IZA DP No. 7881

Migration, Friendship Ties and Cultural Assimilation

Giovanni Facchini
Eleonora Patacchini
Max F. Steinhardt

January 2014

Migration, Friendship Ties and Cultural Assimilation

Giovanni Facchini
*University of Nottingham, University of Milan,
CEPR, CESifo, GEP, IZA and LdA*

Eleonora Patacchini
*Syracuse University,
CEPR and IZA*

Max F. Steinhardt
*Helmut Schmidt University,
HWWI, LdA and CELSI*

ABSTRACT

Migration, Friendship Ties and Cultural Assimilation

Using novel information from the German Socio-Economic Panel for the period 1996-2011, we document that migrants with a German friend are more similar to natives than those without a local companion along several important dimensions, including engagement in social activities, concerns about the economy, interest in politics and broad policy issues like the environment, crime and xenophobia. When looking at the determinants of friendship acquisition, we find that the acquisition of a new job is the cause (rather than the product) of social network variations. Other factors driving the acquisition of a native friend include the number of years the migrant has spent in the country, the birth of a child, residential mobility and additional education in the host country.

Corresponding author:

Giovanni Facchini
School of Economics
University of Nottingham
University Park
Nottingham NG7 2RD
United Kingdom
E-mail: giovanni.facchini@nottingham.ac.uk

1 Introduction

Immigrant assimilation – a process of convergence of immigrant behavioral and attitudinal outcomes to the outcomes of the native-born – is a complex phenomenon. It may occur along some dimensions (language, citizenship acquisition, or employment), but not necessarily along others (religiosity). It may also be very heterogeneous across destinations, origins, or both. Assimilation is mostly a one-way, absorptive, process, whereas integration also reflects the extent to which receiving societies are willing to engage with immigrants, accept them, and provide them with equal rights and opportunities to express their behaviors and preferences along with the native-born. As such, integration is mostly framed by specific measures and policies adopted by the destination country which affect the inclusion of immigrants into different life dimensions. A good understanding of assimilation processes is thus crucial to design effective integration policies.

The political and academic debate surrounding assimilation and integration has a long-standing tradition in the United States, while attention to immigration and other minority-related concerns is relatively novel in Europe. In particular, most of the literature focuses on the economic impact of immigration (see for example, Dustmann et al. 2005; Manacorda et al, 2012) and the issue of "identity" has been investigated in relation to labor market outcomes (Mason 2004; Pendakur and Pendakur 2005; Nekby and Rodin 2007; Zimmermann 2007; Constant and Zimmermann 2008; Bisin at al. 2010, Battu and Zenou 2010). The key question in these studies is whether immigrants that identify strongly with the host country perform better in the labor market than immigrants that do not. Still, several important issues have not been explored in the European context. In particular, do immigrants identify themselves with the culture, values and beliefs of the country which they have chosen as their new home, or with beliefs and values of their origin country? Furthermore, what are the factors shaping cultural assimilation patterns? Modood et al. (1997) and Manning and Roy (2010) investigate some of these aspects. Both studies (as many others focusing on the US) are based on subjective measures of cultural assimilation.[1] Vidgor (2013) takes instead a broader perspective, using objective indicators to measure the extent of *economic*, *cultural* and *civic* assimilation in the United States. In this paper, we follow this approach and measure cultural assimilation using information on the friendship patterns between native and migrants.

According to Gordon's structural assimilation theory, "the large-scale entry into the cliques,

---

[1]Modood et al. (1997) use the information contained in the UK Fourth National Survey of Ethnic Minorities collected in 1993/94 concerning the extent of agreement to the following statements "In many ways I think of myself as British" and "In many ways I think of myself as ....[Respondent's ethnic group]". Manning and Roy (2010) use instead various data sources, and in particular the following question asked in the UK Labour Force Survey: "What do you consider your national identity to be?".

clubs, and institutions of the host society is the keystone in the arch of assimilation" (Gordon, 1964).[2] Exploiting US data, Patacchini and Zenou (2006) use the racial choice of friends as a measure of ethnic identity and look at its consequences on education outcomes.[3] Using data from the European Community Household Panel, De Palo, Faini and Venturini (2006) study instead the assimilation of immigrants in the host country society by analyzing a question on the number of interactions between the respondent and his/her neighbor, as related to the number of interactions with friends or relatives not living with them. Their results suggest that non-EU migrants tend to socialize less with natives, even after controlling for individual characteristics. Second, they find that migrants' behavior tends to slowly assimilate to that of natives. Third, they suggest that education has a significant impact on the type of social activities undertaken by the individuals. More-educated people tend to relate somewhat less with close neighbors, but socialize more intensively with the broader community. Our analysis is also based on eliciting preferences from individual immigrants but has a broader scope – we tackle several additional dimensions of social and cultural assimilation and focus on the role of friendships with natives in shaping preferences.

Our investigation is made possible by the use of the unique information contained in the recent waves of the German Socio-Economic Panel (GSOEP) for the years 1996 to 2011. The survey over-samples the resident immigrant population and contains extensive information on various dimensions of ethnic identity and preferences. We exploit three specific features of this data: *(i)* the detailed information on cultural issues - including crime, environmental protection and the political domain - that are salient to the native population; *(ii)* the friendship roster, that allows us to distinguish German and non-German friends; *(iii)* the longitudinal dimension, which allows us to both control for individual fixed effects and identify the causal link between friendship formation and important life-course events such as education attainment, employment, marriage, childbirth and residential mobility.

