, an accompanying phenomenon of internal as well as international couple migration is family reunification. Rather than migrating at the same time, couples frequently decide to migrate one after another and often several years apart (Green, Hogarth, & Shackleton, 1999; OECD, 2017). Yet, whereas family separation within a country still allows for long-distance commuting, separation across national borders hinders frequent contact and visit. Taken together, these two aspects can be expected to introduce yet undiscovered dynamics to decisions on international couple migration and their impacts.

This article aims to uncover these dynamics. I study the employment experiences of tied relative to lead and equal migrants and test whether they differ in their post-migration employment probability and time to first employment in Germany. Entries into the labor market are generally considered a key dimension of migrant integration as employment allows for material well-being and financial security as well as for establishing new social contacts (OECD, 2005).

To investigate transitions into employment, I restrict the analysis to migrants who were legally allowed to immediately access the German labor market, using difference-in-difference and survival analysis regression techniques and data from the German Socio-Economic Panel Survey (SOEP) (Goebel et al., 2019). Using data from the SOEP offers two main advantages: First, it unites a wide range of pre- and postmigration information and, second, it includes questions on the circumstances of couples' migration decisions. Previously, only Taylor (2007) identified tied migrants from couples' reports. Similarly, this study links the concept of tied migration to respondents' accounts of who was the decisive force in their decision. This offers a first unique insight into decisions on international couple migration.

Overall, this article extends previous theoretical and empirical findings on the decision making in international couple migration and its employment consequences.

Background

Theoretical Insights

Long (1974), DaVanzo (1976), Sandell (1977), and Mincer (1978) provided the first theoretical insights into the dynamics of couple migration. To date, the most influential of these first insights remains the tied migration theory proposed by Mincer.

Mincer's tied migration theory is based on the assumptions of the human capital model of migration (Becker, 1962; Harris & Todaro, 1970; Sjaastad, 1962). In that model, when facing the decision on whether to migrate, individuals first estimate the associated expected gains and costs. If and only if the expected gains are found to exceed the expected costs, individuals decide to migrate. Hence, any individual i decides to migrate if:

$$R_i = G_i - C_i > 0 \qquad (1)$$

where R_i is the expected return, G_i is the expected gain, and C_i the expected cost of migration.

The tied migration theory expands on the human capital model of migration by incorporating family ties as one decisive factor behind migration decisions. Specifically, the tied migration theory moves away from seeing the individual at the center of the migration

decision and argues instead that this decision is taken in the family context and particularly between partners in an effort to promote their collective return. Accordingly, the decision rule set in Equation 1 needs to be adjusted as follows:

$$R_c = \sum_{i=P1,P2} G_i - C_i > 0 \qquad (2)$$

where R_c is the couple's expected return from migration and *P1* stands for Partner 1 and *P2* for Partner 2. Thus, migration decisions in the tied migration theory are based on the couple's expected return to migration, which is the sum of both partners' individual considerations as seen in Equation 1. The model thus abstracts from the presence of further family members. Rather, the couple is seen as the relevant unit for migration decisions. Accordingly, Mincer (1978) modified the decision rule for partnered individuals. Now, their expected collective—rather than individually expected returns—must be greater than zero to decide for migration.

On one hand, the expected couple return to migration can be greater than zero if both partners expect to gain. These individuals will be called equal migrants throughout this study. Yet, further, Mincer (1978) highlighted that even if only one partner expected positive returns from migration, the couple's expected return could be positive. By way of example, we may imagine a situation in which $R_{P1} < 0$ and $R_{P2} > 0$—that is, Partner 1 expects to lose from migration, whereas Partner 2 expects to gain from it. Yet, if $R_{P2} > |R_{P1}|$ and the expected gains of Partner 2 therefore exceed the expected losses of Partner 1 in absolute terms, the couple's expected return to migration is still positive. Then it is rational for the couple as a whole to move. In this scenario, Mincer calls Partner 1 the tied migrant and Partner 2 the lead migrant: Partner 1 migrates along with Partner 2 despite this not being individually rational as his or her expected costs exceed the expected gains from migration. Whether there is and who is the tied migrant is thus independent of gender but rather, depends on an individual's expected returns to migration. Hence, the tied migration theory is gender-neutral.

In the past, Mincer's theory has repeatedly been criticized for assuming that both partners pursue a common goal—that is, maximizing their collective expected return. Bargaining theory relaxes this assumption (Bielby & Bielby, 1992). Through the lens of bargaining theory,

migration decisions of couples are negotiations between partners with heterogeneous interests. Bargaining theory further argues that the outcomes of these negotiations will reflect the will of those individuals with relatively more bargaining power when compared with their partners (Lundberg & Pollak, 2003). Accordingly, if $R_{P1} < 0$ and $R_{P2} > |R_{P1}| > 0$, migration will only occur if Partner 2 does not have enough power to prevent the move. Contrary to the Mincer model, bargaining theory thus implies migration to occur less often as partners expecting losses can refuse to move conditional on having sufficient bargaining power.

These gender-neutral views on the migration of couples were first challenged by Shihadeh (1991) and Bielby and Bielby (1992). These authors pointed to the significance of gender role theory for understanding patterns of couple migration. Gender roles are "roles that men and women have been socialized to accept in society" (Shihadeh, 1991, p. 433). Traditional gender roles portray men as breadwinners and women as focused on domestic work and care duties (Shauman & Noonan, 2007). Bielby and Bielby (1992) hypothesized such traditional gender role beliefs to reproduce in the process of couple migration and to introduce asymmetries into it. Equation 3 incorporates this line of argumentation into Mincer's model.

$$R_c = \sum_{i=P1,P2} (G_i - C_i)/\delta_i > 0 \qquad (3)$$

where *P1* now is the male and *P2* is the female partner and let $0 < \delta_{P1} < 1$ and $\delta_{P2} > 1$ be discount factors that both partners equally accept. These factors cause the following to hold: $R_{P1}/\delta_{P1} > R_{P1}$ and $R_{P2}/\delta_{P2} < R_{P2}$. Hence, relative to before, females' returns are now given a lower and males' returns a higher weight. Accordingly, for a couple's expected return to be positive when male partners anticipate a loss, female partners have to expect disproportionally high gains from migration. Likewise, small expected gains for male partners are sufficient to generate a positive expected couple return even if female partners expect to incur high losses. The discount factors thus reflect the essence of traditional gender roles in which men as providers are assigned superordinate roles (Bielby & Bielby, 1992).

Overall, the theories thus focus on the interplay of individual expected returns in

couples' migration decisions. After migration, individuals receive real returns. Taking expected as the basis for real returns, tied migration and bargaining theory thus predict those individuals whose interests are aligned with the decision—that is, following Mincer's terminology, lead and equal migrants—to have higher real returns from migration relative to tied migrants. Yet, gender role theory highlights that there may be dynamics in the migration decision making process that cause gender-specific experiences for tied relative to lead and equal migrants.