We begin our analysis by discussing the extent to which friendship with natives can be considered a measure of cultural assimilation by comparing attitudes between natives and migrants with or without German friends. Our descriptive evidence shows that friendship with natives tends to result in greater "similarity" with them along several important dimensions, ranging from engagement in social activities, to concern about the respondent's own economic condition, to salient policy issues and interest in politics. These findings continue to hold when we condition on a vari-

---

[2]In a similar vein, there is a literature that uses intermarriage as a measure of social assimilation (Meng and Gregory, 2005 ; Chiswick and Houseworth, 2011; Bisin et al., 2009b; Furtado and Theodoropoulos, 2011)

[3]In an interesting paper, Austen-Smith and Fryer (2005) show that there is tension faced by ethnic minorities between signalling their type to the outside labor market and signalling their type to their peers: signals that induce high wages can be signals that induce peer rejection.

ety of individual characteristics, motivating the main analysis in the paper, which focuses on the factors that shape social networks ties in the host country. We consider foreign born individuals that do not have a German friend when they answer the question on friendship for the first time, and exploit the longitudinal dimension of our data to identify the predictors of a German friend acquisition, while controlling for individual time invariant unobservable characteristics. We also consider possible differences in terms of drivers for the first German friend or for further German friends, finding no substantial differences. Our analysis reveals that the acquisition of a German friend is influenced by the number of years the migrant has spent in Germany, the acquisition of a job, the birth of a new child, the relocation decisions, and most importantly whether he/she has acquired an additional degree in Germany. Different socio-demographic groups present interesting deviations from this general tendency. Among others, we do find that first generation migrants from Turkey, which are the largest migrant group in the German population with a direct migration background, are characterized by a flatter friendship acquisition pattern than migrants from Southern and Eastern Europe. In other words, holding everything else constant, on average Turkish migrants need to spend more years in Germany than South-and East-Europeans before they acquire a German friend. Moreover, getting a job seems to not affect the likelihood of having German friends for Turks, while it does matter for South-European migrants. This suggests that Turkish migrants are often working in segments of the labor market in which they do not have intense contacts with native Germans.

The paper unfolds as follows. Section 2 reviews the related literature, while highlighting the contribution of the paper. Section 3 describes the data, and Section 4 discusses the extent to which friendship with natives can be considered a measure of cultural assimilation. We present our main results on the determinants of friendship formation in Section 5. Section 6 reproduces the analysis for different sub-samples of the population. Section 7 concludes.

2 Related literature

This paper contributes to two strands of literature.

Migration and cultural assimilation.

Several recent economic approaches have incorporated features coming from the psychological and sociological literature (e.g. Berry, 1980, 1984, 1997) . Building on evolutionary models of cultural transmission, Bisin and Verdier (2000, 2001) incorporate these issues to discuss the incentives associated to cultural transmission dynamics and the circumstances leading to a tendency of cultural homogeneity or the maintenance of cultural diversity. More specifically, cultural transmission comes as the result of the interaction between purposeful socialization decisions inside the

family ("direct vertical socialization") and indirect socialization processes like social imitation and learning from the peers ("oblique and horizontal socialization").[4] Empirical tests of such theories are extremely scarce, chiefly due to the scarcity of data. Also analyzing Germany, Casey and Dustmann (2010) study the formation of identity with home and host countries and the association between both identities and labor market outcomes. They exploit the longitudinal dimension of the GSOEP to study the intergenerational transmission of identity from a generation to the next (vertical channel), finding a strong transmission of ethnic traits between parents and children. In this paper, we operationalize horizontal socialization as the ethnic composition of the immigrant's friendship network. Our descriptive analysis in Section 4 contributes to this literature by providing novel evidence about the importance of the social context in cultural assimilation patterns.

Social Networks and Network formation.

There is a large and growing literature documenting the importance of social networks for socio-economic outcomes (see the recent Handbook of Social Economics, Benhabib et al. (2011)), including immigrants' labor market outcomes (see for example Nekby and Rodin (2007); Pendakur and Pendakur (2005); Patacchini and Zenou (2012); Frijters, Shields, and Price (2005) and Battu, Seaman, and Zenou (2011)). The causal effect of networks is, however, difficult to assess. The main difficulties faced by most of the existing studies are reverse causality issues and omitted variables bias. Data on social networks are difficult to find and most of the existing studies are cross-sectional analyses. One potential issue is that the correlation between the number and/or quality of social contacts and the probabilityof finding a job is simply driven by the fact that the social contacts change because an individual finds a job. Further, the presence of unmeasured factors could affect both social group formation and outcomes. In short, very little is known about how economic and social networks form. As a result, little can be done to utilize social capital as a policy tool.[5] The few existing studies present an analysis of friendship ties restricted to specific contexts, such as a classroom, a school, or a college in the US (see for instance Mayer and Puller, 2008). To the best of our knowledge there are no studies that specifically investigate friendship choices of immigrants in Europe. Our paper contributes to this literature by presenting an analysis of migrants' friendship formation in the host country, where reverse causality is solved and individual unobserved heterogeneity is taken into account.

---

[4]There has been since a rapidly emerging economic literature on oppositional cultures-namely situations where minority individuals adopt cultural categorizations and prescriptions defined in opposition to the categorizations and prescriptions of the mainstream group, with corresponding social behaviours associated to significant economic costs at the individual level- (see for instance Bisin at el. (2009a), Battu, McDonald and Zenou (2007),

[5]See Alesina and Giuliano (2011) for an investigation of the imporatnce of social capital for policy purposes.