Determinants and Consequences of Couple Migration

During the past half century, extensive empirical research on the mobility of couples has been carried out. Most studies on couple migration deal with its employment consequences. Numerous studies show that partnered female movers around the world are disadvantaged in terms of their employment (Boyle, Zhiqiang, & Vernon, 2009; Clark & Huang, 2006; Geist & McManus, 2012; Jacobsen & Levin, 1997; Lersch, 2013; Rabe, 2011; Shauman & Noonan, 2007; Zaiceva, 2010), earnings (see, for instance, Clark & Withers, 2002; Lichter, 1980), and working conditions (Morrison & Lichter, 1988) after migration. These disadvantages are mostly short lived (Spitze, 1984), although not for women with children (Boyle, Cooke, Halfacree, & Smith, 2003). In contrast, empirical evidence shows the earnings of partnered men to rise after moving (Cooke, 2003; Jacobsen & Levin, 2000). Hence, partnered men benefit from migration, whereas it disadvantages partnered women. This result has been associated with the concept of tied migration by coining the term *trailing wife*, implying the intersection of partnered women and tied movers (Taylor, 2007).

In contrast, analyses of couples' migration decisions remain scarce. One body of literature explores how couples' migration decisions are influenced by the characteristics of both partners. These studies overwhelmingly conclude that men dominate the decision to migrate, even if their female partners have relatively more resources (Bielby & Bielby, 1992; Duncan & Perrucci, 1976; Lichter, 1983; Shauman, 2010; Shihadeh, 1991; Tenn, 2010).

Furthermore, there is also little evidence on the effects of dynamics in couples' migration

decisions. Individual preferences in couples' migration decisions have been mostly linked to legal immigration classes, equating accompanying family with tied movers (Banerjee & Phan, 2015). Yet, visa classes only partly reproduce couples' preferences as further factors, such as requirements to obtain certain legal statuses, ultimately drive selection into them. By contrast, couples' migration decisions and their impacts have only been assessed once by drawing on respondents' direct reports: Taylor (2007) defined tied migrants as those who moved for their partner's job and found tied husbands and wives in Great Britain to be less likely to be employed after relocation. However, Taylor depicted internal migration. Although the employment of migrant wives in general (see, for instance, Adsera & Ferrer, 2016) has been commonly considered, the decision making process with regard to international couple migration has not yet received any attention. This study aims to shed light on this issue.

Hypotheses

Tied migration and bargaining theory predict those individuals whose interests are aligned with the migration decision—that is, lead and equal migrants—to benefit from migration relative to tied migrants. I measure these benefits, first, through the probability to be employed and, second, through the time to first employment. Accordingly, I hypothesize the following:

> Hypothesis 1: Tied migrants are less likely to be employed than lead or equal migrants after migration.

> Hypothesis 2: Tied migrants take longer than lead or equal migrants to secure a first job after migration.

The extension to Mincer's model highlighted gender-specific dynamics. Specifically, women must expect disproportionally high returns to initiate migration, whereas moderately positive expected returns for men are sufficient to compensate for high expected losses of women. Hence, among those couples who migrate, female lead movers can be expected to have, on average, higher gains than male lead movers. By contrast, female tied movers will, on average, have higher losses relative to their male counterparts. Therefore, I hypothesize the following:

Hypothesis 3: The difference in the probability to be employed after migration is larger when comparing female lead or equal to tied migrants than when comparing male lead or equal to tied migrants.

Hypothesis 4: The difference in the time to first job after migration is larger when comparing female lead or equal to tied migrants than when comparing male lead or equal to tied migrants.

Method

Data

To test these hypotheses, I refer to individual-level data from the SOEP. The SOEP is a longitudinal household study representative of adults living in private households in Germany. It was launched in 1984 and has been carried out on an annual basis since then. As part of their annual interviews, the respondents provide information on various topics such as their income and employment (Goebel et al., 2019).

For the purpose of this study, I extract information from the migration samples (Samples M1 and M2) of the SOEP. These were added to the SOEP in 2013 and 2015, respectively (Brücker et al., 2014). Their target population consists of first-generation immigrants who arrived in Germany between 1995 and 2013 and second-generation immigrants residing in Germany (Kroh, Kühne, Goebel, & Preu, 2015; Kühne & Kroh, 2017). A key feature of the SOEP is to not only survey household heads but also to include all other adult members (aged 17 years and older) of the household. Therefore, the migration samples enclose a wider circle of individuals than the mere target population. To date, 7,366 individuals have been surveyed as part of the SOEP migration samples; 5,703 of which are first-generation immigrants.

This study's population of interest is first-generation immigrants, who indicate that they were in a serious relationship prior to moving to Germany, whose relationship persisted beyond the move, and whose partner resides in Germany yet is not German-born. A total of 2,205 respondents in the sample met these criteria (see Table 1). Furthermore, given that this study focuses on employment, I restrict the sample to working-age individuals (aged 23 to 60 at immigration). Also, I do not consider refugees as previous studies found their

Table 1. *Analytical Sample With Exclusion Criteria*

Sample restrictions	N
Samples M1 and M2	7,366
First-generation immigrants	5,703
In a relationship prior to immigration, relationship persisted beyond the move and partner resides in Germany but is not German-born	2,205
Age at immigration between 23 and 60	1,956
No refugee background	1,722
No students or tourists	1,665
No missing data—explanatory/control variables	1,626
Data for at least two points in time	1,618
Residence permit allows for immediate employment	1,488
Immigrated after 1982	1,485
Final sample	1,485

Note: The abbreviations M1 and M2 stand for the SOEP migration samples.

labor market access to be particularly difficult (Bevelander, 2011). I further exclude tourists and students. Next, I use listwise deletion for individuals with missing data on explanatory or control variables or who did not provide employment data for at least one point for both before and after migration.

I further only include respondents whose residence permits allowed for immediate employment. Overall, this study covers migrants with the right to freedom of movement in Germany—that is, individuals from the European Union, European Economic Area, and Switzerland—, ethnic German repatriates and finally, migrant workers, family, and other migrants. Table 2 summarizes the regulations for each group per immigration period. Based on Table 2, I exclude family migrants who immigrated before 2004. Finally, due to low sample size prior to that, I restrict the sample from the immigration year 1982 onward.