3 Data

The data used in our analysis come from the German Socio-Economic Panel (GSOEP) and covers the years 1996 to 2011. The GSOEP is a representative, individual-level longitudinal data set on persons, families, and households in Germany. Initiated in 1984, the GSOEP over–sampled the resident immigrant population. Out of the 6,000 households contained in the first wave of the study, 4,500 households had a German head, and 1,500 were instead led by a foreign-born individual. As of 2011, over twelve thousand households are surveyed, involving more than twenty thousand individuals. A main feature of the dataset is the provision of detailed information on respondents' immigration history like country of birth and ethnicity (see Wagner et al. (2007) for a detailed description).

The data are particularly suited for the purpose of our analysis because they contain repeated information on a boost sample of immigrants over a long period of time. In the first part of our analysis, in which we investigate the association between having a friendship with a native and migrant broad assimilation patterns, we will focus on all working-age individuals (i.e. between 18 and 64 years old) living in West Germany. In the second part of the paper, in which we analyse the determinants of friendship acquisition, we will then consider all first generation migrants which do not have any German friend in their first spell for which we have information on friendship.

In four recent rounds of the survey (1996, 2001, 2006 and 2011), participants were asked to provide detailed information on their network of relationships. In particular, in 2011, the question used for this purpose reads "... Please think of three people outside of your household who are important for you, personally. They can be relatives or non-relatives." (question 126). The answers (Part d) allow the identification of the origin of each of the friends being considered, differentiating among "From the former West Germany", "From the former East Germany" and "From another country". We use answers to this question to construct a dummy variable indicating whether the respondent has at least one German friend, and summary statistics by year of survey are reported in Table 1. We identify three subgroups of the population: Natives, First Generation Migrants and Second Generation Migrants. The former are defined as individuals who were born in Germany from parents who both have no migration background; First Generation Migrants are individuals who were born outside of Germany and Second Generation Migrants are individuals who were born in Germany, but had at least one parent of migrant origin.[6] Almost 80% of the individuals in this group posses German citizenship - either by birth or through naturalization.

As it can be immediately seen from Table 1, German natives are very likely to report that

---

[6]A parent is of migrant origin if he/she was born abroad or if he/she was born in Germany but had no German citizenship by birth.

they have at least one German companion. In fact, in every year of our sample, well over 99% of them indicate this to be the case.[7]. As for migrants, a clear pattern also emerges. First, they tend to be less likely to have built a friendship with a native than their German counterparts. Even more interestingly, there is a substantial gap between first and second generation migrants. While on-average more than 80% of the individuals in the latter group report to have a German friend, this figure declines to only 55% for first generation immigrants.

4   Native friend acquisition and assimilation

Is friendship with natives an indicator of cultural assimilation? The rich information provided by the GSOEP includes a series of questions that allow us to elicit individual preferences on a variety of issues. Combining this information with the relationships migrants have built with natives allows us to highlight a series of interesting patterns that speak to the role that friendships might have on cultural assimilation. Table 2 reports summary statistics on answers to ten such attitudinal questions.

We start by considering a measure for engagement in politics and the local society (question 3 of the 2011 survey), which is coded as one if the respondent has provided "Volunteer work in clubs or social services"; or/and has been active ".. in a citizens' group, political party, local government", and coded zero otherwise. Interestingly, we find that while 38% of native Germans report to be socially active in their free time (column 1), but when we look at foreigners, we see that only 26% of second generation migrants do the same (column 2). This share further declines when we restrict our attention to first generation migrants (share 17.5%, column 3). In columns (4) and (5) we further disaggregate our data and look at migrants with a German friend (column 4) and without one (column 5). Interestingly, we find that while 19 percent of migrants with a German friend are actually involved in social activities, the figure for migrants without German friends is four percentage points lower. As shown in column (6) of the table, the two figures are statistically different from each other.

Next, we consider a number of questions which elicit preferences on a variety of policy dimensions. The typical query reads, "What is your attitude towards the following areas – Are you concerned about them?", and the answers can take three possible values: "Very concerned", "Somewhat concerned", "Not concerned at all". For each topic addressed we construct an indicator variable "$WorriedX$" which equals one if the respondent indicates that he is "Very concerned" about a particular issue, and zero otherwise.

---

[7]The differences in the number of observations are mainly due to changes in the sample size of the GSOEP over time. For example, new samples were added in 1998, 2000, 2002, and 2006

Three of the questions asked deal directly with economic concerns. The first one focuses on the individual's own economic situation (*Own Economic Situation*); the second one continues to look at the respondent's own position, but considers instead whether he is worried about his own job security if he is in employment (*Job Security*); finally, the third question focuses on a broader topic, i.e. whether the respondent is worried about the introduction of the Euro in place of the Deutsche Mark (*Euro or D-Mark?*). Several interesting patterns emerge. First, when we consider the queries focusing on individual position, we can see that natives are less likely to be worried about their circumstances than migrants. This is true when the comparison is carried out vis-a-vis second generation migrants, but the effect is even stronger when the comparison involves first generation migrants. Furthermore, when looking at first generation migrants, we can see that individuals without a German friend are significantly more likely to signal concerns about their status than individuals with a German friend. In particular, the former are 7.8 percentage points more likely to be worried about their own economic condition than the latter, and they are 4 percentage points more likely to be concerned about losing their job. Both these differences are strongly statistically significant. At the same time, when turning to broader questions, like in the case of the introduction of the Euro, the preference patterns among the various groups appear much more similar, and, in particular, there is no statistically significant difference depending on whether first generation migrants have a German friend or not.

Three other questions deal with policy issues that are salient among the native population - crime (*Crime*), environmental protection (*Environment*) and hostility towards foreigners or minorities (*Xenophobia*). Interestingly, while first generation migrants in general appear more concerned about crime than their native counterparts, there are no significant differences between those who have a relationship with a native and those who do not. At the same time, native Germans appear to be more concerned than immigrants about the environment, and this is especially true when we consider first generation arrivals. Interestingly, also in this case, first generation migrants with German friends appear to have preferences closer to those of the natives, and as a result are significantly more worried about the environment than those without German friends. As for concerns towards Xenophobia, an interesting pattern emerges. Migrants without German friends appear to be six percentage points more likely to be concerned about hostility towards foreigners and minorities than those who have a German friend.

The last dimension we consider focuses on individual preferences in the political domain. To that end we investigate whether the respondent is interested in politics, using answers to the question "Generally speaking, how much are you interested in politics?" to construct an indicator variable that is equal to one if the survey participant replied to be "Very interested", and zero otherwise. Next, we consider whether the individual leans towards the left (i.e. he declares to

support the SPD, the Greens and the PDS)[8] or whether he leans towards conservative parties (i.e. he supports the CDU, the CSU or the FDP).[9] Interestingly, native Germans appear to be substantially more interested in politics in general than migrants. Furthermore, there is a large and statistically significant difference between first generation migrants with and without German friends. In fact, the former are 8 percentage points more likely than the latter to be interested in the running of domestic affairs. When it comes to the ideological orientation of the respondent, while we find that native Germans are significantly more likely to lean conservative (and correspondingly less likely to lean towards the left) than second generation migrants, this effect disappears when comparing natives and first generation arrivals. Furthermore, on average, having or lacking a German friend does not affect a foreigner's political orientation, i.e. we do not observe any significant difference in support for conservative or left parties.

The simple comparisons of means carried out in Table 2 thus suggests that having a friendship with natives tends to result in greater 'similarity' with them with respect to several important dimensions, ranging from engagement in social activities, to concern about the respondent's own economic condition, to salient policy issues and to interest in politics. At the same time, these patterns could be driven by characteristics of the individual respondents that vary systematically with their immigration status. For this reason, we further investigate this issue presenting the results of a series of linear probability models in which the sample is restricted to first generation migrants, and where answers to the questions discussed in Table 2 are related to having a German friend, controlling for a series of individual determinants. In particular, we run the following type of model:

$$Answer_{it} = \alpha + \beta \text{German}_{it} + \gamma \mathbf{X}_{it} + I_t + \epsilon_{it} \tag{1}$$

where $Answer_{it}$ is the answer to one of the questions we have discussed above, $German_{it}$ is a dummy variable indicating whether the individual has a German friend and $\mathbf{X}_{it}$ is a vector of controls that include gender, marital status, age, age squared, years since migration, years since migration squared, the presence of children in the household, educational attainment, work status, and changes in residential status since the last observation. All specifications also include year fixed effects, I_t, that account for common unobserved shocks affecting all respondents, and ϵ_{it} is a zero mean error term.

Table 3 reports the results for the coefficient of interest, β. The broad patterns we have

---

[8]The acronym SPD stands for *Sozialdemokratische Partei Deutschlands*, or Social Democratic Party of Germany. The PDS is the *Partei des Demokratischen Sozialismus* or Party of Democratic Socialism was a left wing party which in 2007 changed name to become "Die Linke" (The Left).

[9]These acronyms stand respectively for *Christlich Demokratische Union Deutschlands* or Christian Democratic Union of Germany (CDU); *Christlich-Soziale Union* (CSU), or Christian Social Union, active in the federal state Bavaria and *Freie demokratisch Partei* (FDP) or Free Democratic Party.

identified in Table 2 continue to hold, i.e. first generation migrants with a German friend are more "similar" to natives than first generation migrants without a German friend, even after controlling for individual characteristics. In particular, migrants with a local companion are less worried about xenophobic feelings, less concerned about their own economic situation and more interested in politics than their counterparts with no local connections. At the same time, once we control for the individual characteristics of the respondent, we find that having a German friend does not have an effect on social engagement in Germany, but instead is positively associated with support for conservative political parties.

5   What drives migrants' friendship choices?

The results of Tables 2 and 3 suggest that first generation immigrants with a German friend are more "similar" to natives than those without a local companion along several important dimensions, ranging from engagement in social activities, to concerns about the economy and politics, to broad issues like the environment, crime and xenophobia. These dimensions are useful proxies for the foreigner's assimilation in the host country society, extending beyond the labor market outcomes that have been extensively studied in the economics literature (see the pioneering contributions of Chiswick (1978) and Borjas (1987)). Given that friendships can thus be considered an important predictor of cultural assimilation, in this section we exploit the rich longitudinal nature of the GSOEP to investigate the determinants of the acquisition of a German friend.

Our analysis is carried out focusing on foreign born individuals that do not have a German friend when they answer the question on friendship for the first time. We run a series of specifications with individual fixed effects that take the following form:

$$GermanFriend_{it} = \alpha + \beta_1 Y_{it} + \beta_2 Y_{it}^2 + \gamma_1 \mathbf{CMS}_{it} + \gamma_2 \mathbf{CC}_{it} + \gamma_3 CEd_{it} + \gamma_4 CLo + \gamma_5 \mathbf{CEm} + \mu_{it} + \eta_{it} \quad (2)$$

where $GermanFriend_{it}$ is an indicator variable taking a value equal to 1 if individual i has a German friend at time t. As we have mentioned, this variable is available in four waves of the GSOEP (1996, 2001, 2006 and 2011). At the same time, individual level characteristics are available at a yearly frequency, and as a result, we can exploit this information when studying the determinants of friendship acquisition.