Measures

The outcome variables for this study are an indicator of employment and a continuous variable recording individuals' time to first employment after migration. I obtain respondents' annual employment statuses from responses to the following question:

Table 2. *Immigrant Groups and Labor Market Restrictions Over Time*

Immigrant group	Immigration period	Labor market regulation	N	Action
EU, EEA, Swiss citizens	1969–2016	Unrestricted access	652	In final sample
Ethnic German repatriates	1953–2016	Unrestricted access	394	In final sample
Migrant workers	1974–1981	No work permits	0	Excluded
	1982–2016	Unrestricted access	215	In final sample
Family migrants	1974–1981	No work permits	1	Excluded
	1982–1990	Waiting period of 4 years until full labor market access	6	Excluded
	1990–2004	Waiting period of 1 year until full labor market access	123	Excluded
	2005–2013	Can access labor market if principal migrant is allowed to	180	In final sample
	2013–2016	Unrestricted access	27	In final sample
Other	1969–2016	Unrestricted access	17	In final sample

Note: References include Treaty on Functioning of the European Union (2007), Agreement on European Economic Area (1994), EU-Swiss Association Agreement (1999), Federal Expellees Act (1953), Aliens Act (1965) and Verordnung über die Arbeitsgenehmigung für ausländische Arbeitnehmer (1971). EEA = European Economic Area; EU = European Union. Further, the principal migrant is the migrant in the family to whom the family visas are linked.

Please state what has happened in your life since you were 15—from when to when you were in school, vocational training, employed, etc. It is important that you give some answer for every year of your life up to the present or up to the age of 65. If more than one answer applies in a particular year, please give more than one answer. (Taylor Nelson Sofres [TNS] Infratest Sozialforschung, 2016, p. 30)

The response options include: "I was attending school/university/night school," "I was completing an apprenticeship/vocational training/further education/retraining," "I was in (voluntary) military/community service, voluntary social/ecological year, federal volunteer service, at war, in captivity," "I was employed full-time," "I was employed part-time," "I was unemployed," "I was a homemaker," "I was retired," and "Other" (TNS Infratest Sozialforschung, 2016, p. 30). Respondents thus give a retrospective account of their entire occupational biography, which I additionally supplement with details on respondents' employment provided as part of the annually recurring surveys. This offers the advantage of uniting pre- and post-migration information for all respondents who immigrated after age 15.

I define *employment* as being economically active—that is, being either full- or part-time employed. The reference category thus comprises unemployment as well as economic inactivity. Generally, the economically inactive are those who are not available for work (for instance, homemakers). In case a respondent reports multiple activities for any given year and this includes a mix of being economically active, inactive, and unemployed, I denote the respondent to be employed for that year as there was some contact with the labor market.

In examining the outcome, I include various individual-level controls but focus on individual preferences in couples' migration decisions—that is, the impact of being a tied versus lead or equal migrant. I identify tied, lead, and equal migrants from the following question:

A relationship, whether marriage or otherwise, can affect our decisions, sometimes to a greater and sometimes to a lesser extent. We therefore ask you to think back to before you moved to Germany—before you made the decision to move here. What played the decisive role in your decision to move here—who was the driving force in that decision? (TNS Infratest Sozialforschung, 2016, p. 20)

The response options include the following: "my partner," "I was," and "both to an equal extent" (TNS Infratest Sozialforschung, 2016, p. 20). I define *tied migrants* as those whose partner played the decisive role in the migration decision, *lead migrants* as those who themselves

played the decisive role in the migration decision, and *equal migrants* as those who report that they were as involved in the decision making process as their partner.

The way in which this study identifies tied, lead, and equal migrants reflects the theoretical concepts presented previously. I define *lead migrants* as respondents who perceive themselves as having pressed for emigration. Hence, it can be assumed that these respondents expected to gain from migration. By contrast, they do not report their partners as having actively pursued emigration; otherwise they would have indicated so by answering with "both to an equal extent." Hence, the respondents who reported "I was" initiated migration for their advantage, whereas their partners were not actively interested in migration, suggesting that their costs from migration exceeded the associated gains. The measurement does not, however, reveal how close the migration decision exactly was—that is, whether the couple was in large disagreement or whether both partners were eventually convinced of migration despite one partner taking the decisive role in that decision. Furthermore, in contrast to Taylor (2007), the measurement does not reflect whether migration occurred for employment-related reasons. For instance, individuals could have also assumed the decisive role in migration decisions for the benefit of their children. Yet, regardless of the original migration motif, employment is unexceptionally desirable for immigrants as they do not enjoy immediate, full access to the German welfare system. Rather, immigrants are subjected to waiting periods until they are allowed to claim social benefits, their amount is crucially linked to prior employment, and migrants from third countries additionally have to prove that they have sufficient resources for living in Germany. Overall, the measurement thus provides a first meaningful insight into the employment consequences of decision dynamics in international couple migration.

The final sample consists of 1,485 tied, lead, and equal migrants, who immigrated to Germany between 1985 and 2015. A total of 652 respondents moved to Germany by right to freedom of movement, and 394 as ethnic German repatriates and their family members. Of the remaining 493 respondents, most (215) came to Germany as migrant workers, 207 as family migrants, and 17 for other reasons. I

identify 433 respondents (29%) as tied, 407 respondents (27%) as lead, and 645 respondents (44%) as equal migrants. The sample is almost equally split between men (720, 48%) and women (765, 52%). Yet, this equal distribution of male and female respondents does not hold across tied and lead migrants: I identify 259 of 433 (60%) tied migrants to be women and 239 of 407 (59%) lead migrants to be men. By contrast, the relative shares of tied, lead, and equal migrants across regions of origins (European Union-28, post-Soviet states, and rest of the world) are almost equally distributed. Finally, the partners of 935 respondents have also been surveyed by the SOEP. Hence, their responses on who was the decisive force can be compared with their partner's responses. This comparison is relevant as respondents' accounts are retrospective and might thus be clouded by experiences made since migration. Looking at whether the responses of both partners match thus hints at the extent to which retrospectivity influenced response behavior. Overall, 80% (748 respondents) answered consistently with their partners, identifying, for instance, as tied migrants when their partner reported to have dominated the decision. Thus, most respondents answered consistently with their partner mitigating the concern of retrospectivity. I retain inconsistent responses as these constitute a subjective account of the decision, which might still have impacted employment behavior.

I further control for a range of individual-level variables. These include the respondent's age, an indicator of whether the respondent has children aged 18 or younger (1 = "yes," 0 = "no") and a categorical variable recording German language skills (1 = "poor," 2 = "medium," 3 = "good"). Respondents self-assess their abilities to speak, read, and write German before migration on a scale from 1 (*very well*) to 5 (n*ot at all*). I reverse the item scales, determine Cronbach's α for the items ($\alpha = .94$), and calculate the associated rounded score. Then I group the responses "not at all" and "badly" to 1 (*poor German*) and "very well" and "well" to 3 (*good German*). Although this score cannot grasp language acquisition following migration, it is still relevant for my analyses as these are concerned with employment around the time of immigration. Furthermore, I include the respondent's years of education from age 15 onward. Prior to that, immigrants' educational attainment is not surveyed by the

SOEP. However, this still guarantees an adequate representation of respondents' acquisition of education as the years of education since age 15 are indicative of individuals' highest educational degree but also allow for insights into potential retraining after migration. Finally, I include categorical variables for period of immigration (1 = "before 2000," 2 = "between 2000 and 2010," 3 = "from 2010 onward") and region of origin (1 = "European Union-28," 2 = "post-Soviet," 3 = "rest of the World").

Methods

I have annual pre- and postmigration employment information and aim to identify the impact of being a tied versus lead or equal migrant on the probability to be employed (Hypothesis 1). I thus specify a difference-in-difference model. Difference-in-difference models compare the average outcomes of a treatment versus control group over time beyond the onset of a treatment. For this study, tied migrants form the treatment group and lead and equal migrants the two control groups. Assignment to treatment is thus non-random: Some individuals are more likely than others to be tied movers. The treatment onset is the year of immigration. For all difference-in-difference estimations in this study, I restrict the sample to range from 5 years before to 5 years after every respondent's immigration. I report the model as a linear probability regression. The model takes the following form:

$$y_{it} = \zeta_i + \eta_t + \beta T_{it} + \delta X_{it} + u_{it} \qquad (4)$$

where y_{it} is the binary dependent variable equal to one if individual i is employed in calendar year t, and ζ_i are individual fixed effects. Furthermore, η_t are year fixed effects that control for economic shocks. T_{it} is the treatment dummy equal to one for tied migrants from their year of immigration onward. Thus, T_{it} is equal to zero for lead and equal migrants at any time as well as for tied migrants before migration. Next, X_{it} is a set of time-varying covariates (age, education, German skills before migration, and an indicator of whether the respondent has children). Respondents' German skills are interacted with a postmigration dummy variable as knowledge of German is highly relevant for employment in Germany, yet less so in countries of origin. Time-constant covariates are not included due to their collinearity with individual fixed effects. In general, I include covariates and individual fixed effects to take the non-random selection into treatment into account. Finally, u_{it} is the error term. Following Bertrand, Duflo, and Mullainathan (2004), I cluster the error term on the individual level. To identify gender-specific effects, I run separate regressions by sex (Hypothesis 3).

In a further specification of Equation 4, I examine the treatment effect over time by including its leads and lags. I add treatment indicators for the 3 years before immigration, the year of immigration, the first year after immigration, and from the second year after immigration onward. The first five treatment indicators are only equal to one for tied migrants in the respective year, whereas the last indicator is equal to one for tied migrants in the second year after immigration as well as in all following years. Hence, I modify Equation 4 as follows:

$$y_{it} = \zeta_i + \eta_t + \sum_{j=-3}^{2} \beta_j T_{it}(t = g + j)$$
$$+ \delta X_{it} + u_{it} \qquad (5)$$

where g is the immigration year, and all other variables are defined as before. I include these treatment indicators for two reasons. First, I include treatment leads to simulate a pseudo-treatment before the actual treatment onset. This is to test the common time trend assumption, which is necessary for identification in difference-in-difference estimations. The common time trend assumption states that in the absence of treatment, the difference between the treatment and control group is fixed over time. As the time before immigration constitutes a period absent of treatment, insignificant estimates of treatment leads provide evidence for common time trends (Autor, 2003). Second, I include treatment lags to observe the behavior of the effect over time. This is to see whether the effect of being a tied migrant accelerates, reverts, or stabilizes over time. For instance, if a negative treatment effect shows in the first year after immigration but is insignificant thereafter, it can be concluded that the employment gap between tied and lead or equal migrants only briefly widened after migration.

I conduct several sensitivity analyses. First, as non-response could drive the results, I fit the same set of models for those respondents in the sample (390 men and 412 women) who

reported their employment status for each year of the observation period—that is, for the 5 years before, the year of, and the 5 years after immigration to Germany. Second, as touched on before, some couples provided inconsistent answers to the question on who was the driving force. I run a robustness check with consistent accounts (372 men and 376 women). Third, migration might lead to union dissolution. Hence, I re-run the regressions for those respondents (656 men and 710 women) who did not separate from their partner until first surveyed. Fourth, family migrants who immigrated between 2004 and 2013 were only allowed to work if their partner was (see Table 2). Only few residence titles prohibited employment of principal migrants and these (e.g., asylum seekers) cannot be identified from the SOEP. I thus first include those family migrants, yet exclude the ones whose partner's right to work is unclear (690 men and 705 women). In a final robustness check, I retain the respondents who were at least once employed in Germany (667 men and 569 women).

Furthermore, the annual post-migration employment data allow for identifying when respondents took up their first job. Thus, it is possible to test whether the time to first employment differs significantly between migrant types (Hypothesis 2). For this, I restrict the sample to cover all years from the year of immigration onward and use Cox proportional hazards regressions.

$$h(t_1 \mid x_i) = h_0(t_1) \, \exp(\beta_1 TM_i + \delta X_i) \quad (6)$$

where $h(t_1 \mid x_i)$ is the hazard rate for individual i to take up employment in year t_1 after migration. $h_0(t_1)$ is the baseline hazard, which is not given any particular parameterization in the Cox model. Furthermore, TM_i is a categorical variable recording whether the respondent is a tied, lead, or equal migrant. Finally, X_i is a set of time-constant control variables (respondent's age, education, German language skills before immigration, region of origin, immigration period and an indicator of whether the respondent has children). These covariates are set constant to the immigration year as this marks the start of the employment search, and respondents' characteristics at this point should be most relevant. I perform the same robustness checks

as before: I exclude respondents with inconsistent accounts who separated before being surveyed and who immigrated as family migrants before 2013. To identify gender-specific effects, I run separate regressions by sex (Hypothesis 4).

Results

Employment Probability

Table 3 summarizes the average socioeconomic characteristics of tied, lead, and equal migrants by gender in their year of immigration. Table 3 suggests that at immigration, male tied, lead, and equal migrants were comparable in terms of their age, education, and German skills as well as in their likelihood of having children. In contrast, there were several significant differences between female tied and lead migrants in their immigration year. Table 3 demonstrates that female lead migrants were, on average, older and less educated than tied migrants. Furthermore, female lead migrants had more profound knowledge of German relative to tied migrants. By contrast, female tied and equal migrants were again more comparable, with the only significant difference being better German language skills among equal migrants. Finally, Table 3 also displays the first outcome of interest: employment. It illustrates that the men of any migrant type were significantly more likely to be employed than women. Furthermore, male and female lead and equal migrants were more likely to be employed than tied migrants. This gap was more pronounced among male than female respondents in the sample.