Thus, Y_{it} captures the number of years a foreign born individual has spent in Germany whereas $\mathbf{CMS}_{it}$, $\mathbf{CC}_{it}, Ced_{it}, CLo_{it}, \mathbf{CEm}_{it}$ are vectors of variables (in bold) or variables, characterizing changes in the marital status, presence of children, education, location and labor market status

of individual i that have occurred between the years in which we observe friendship. All time constant individual characteristics are captured by the individual fixed effects. With respect to the variables which capture changes in characteristics, we construct a dummy for each variable of interest X that is coded as 1 at time t if the variable X has changed between the last time we have observed friendship (t-5) and one year before we observe actual friendship (t-1), and coded 0 otherwise.[10]

More specifically, the vector **CMS** includes three variables: $Getmarried_{it}$, which indicates that individual i becomes married in any of the four years that passed between time $t-1$ and time $t-5$; $GetmarriedG_{it}$, which indicates that individual i become married to a German ; $GetDivorced_{it}$, which indicates that individual became single - either due to death of the partner or through divorce. In a similar way, the vector **CC**$_{it}$ captures changes in the presence of children in the household. Two possible events appear particularly interesting: the arrival of a new child between time $t-1$ and time $t-5$ ($NewChild$) and the departure from the household of a child aged 16 or above between time $t-1$ and time $t-5$ ($LeavingChild$). CEd_{it} captures whether individual i has acquired a higher education level in Germany since we last time observed his/her friendship status. CLo_{it} describes whether the individual has relocated between time $t-1$ and time $t-5$. This can happen if she/he has changed federal states, if she/he has moved from an urban to a less urbanized area or from an less urbanized area to an urban area. **CEm**$_{it}$ is a vector of changes in employment status that captures whether the individual has become employed between time $t-1$ and time $t-5$ ($Employed_{it}$) or has lost his or her job ($Unemployed_{it}$) within the same time interval. Finally, μ_{it} describes the individual specific time invariant component of the error term, while η_{it} is the idiosyncratic disturbance.

Our benchmark results are reported in Table 4. We start with a parsimonious specification in which we only control for years since migration and its square. We find an interesting u-shape pattern regarding time in Germany. In the first years the marginal effect of years since migration is positive and permanence in the destination country has a positive impact on the probability of acquiring a German friend. After approximately 50 years in the country the chance of having a German friend starts to decrease slightly with every additional year spent in Germany. However, less than 1% of our sample lived more than 50 years in Germany. In column (2) we add variables

---

[10]An exception is the first period of each individual for which we observe friendship. In this period all dummy variables which capture changes in marital status are 0. For the purpose of illustration, let's think about an individual A who enters the sample in 2001. The first change in marital status can occur between 2001 and 2005. Therefore, all dummy variables capturing changes in marital status are 0 in 2001 by definition. This implies if A would be married throughout the whole observation period he/she would have no change in the respective dummy variable. The same would hold true if he/she would be never married. On the other hand, if A would be a single in 2001 and would marry in 2003, the dummy for married would change to 1 in 2006. If A is still married in 2011, the respective dummy changes again to 0.

indicating changes in marital status. Interestingly, we find that acquiring a partner does not have a significant effect, and this result also holds when the partner is German. We also find no effect if the individual loses a partner due to a death. In column (3) we additionally account for changes in the presence of children in the household. We find that the birth of a new child increases the likelihood of acquiring a native friend, whereas the departure of a child from the household does not play a significant role. This is a very reasonable finding: a new child in the household increases the interaction probability with the host society (day nursery, kindergarten etc.). In column (4) we additionally look at the acquisition of a higher educational degree in Germany, and we find that it significantly increases the likelihood of acquiring a local companion. The magnitude of the effect is remarkable: reaching a new educational level, through investment in human capital in Germany, increases the probability of having a German friend by approximately 24 percentage points. In column (5) we add a control for changes in location, and we find that relocations play a significant role. Residential mobility seem to have on average a positive effect on the acquisition of German friendship. In column (6) we additionally account for changes in employment status, by looking both at whether the individual has found a job or has lost a job between $t-1$ and $t-5$. Interestingly, we find that becoming employed leads to the acquisition of a German friend, whereas becoming unemployed does not have a significant effect. Getting into work is associated with an increase of about 8 percentage points on the probability of having a German friend. Finally, we investigate whether our results hold if we focus on the acquisition of the first German friend only. We do this by holding $GermanFriend_{it}$ artificially constant at 1 after an immigrant has acquired his/her first German friend. The corresponding estimates are reported in column (7). The qualitative results remain unchanged with a notable exception- a broken marriage seems to increase the probability to acquire the first German friend, whereas it doesn't play any role for additional German friend acquisitions (column (6)).[11]

Summing up, our analysis so far suggests that the acquisition of a German friend is influenced by the number of years the migrant has spent in Germany, the acquisition of a job, the birth of a new child, relocation decisions, and importantly, whether he/she has acquired an additional degree in Germany.

---

[11]The large majority of the individuals in our sample (about 90%) do not "lose" the German companion after acquisition. For robustness, we have also repeated our analysis dropping those individuals, i.e. those reporting having acquired a German friend at some point and then reporting later on to no longer have one.

6 Additional evidence

In Table 5 we build on these findings to investigate the possible presence of heterogeneous effects. In particular, using our benchmark specification of column (6) of Table 4, we repeat our analysis on different subsamples. In columns (1) and (2) we focus respectively on female and male respondents. In columns (3) and (4) we split instead the sample between low-skilled (column 3) and high-skilled individuals (column 4). Finally, in column (5) and (6) we distinguish between young (< 40) and older migrants ($40+$). Comparing the results for females and males, several interesting results emerge. First, years since migration and the acquisition of an education in Germany have broadly comparable effects for the two groups. Interestingly, having a new child appears to have an effect on the likelihood to acquire a German friend for males, but not for females. Furthermore, a relocation increases the likelihood of having a German friend for male migrants, but does not have any impact on female migrants. This might be due to the fact that migrant households are disproportionately characterized by a "male-breadwinner" pattern. Changing locations might therefore be often driven by new employment opportunities of men. Interestingly, becoming employed and losing a German partner have a positive impact on the acquisition of a German friend for female respondents, but not for male ones.

The comparison between skilled and unskilled individuals also leads to some interesting results. While we find that time spent in the country and the acquisition of a new degree in Germany has a positive effect on the acquisition of a German friend on both groups of individuals, we find that having a child has a positive effect on building relationship with natives only for highly skilled immigrants, possibly because of a closer involvement of the parent in the educational institutions attended by the offsprings. Finally, changing the region of residence increases the probability of acquiring a German friend for high skilled workers, and has no effect on unskilled workers. The same holds true for changes in the employment status. When we split our sample by age we uncover an interesting difference in the effect of marriage. While for young migrant getting married with another migrant decreases the probability to make friends among natives, for older workers a marriage (even if within migrants) increases social contacts with German people.

Table 6 presents results for four different subgroups of migrants. In column (1) we focus on Turkish immigrants, in column (2) we look at immigrants from Eastern European countries[12], in column (3) we focus on individuals from Southern European countries,[13] and in column (4) we restrict our analysis to migrants originating in countries that used to be part of the former Yugoslavia.

---

[12]These include individuals originating in Poland, Russia, Kazakhstan, Romania, Ukraine, Czech Republic, Hungary, Bulgaria, Slovakia (in descending order).

[13]That is, individuals originating in Greece, Italy, Portugal and Spain.

By splitting the sample along nationality lines, the number of observations included in each specification drops significantly, and as a result the statistical significance of our findings tends to decline. Still, several interesting patterns emerge. First of all, the time spent in the destination country and the acquisition of a degree in Germany appear to play a broadly similar role for migrants from Eastern and Souther Europe. Immigrants from Turkey, which are by far the largest group in Germany, and former Yugoslavia exhibit a flatter pattern over time. In other words, the likelihood to get a German friend increases at a much lower level for those immigrant groups than for migrants from South and Eastern Europe. At the same time, some further important differences can be identified. For instance, the positive impact of recently having a child born in the household appears to be driven by the Eastern European migrant group. In fact, for all other migrant groups, these effects do not appear to be statistically significant. Furthermore, the magnitude of the coefficients of these variables in column (2) of Table 6 is substantially larger than the average effect reported in column (6) of Table 4. The average effect of becoming employed obtained in our benchmark specification appears instead to be mainly driven by the Souther European immigrant groups, for which a positive employment shock has a particularly large and significant impact on the likelihood of acquiring a German friend, whereas this effect does not appear to be significant for other immigrant groups. However, Yugoslavian migrants seem to be much less likely to find German friends if they have lost their job recently. Relocations appear also to have heterogeneous effects across groups, positively impacting the likelihood of acquiring a German friend for Turkish migrants, but not for migrants from other groups.

7   Conclusions

It is widely believed that migration is a growing and permanent part of Europe's future. For this reason, cultural assimilation of immigrants is at the forefront of the political debate and the study of inter-ethnic and interracial interactions and relationships (also called intergroup relations) has become an important field of research in recent years. Our analysis suggests that first generation migrants who have a German friend tend to be "more similar" to German natives than migrants who do not. This is an important finding, as it suggests that having a well-developed social network in the destination country involving natives might be an important driver of cultural assimilation. We also find that the educational achievement, the years spent in the host country, getting into work and the presence of children are positively related to the probability of forming friendships with majority group members. The effects vary across different socio-demographic groups. Clearly, friendships are complex social relationships and it is difficult to draw straightforward conclusions about the determinants of social ties. In this paper, by addressing reverse causality issues and

using individual fixed effects we have been able to address some of the main challenges present in the empirical analysis of friendship formation.

References

[1] Alesina, A. and P. Giuliano (2011) "Family Ties and Political Participation", *Journal of the European Economic Association*, vol. 9, pp. 817-839

[2] Austen–Smith D. and R. B. Fryer (2005) "An Economic Analysis of 'Acting White'" *Quarterly Journal of Economics*, vol. 120, pp. 551–583.

[3] Battu, H. and Y. Zenou (2010) "Oppositional identities and employment for ethnic minorities. Evidence for England" *Economic Journal*, vol. 120, pp. F52-F71.

[4] Battu H., P. Seaman and Y. Zenou (2011) "Job contact networks and the ethnic minorities" *Labour Economics*, vol. 18, pp. 48–56.

[5] Battu, H. McDonald, M. and Y. Zenou (2007), "Oppositional identities and the labor market," *Journal of Population Economics* 20, 643-667.

[6] Benhabib, J., Bisin, A. and Jackson, M. O. (eds) (2011). *Handbook of Social Economics*, Vol. 1A, North-Holland.

[7] Berry, J.W. (1980) "Acculturation as varieties of adaptation" In A. M. Padilla (Ed.), *Acculturation: Theory, models and some new findings* pp. 9–25. Boulder, CO: Westview. Press.