Table 4 sheds further light on the outcome of interest. It presents unadjusted difference-in-difference estimates and thus compares differences in mean employment between tied, lead, and equal migrants by gender for before and after immigration. As the number of observations per respondent differs due to partial item non-response, I calculated the mean employment in Table 4 by first computing every respondent's mean employment for before and after migration separately and by then taking the average over the resulting individual means. Three features stood out. First, female lead and equal migrants were significantly more likely to be employed before migration than tied migrants. This pattern did not show among male respondents. However, the pattern held

Table 3. *Mean Socioeconomic Characteristics by Gender and Migrant Type at Immigration*

Variables	Males			Females		
	Tied	Lead	Equal	Tied	Lead	Equal
Employment[a]	0.77	0.92[d]	0.87[d]	0.58	0.70[d]	0.66[d]
	(0.42)	(0.28)	(0.34)	(0.50)	(0.46)	(0.47)
Age	34.86	34.28	35.58	33.15	34.83[d]	33.67
	(8.64)	(8.27)	(8.54)	(7.48)	(8.70)	(8.17)
Education	4.86	5.05	4.83	5.58	4.42[d]	5.42
	(3.80)	(3.87)	(4.04)	(3.75)	(3.31)	(4.06)
Children[b]	0.59	0.62	0.66	0.60	0.65	0.62
	(0.49)	(0.49)	(0.47)	(0.49)	(0.48)	(0.49)
German skills[c]	1.59	1.58	1.58	1.52	1.87[d]	1.63[d]
	(0.65)	(0.68)	(0.64)	(0.67)	(0.80)	(0.70)
N	174	239	307	259	168	338

Note: Standard errors in parentheses.

[a]Employment: 0 = "unemployed/economically inactive," 1 = "employed." [b]Children: 0 = "no," 1 = "yes." [c]German skills: 1 = "poor," 2 = "medium," 3 = "good." [d]Means differ from the mean of tied migrants at $p < .05$.

Table 4. *Mean Employment[a] by Gender and Migrant Type Before and After Immigration*

Migrant type	Before immigration		After immigration		After − Before	
	Males	Females	Males	Females	Males	Females
Lead	0.87	0.72	0.93	0.66	0.06[***]	−0.06[***]
	(0.28)	(0.38)	(0.19)	(0.37)	(0.01)	(0.02)
Equal	0.86	0.66	0.83	0.57	−0.03[**]	−0.09[***]
	(0.29)	(0.42)	(0.29)	(0.39)	(0.01)	(0.01)
Tied	0.88	0.62	0.81	0.57	−0.07[***]	−0.05[***]
	(0.27)	(0.42)	(0.31)	(0.37)	(0.01)	(0.02)
Lead − Tied	−0.01	0.10[***]	0.12[***]	0.09[***]	0.13[***]	−0.01[***]
	(0.01)	(0.02)	(0.01)	(0.02)	(0.00)	(0.00)
Equal − Tied	−0.02	0.04[*]	0.02	0.00	0.04[***]	−0.04[***]
	(0.01)	(0.02)	(0.01)	(0.01)	(0.00)	(0.00)
N	3,595	3,810	3,617	3,862	7,212	7,672

Note: Standard errors in parentheses.

[a]Employment: 0 = "unemployed/economically inactive," 1 = "employed."

[*]$p < .05$, [**]$p < .01$, [***]$p < .001$.

after immigration with male and female lead migrants being significantly more likely to be employed when compared with tied movers. In contrast, there were no notable differences between tied and equal migrants subsequent to migration. Second, male lead migrants were the only group more likely to be employed after migration. In contrast, the women of all migrant types were less likely to be employed following migration. Finally, Table 4 shows that there was a post-migration employment gap between male tied migrants and their two control groups. The opposite was true for women.

Yet, the interpretation of these effects is problematic as observable and unobservable factors could drive them. Table 5 addresses this issue. Table 5 presents the effect of being a tied migrant on employment with separate regressions by sex. Separate regressions are also run for the two control groups. Turning first to the results for the entire sample, it becomes apparent that tied migrants were 10% less likely to be employed after immigration when compared with lead migrants. This effect held across the sexes (Models 3 and 5). Yet, whereas male tied migrants had a significantly lower employment probability (15%) when compared with male lead

Table 5. Model Estimates for Employment (y = 1, Employed)

Variables	All				Males				Females			
	1		2		3		4		5		6	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Tied vs. Lead migrant	−0.10***	0.02			−0.15***	0.03			−0.05	0.03		
Tied vs. Equal migrant			−0.03	0.02			−0.08*	0.03			0.00	0.03
Age												
Ref.:18–30												
31–40	0.17***	0.02	0.13***	0.02	0.17***	0.03	0.14***	0.03	0.16***	0.04	0.13***	0.03
41–65	0.14***	0.04	0.10*	0.04	0.09*	0.04	0.09*	0.04	0.16*	0.06	0.08	0.06
German skills												
Ref.: Poor German												
Medium German	−0.04	0.03	−0.08***	0.02	0.01	0.03	−0.03	0.03	−0.09*	0.04	−0.13***	0.04
Good German	−0.00	0.04	0.01	0.04	0.08	0.05	0.04	0.05	−0.06	0.05	0.00	0.06
Education years												
Ref.: 0–3												
4–6	0.01	0.11	−0.09	0.14	0.07	0.11	0.08	0.13	−0.00	0.19	−0.50***	0.12
>6	0.25	0.13	0.24	0.16	0.40*	0.15	0.59***	0.15	0.21	0.21	−0.25	0.15
Children												
Ref.: No												
Yes	−0.10***	0.02	−0.12***	0.02	0.01	0.02	0.02	0.02	−0.21***	0.03	−0.23***	0.03
N	8,500		10,716		4,194		4,771		4,304		5,944	
Individuals	840		1,078		413		481		427		597	
Individual FE	Yes		Yes		Yes		Yes		Yes		Yes	
Year FE	Yes		Yes		Yes		Yes		Yes		Yes	
Adjusted R^2	0.44		0.43		0.38		0.35		0.41		0.42	

Note: Standard errors clustered on individual level. The directions of the treatment effects were confirmed to hold in probit models. Ref. = reference category; FE = fixed effects.
 *$p < .05$, **$p < .01$, ***$p < .001$.

FIGURE 1. MODEL ESTIMATES FOR EMPLOYMENT ($y = 1$, EMPLOYED), TREATMENT LEADS AND LAGS.
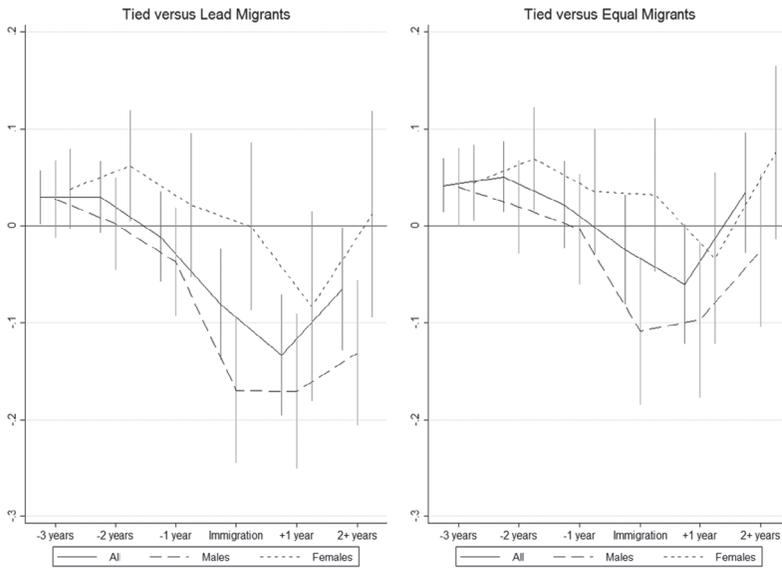
Note: Displayed with 95% confidence intervals.

migrants after migration, this difference, though negative, was not significant for women. By contrast, employment differences between tied and equal migrants were less pronounced. The effect of being a tied versus equal migrant was negative yet not significant for the entire sample or for women. Male tied migrants were 8% less likely to be employed when compared with equal migrants after migration. These results for the male and female subsamples remained virtually unchanged in all robustness checks (tables available upon request). Briefly turning to the covariates in Table 5, their direction was mostly as theoretically expected. Surprisingly, there was a negative effect of having medium German skills among women. This can, however, be ascribed to the variable's self-assessed nature. Also, there was a sizable, negative education effect (Model 6). This could either point to a dynamic in which highly qualified women find it particularly difficult to be employed or to retraining following migration given unemployment or economic inactivity.

Figure 1 presents the basic specification augmented with treatment leads and lags and plots the corresponding estimates. Turning first to the results in which lead migrants form the control group (left graph), it is crucial to note that the coefficients of the treatment leads were close to

zero. Thus, there was little evidence for anticipatory responses before the treatment onset, suggesting parallel time trends. Furthermore, considering the results for the entire sample, it became apparent that the treatment effect mean reverted over time: In the immigration year, tied migrants were 8% less likely to be employed when compared with lead migrants. This effect amplified in the first year after migration when it rose to 13%. Following this, the effect decreased in size and significance, to 7% and 5%, respectively, from the second year after migration onward. Thus, the negative tied migrant effect persisted over time and was significant throughout. Yet, the robustness checks showed the negative effect of being a tied versus lead migrant in the entire sample to disappear from the second year after migration onward. All of the other results remained virtually unchanged. Turning to the results for women, Figure 1 does not show significant differences between tied and lead immigrants. This result was confirmed throughout all robustness checks except for when excluding all respondents with nonresponse. Then, female tied migrants were 15% less likely to be employed when compared with lead migrants in the first year after immigration. Overall, there was no significant difference

FIGURE 2. TRANSITION INTO FIRST EMPLOYMENT BY GENDER AND MIGRANT TYPE.
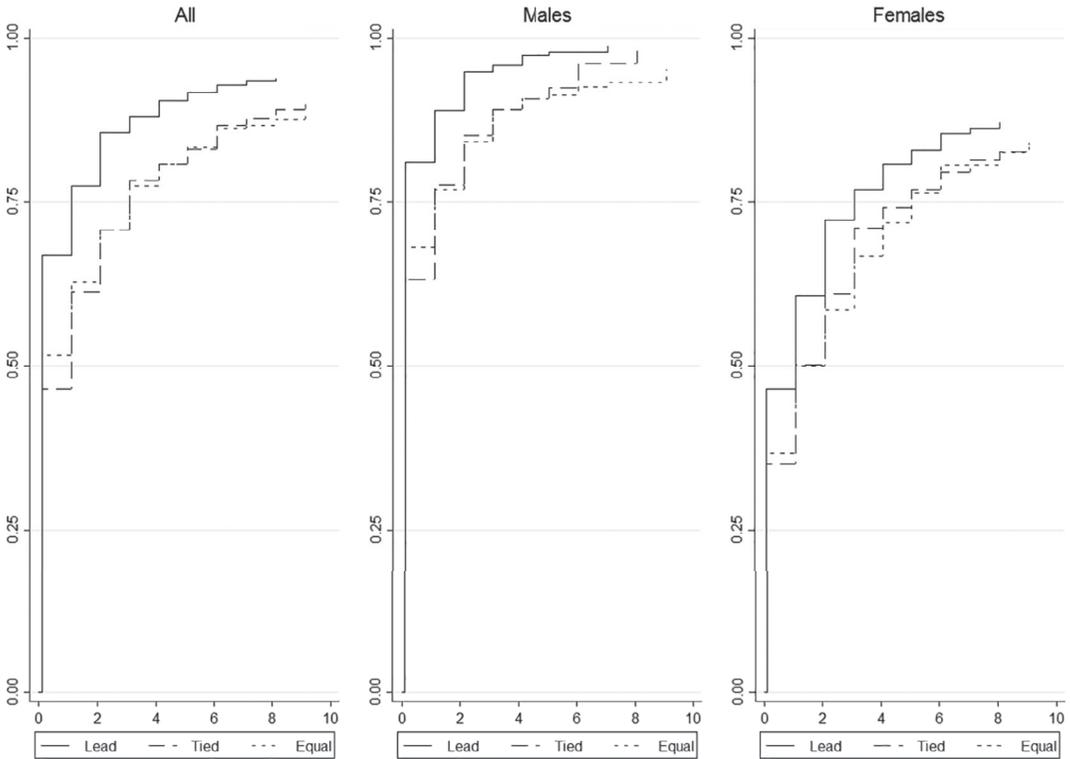
Note: Observation time restricted to 10 years in this figure.

between female tied and lead migrants following migration. The opposite held true for men: The decrease in the employment probability of tied versus lead movers amounted to 17% in the year of and the first year after migration and decreased only slightly thereafter, to 13%, from the second year after and onward. Hence, male tied movers were permanently disadvantaged relative to lead migrants. These effects remained unchanged in their direction and significance in all robustness checks, although slightly increasing in size when excluding respondents with non-response. Thus, there was evidence for non-random non-response when reporting employment. In summary, Hypothesis 1 was accepted, yet Hypothesis 3 was rejected for tied versus lead movers as the effect showed to be greater among men than women in the sample. The second graph in Figure 1 shows the basic specification of being a tied versus equal migrant augmented with treatment leads and lags. As is evident from Figure 1, there were significant differences between tied and

equal migrants 3 years before migration. This challenged the common time trend assumption, and the estimates should hence be interpreted as correlations. As before, there were no significant differences between tied and equal migrants for the entire sample as well as the sample of women. Yet, male tied migrants were 11% less likely to be employed when compared with equal migrants in the immigration year. This estimate decreased to 10% and 5% significance in the year after moving. Thereafter, the effect was close to zero and insignificant. This effect also persisted across the range of robustness checks. Hence, Hypothesis 1 was rejected: Tied migrants did not have a lower employment probability relative to equal migrants. Yet, this effect showed for men, rejecting Hypothesis 3.