[8] Berry, J.W. (1984) "Multicultural policy in Canada: A social psychological analysis" *Canadian Journal of Behavioural Science*, vol. 16, pp. 353–370.

[9] Berry, J.W. (1997) "Immigration, acculturation and adaptation" *Applied Psychology: An International Review*, vol. 46, pp. 5–68.

[10] Bisin, A. and T. Verdier (2000) "Beyond the melting pot: Cultural transmission, marriage, and the evolution of ethnic and religious traits" *Quarterly Journal of Economics*, vol. 115, pp. 955-988.

[11] Bisin, A. and T. Verdier (2001) "The economics of cultural transmission and the dynamics of preferences" *Journal of Economic Theory*, vol. 97, pp. 298-319.

[12] Bisin, A., E. Patacchini, T. Verdier and Y. Zenou (2011) "Formation and persistence of oppositional identities", *European Economic Review*, Elsevier, vol. 55, pp. 1046-1071.

[13] Bisin, A., E. Patacchini, T. Verdier and Y. Zenou (2009b) "Bend it like Beckham: Ethnic identity and integration," NBER Working Papers 16465.

[14] Borjas, George J. (1987) "Self selection and the earnings of immigrants" *American Economic Review*, vol. 77, pp. 531–553

[15] Casey, T. and C. Dustmann (2010) "Immigrants' identity, economic outcomes, and the transmission of identity across generations" *Economic Journal*, vol. 120, pp. F31–F51.

[16] Chiswick, B. (1978) "The Effect of Americanization on the Earnings of Foreign-born men" *Journal of Political Economy*, vol. 86, pp. 897-921.

[17] Chiswick, B. and C. Houseworth (2011) "Ethnic Ethnic intermarriage among immigrants: human capital and assortative mating" *Review of Economics of the Household*, vol. 9, pp. 149-180.

[18] Constant, Amelie and Klaus F. Zimmermann (2008) "Measuring Ethnic Identity and its Impact on Economic Behavior" *Journal of the European Economic Association*, vol. 6, pp. 424–433.

[19] De Palo, D., R. Faini and A. Venturini (2006) "The social assimilation of immigrants", *IZA Working Paper 2436*.

[20] Dustmann, C. and I. Preston (2007) "Racial and Economic Factors in Attitudes towards Migratio" *The B.E. Journal of Economic Analysis & Policy (Advances)*, vol. 7, Issue 1, Article 62.

[21] Dustmann, C., F. Fabbri, and I. Preston (2005) "The Impact of Immigration on the UK Labour Market" *Economic Journal*, vol. 115, pp F324-F341.

[22] Frijters, P. , M. A. Shields, and S. Wheatley Price (2005) "Job search methods and their success: A comparison of immigrants and natives in the UK" *Economic Journal*, vol. 115 pp. 359–376.

[23] Furtado, D. and N. Theodoropoulos (2011) "Interethnic Marriage: A Choice between Ethnic and Educational Similarities " *Journal of Population Economics*, vol. 24, pp. 1257–1279

[24] Gordon, M. M. (1964) *Assimilation in American Life: The Role of Race, Religion, and National Origins*. New York: Oxford University Press.

[25] Manacorda, M., A. Manning and J. Wadsworth (2012) "The Impact of Immigration on the Structure of Male Wages: Theory and Evidence from Britain" *Journal of the European Economic Association*, vol. 10, pp. 120–151

[26] Manning, A. and S. Roy (2010) "Culture clash or culture club? National identity in Britain" *The Economic Journal*, vol. 120, pp. F72–F100

[27] Mason, P. (2004) "Annual income, hourly wages, and identity among Mexican-Americans and other Latinos" *Industrial Relations*, vol. 43, pp. 817-834.

[28] Mayer, A. and S. L. Puller (2008) "The old boy (and girl) network: Social network formation on university campuses" *Journal of Public Economics*, vol. 92, pp. 329 – 347

[29] Meng, X. and R.G. Gregory (2005) "Intermarriage and the economic assimilation of immigrants" *Journal of Labor Economics*, vol.23, pp. 135-175.

[30] Modood, T., J. Berthoud, J. Lakey, P. Nazroo, S. Smith, S. Virdee, and S. Beishon (1997) *Ethnic Minorities in Britain: Diversity and Disadvantage: The Fourth National Survey of Ethnic Minorities*, Policy Studies Institute, London.

[31] Nekby, L. and M. Rödin. (2007) "Acculturation Identity and Labor Market Outcomes" IZA Discussion Paper No. 2826.

[32] Patacchini E. and Y. Zenou (2012) "Ethnic networks and employment outcomes" *Regional Science and Urban Economics*, vol. 42, pp. 938–949.

[33] Pendakur, K. and R. Pendakur (2005) "Ethnic Identity and the Labour Market" mimeo.

[34] Wagner, G. G., J. R. Frick and J. Schupp (2007) "The German Socio-Economic Panel Study (SOEP) - Scope, Evolution and Enhancements" *Schmollers Jahrbuch*, vol. 127, pp. 139-169.

[35] Vigdor, J.A. (2013) "Measuring immigrant assimilation in post–recession America" *Civic Report 76* Manhattan Institute.

[36] Zimmermann, Klaus F. (2007) "Migrant Ethnic Identity: Concept and Policy Implications" *Ekonomia*, vol.10, pp. 1-17.