Time to First Employment

Figure 2 presents the transitions into first employment by gender and type of migrant using Kaplan-Meier hazard estimates. Three

features stand out. First, Figure 2 highlights that a large share of respondents in the sample and male respondents, in particular, were immediately employed upon their arrival in Germany. More than 50% of the respondents found their first employer only 1 year after migration. Second, there was a profound gender difference in the time to first employment. Relatively more men than women secured a job in their immigration year. Yet, further, this difference also persisted over time. Even 10 years after immigration to Germany, when almost all male respondents in the sample had accessed the German labor market for the first time, a large share of female respondents had not yet done so. Overall, 41 male and 152 female respondents in the sample did not access the German labor market within the observational period. Among those that did access the labor market, most (72%) were full-time employed in their first job. Yet, there was a stark imbalance in full- versus part-time employment across genders: Whereas merely 10% of men were part-time employed in their first job upon arrival, this was true for 47% of the women.

Finally, Figure 2 displays separate Kaplan-Meier estimates by migrant type. Turning to the first graph in Figure 2, the results for the entire sample of respondents, it becomes evident that lead migrants had a lower probability to survive in unemployment relative to tied migrants. Overall, among those migrants who were not immediately employed, the median time of unemployment was equal to 2 years for lead migrants, whereas it amounted to 3 years for tied migrants. This difference in the survival times between lead and tied migrants can further be observed in the subsample of men: Approximately 95% of male lead migrants entered the German labor market as of the fifth year after migration, whereas only around 80% of tied migrants had found a first employer by then. Similarly, the difference in the time to first employment was pronounced between female lead and tied migrants. In contrast, the difference in the time to first employment was hardly visible between tied and equal migrants.

Table 6 presents the effect of being a tied versus lead or equal migrant, separately by gender, on the time to first employment. As can be inferred from Table 6, being a tied versus lead migrant was associated with an increased risk of a prolonged period of unemployment when considering the entire sample (Column 1). In fact,

the risk of unemployment was 32% ($e^{0.28}$) higher for tied than for lead migrants with this estimate being significant at 0.1%.

This effect did not persist across the sexes (see Columns 3 and 5): Although pointing to the same direction as the result for the entire sample, the subsample estimates were insignificant. Also, no significant differences showed between tied and equal migrants. Turning briefly to the covariates in Table 6, their direction was as theoretically expected. These results also persisted across the range of robustness checks. Furthermore, when including prior experiences of unemployment as an additional control, the key results remained unchanged. Also, the effects persisted yet increased in size when considering time to first full-time employment. Then, it further showed that female lead migrants were quicker in accessing full-time jobs than female tied movers, which might hint at diverging preferences across migrant types. Finally, I also compared the time to first employment within couples, looking at which partner first found a job in Germany. I performed this analysis on the sample of individuals who had not experienced union dissolution since their migration to Germany. This analysis also confirmed the results from before: Lead and equal migrants were more likely to first find a job or to find a job at the same time compared to their partner with smaller and less significant effects when considering equal immigrants. Furthermore, whereas the results in the male sample were large and significant, this was not true for the female subsample (tables available upon request). Hence, overall, Hypothesis 2 was rejected for equal, yet, accepted for lead migrants.

DISCUSSION

This study analyzed the employment consequences of tied migration to Germany. First, I examined the hypothesis that tied, relative to lead and equal immigrants, have a lower employment probability and take more time to find a first job upon their arrival in Germany. Drawing on gender role theory, I further hypothesized the tied migrant experience to be more severe for women than for men. With this, I first examined the implications of individual preferences in couples' international migration decisions.

As part of the analysis, I applied difference-in-difference and survival analysis regression techniques to data from the SOEP

Table 6. *Model Estimates for Time to First Employment*

Variables	All		Males		Females	
	Estimate	SE	Estimate	SE	Estimate	SE
Migrant type						
Ref.: Tied migrant						
Lead migrant	0.28***	0.07	0.12	0.10	0.22	0.11
Equal migrant	0.01	0.07	−0.04	0.10	−0.02	0.10
Age at immigration						
Ref.: 18–30						
31–40	0.08	0.07	−0.05	0.09	0.13	0.09
41–65	−0.09	0.08	−0.31**	0.11	0.02	0.12
German skills						
Ref.: Poor German						
Medium German	0.12	0.06	0.05	0.08	0.14	0.10
Good German	0.14	0.09	0.15	0.14	0.24	0.12
Education years						
Ref.: 0–3						
4–6	0.07	0.07	0.07	0.10	0.05	0.11
>6	0.09	0.08	0.04	0.11	0.15	0.11
Children						
Ref.: No						
Yes	−0.08	0.06	−0.01	0.09	−0.14	0.09
Immigration period						
Ref.: Before 2000						
2000–2010	−0.20*	0.08	−0.19	0.12	−0.19	0.12
From 2010	−0.05	0.09	−0.17	0.12	0.05	0.14
Region of origin						
Ref.: EU-28						
Post-Soviet states	−0.34***	0.08	−0.42***	0.11	−0.31**	0.11
Rest of the world	−0.38***	0.08	−0.17	0.11	−0.64***	0.13
N	1,485		720		765	
Log likelihood	−8,715		−4,144		−3,683	

Note: EU = European Union; Ref. = reference category.
*$p < .05$, **$p < .01$, ***$p < .001$.

and ran regressions for the entire sample as well as separately for subsamples of men and women. I restricted the dataset to working-age migrants (excluding refugees, tourists, and students), who immigrated to Germany after 1982, who were in a relationship prior and subsequent to the move, and who were legally allowed to immediately access the German labor market. Based on this setting, the results from the survival analysis give insights into the correlation between migrant type and transition into first employment, whereas the difference-in-difference model, although applied to a non-experimental setting, provide a strong estimate given that I control for respondents' fixed and time-varying characteristics and examine pre-treatment dynamics.

Turning to the results for the entire sample first, the results showed that tied, relative to lead and equal immigrants, are less likely to be employed subsequent to their immigration to Germany. Yet, whereas the post-migration difference between tied and lead immigrants was revealed to be large and significant, the employment gap between tied and equal migrants, although negative, was close to zero and insignificant. The larger effect for tied versus lead compared with tied versus equal migrants mirrored in the time to first employment: Lead movers entered the German labor market significantly closer to their immigration when compared with equal and tied migrants. Hence, this study's first two hypotheses were confirmed with smaller and insignificant effects

for equal versus tied migrants. These results can be explained within Mincer's (1978) model: Whereas lead movers need to compensate for expected losses of tied movers when deciding on migration, small expected gains for equal movers are already sufficient to decide for it. Thus, lead movers should, on average, have higher returns than equal movers.

Furthermore, the gendered extension to Mincer's theory showed that, in theory, the tied migrant experience should differ between men and women. Specifically, given the higher weighting of males' returns, the difference between female lead or equal relative to tied migrants should be larger than when drawing the same comparison among male respondents. Indeed, Taylor (2007) showed this hypothesis to hold for couples migrating within Great Britain. In contrast, this study's results showed the opposite: overall, the employment gap between lead and equal relative to tied migrants was larger and longer lasting among men than among women. Still, lead migrants of both sexes were more likely to be employed when compared with tied movers following immigration. The same held for equal relative to tied movers, yet, to a lesser extent in terms of estimate size. Again, this was mirrored in respondents' time to first employment: independent of their sex, lead movers entered the labor market quicker than other migrant types.,

There are two possible explanations for this surprising result. First, as outlined in the introduction, a phenomenon observed in internal as well as international couple migration is family reunification. Rather than migrating simultaneously, couples frequently move sequentially and several years apart (Green et al., 1999; OECD, 2017). Yet, whereas family separation within a country allows for long-distance commuting in a culturally, legally, and linguistically rather homogenous geographic context, family separation across national borders hinders frequent contacts and visits and exposes individuals to an unfamiliar environment. The more time that passes between the immigration of the first versus the second partner, the more time the first partner has to adjust to the new country of residence and, for instance, to build a network or learn the country's language. Once immigrated, the second partner can draw on this country-specific knowledge. Drawing on gender role theory and traditional gender role beliefs, in particular, it can be hypothesized that men are more likely than women to migrate at the same time as their partners and will thus have less country-specific knowledge available. In fact, there is some evidence supporting this hypothesis: For 362 tied migrants for whom I have information on their partner's year of immigration, I find that 52% of the female tied migrants moved more than 1 year after their partner, whereas merely 28% of the men did. Hence, relatively more men come at the same time or before their partners. Descriptive evidence in Table 4 further suggested that male tied migrants were less likely to be employed when compared with their female counterparts. Time to family reunification could thus explain the relatively larger employment gap that male tied compared with female tied migrants experience.

Second, distinct migration motifs across the sexes may offer an explanation. This study considers respondents' labor market integration as an outcome of circumstances in couples' migration decision. As outlined previously, employment is highly desirable for migrants because it allows for material well-being and financial security as well as for establishing new social contacts (OECD, 2005). Furthermore, employment, unemployment, and economic inactivity of partnered individuals ultimately have far-reaching implications for the household's division of labor and family life as well as its considerations in future decisions. Thus, employment is a crucial outcome to consider that has profound consequences. Table 5 illustrated that men adopt the employment perspective when deciding on migration: Male lead and equal migrants are more likely to be employed relative to tied migrants following migration. This result also holds when excluding all respondents who were never employed in Germany. Hence, circumstances in couples' international migration decisions are decisive for males' employment trajectories in Germany. By contrast, the difference in the probability to be employed between female lead and equal relative to tied migrants did not change significantly after migration and when excluding those female respondents who have never been employed in Germany. Thus, females' individual preferences in decision-making do not seem to affect their employment. Table 4 further showed that women of any migrant type are significantly less likely to be employed after migration. The disadvantageous labor market position of immigrant women relative to men

has been documented before (see, for instance, Raijman and Semyonov, 1997). One explanation for this is that women have different reasons for migrating than men. It is, for instance, conceivable that they migrate to extend their children's education or to raise their partner's income so that they themselves can focus on care duties, which can be assumed to be particularly prevalent after migration to a new country. Exploring these motifs and thereby looking into the broader implications of tied migration is a promising avenue for future research. In the course of this, it could further be interesting to consider indicators of job quality, such as type of occupation or hours worked.

Overall, this study documents that dynamics in couples' decision making processes have far reaching consequences. Furthermore, it showed that this study's empirical evidence on the employment consequences of tied, lead, and equal immigration can be contextualized within Mincer's (1978) tied migration theory, yet, merely when considering the entire sample. By contrast, when disaggregating the sample by gender, it becomes evident that, even when adding a gender-specific component to Mincer's ideas, further gender-specific processes between taking the decision to migrate and its consequences are at work that ultimately reinforce or mitigate the effect of decision-making. Such processes were previously not uncovered when analyzing internal migration. Yet, in international migration, family reunification and migration motifs might be such processes and are thus interesting avenues for future research.

Finally, descriptive evidence showed that relatively more women than men are tied migrants (34% of female vs. 24% of male respondents). Thus, there seems to be a gender imbalance in the selection into tied migration that is consistent with gender role theory. Specifically, the probability of being a tied migrant is greater for women; a result that is also consistent with previous studies (see, for instance, Bielby & Bielby, 1992; Shihadeh, 1991; Tenn, 2010). This cannot be further investigated in this study as it is limited in the sense that non-migrants are not observed. Still, it can be hypothesized that male tied as well as female lead migrants in this study are a selective sample of respondents.

Another limitation of this study is that I cannot observe return migration that might have occurred since immigration. Lead, tied, and equal migrants, whose experiences in Germany

did not live up to their expectations, might have returned to their country of origin before they could enter the migration samples of the SOEP. This would introduce a selection bias into the sample of migrants considered in this study that could potentially influence the results obtained. Looking at the subsample of respondents who immigrated to Germany after 2013 and whose return migration might hence be recorded by the SOEP, I find eight respondents to have left for another country. Three of those respondents are tied migrants, two are lead migrants, and three are equal migrants, leaving it unclear how return migration might influence the results. Unfortunately, this cannot be further investigated given that the SOEP did not sample individuals directly after their immigration but rather sampled migrants who were residing in Germany in 2013 and immigrated some time before. Finally, the SOEP only asks partnered adults to assess their role in the migration decision. By contrast, other family members such as children or parents and their potential impact are not assessed. Although the couple is the relevant unit for decision making in most families, this is not necessarily always true. However, this can unfortunately not be observed as part of this study.

Despite these limitations, this study's results still greatly advance the existing literature. This study is the first to depict decisions on international couple migration and their significance for employment. This approach uncovered highly interesting gender-specific dynamics that point to promising avenues for future research.

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