Table 1: Friendship and Migration –Summary Statistics-

Year	Natives		2nd Generation Migrants		1st Generation Migrants	
	total	% with German friend	total	% with German friend	total	% with German friend
1996	5,612	0.996 (0.060)	523	0.805 (0.397)	2,305	0.512 (0.500)
2001	10,511	0.994 (0.080)	755	0.825 (0.380)	2,493	0.561 (0.496)
2006	10,414	0.994 (0.076)	846	0.808 (0.394)	1,885	0.577 (0.494)
2011	7,314	0.998 (0.042)	631	0.854 (0.353)	1,001	0.601 (0.490)
Overall	33,851	0.995 (0.069)	2,755	0.823 (0.382)	7,686	0.556 (0.497)
Individuals with at least two observations	27,859	0.996 (0.066)	2,030	0.562 (0.496)	6,148	0.836 (0.370)

Notes: We report number of observations, mean values and standard deviations (in parentheses). Sample: Individuals in working age (18-64), West-Germany

Table 2: Friendship, Migration and Cultural assimilation –Summary Statistics-

	Native	2nd Gen. Migrant	1st Gen. Migrant	1st Gen. Migrant with German Friend	1st Gen. Migrant without German friend	Difference between (4) and (5)	N. obs
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
SocialActive	0.381	0.260	0.175	0.192	0.155	0.0376***	31,145
	(0.486)	(0.439)	(0.380)	(0.394)	(0.362)	(3.78)	
WorOwnEcon	0.177	0.240	0.303	0.269	0.347	-0.0779***	44,094
	(0.381)	(0.427)	(0.460)	(0.443)	(0.476)	(-7.33)	
WorJob	0.0979	0.122	0.187	0.169	0.213	-0.0446***	31,258
	(0.297)	(0.327)	(0.390)	(0.375)	(0.410)	(-3.90)	
WorEuro	0.229	0.220	0.202	0.200	0.204	-0.00438	22,517
	(0.420)	(0.414)	(0.402)	(0.400)	(0.403)	(-0.32)	
WorCrime	0.409	0.398	0.429	0.423	0.436	-0.0136	44,014
	(0.492)	(0.490)	(0.495)	(0.494)	(0.496)	(-1.19)	
WorEnv	0.304	0.298	0.251	0.264	0.234	0.0300***	44,068
	(0.460)	(0.458)	(0.433)	(0.441)	(0.423)	(3.03)	
WorXeno	0.295	0.321	0.308	0.281	0.344	-0.0627***	35,602
	(0.456)	(0.467)	(0.462)	(0.450)	(0.475)	(-4.88)	
StrongInPol	0.394	0.273	0.202	0.238	0.156	0.0820***	44,214
	(0.489)	(0.446)	(0.401)	(0.426)	(0.363)	(9.09)	
Conservative	0.409	0.283	0.407	0.411	0.399	0.0122	19,944
	(0.492)	(0.451)	(0.491)	(0.492)	(0.490)	(0.57)	
Left	0.565	0.699	0.580	0.573	0.591	-0.0177	19,944
	(0.496)	(0.459)	(0.494)	(0.495)	(0.492)	(-0.82)	

Notes: Columns (1)-(5): mean values, standard deviations in parentheses, Column (6): t statistics in parentheses, Column (7) number of observations. *** Significant at 1% level, ** Significant at 5% level. * Significant at 10% level. Sample: Individuals in working age (18-64), pooled, West-Germany. Detailed description of the variables in Appendix.

Table 3: Friendship, Migration and Cultural assimilation –Regression Analysis-

Outcomes (dep. Var.)	German Friend	N	R^2
SocialActive	0.009 (0.011)	5,557	0.037
WorOwnEcon	-0.039*** (0.012)	7,312	0.068
WorJob	-0.018 (0.013)	4,743	0.038
WorEuro	-0.010 (0.015)	3,322	0.018
WorCrime	0.011 (0.013)	7,293	0.028
WorEnv	0.018 (0.011)	7,300	0.018
WorXeno	-0.064*** (0.014)	5,100	0.029
StrongInPol	0.048*** (0.010)	7,333	0.105
Conservative	0.062*** (0.023)	2,145	0.156
Left	-0.066*** (0.023)	2,145	0.156

Notes: OLS Estimates from linear probability models, robust standard errors in parentheses. Controls for gender, marital status, age and its square, years since migration at its square, children, education, work, and change in residential status as well as year fixed effects are included. *** Significant at 1% level, ** Significant at 5% level. * Significant at 10% level. Sample: Individuals in working age (18-64), pooled, West-Germany. Detailed description of the variables in Appendix.

Table 4: Friendship formation in the host country - Benchmark results-

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
YSM	0.0576***	0.0567***	0.0558***	0.0537***	0.0532***	0.0517***	0.0645***
	(0.00380)	(0.00383)	(0.00385)	(0.00384)	(0.00385)	(0.00394)	(0.00389)
YSM2	-0.000557***	-0.000546***	-0.000537***	-0.000496***	-0.000495***	-0.000473***	-0.000444***
	(7.50e-05)	(7.50e-05)	(7.49e-05)	(7.51e-05)	(7.49e-05)	(7.56e-05)	(7.77e-05)
Getmarried		0.0699	0.0267	0.0184	0.00885	0.00872	-0.000649
		(0.0739)	(0.0748)	(0.0741)	(0.0746)	(0.0747)	(0.0585)
GetmarriedG		0.0611	0.0768	0.0344	0.0343	0.0111	0.0113
		(0.137)	(0.148)	(0.158)	(0.157)	(0.168)	(0.155)
GetDivorce		0.0973	0.0871	0.0873	0.0796	0.0783	0.0823*
		(0.0721)	(0.0710)	(0.0692)	(0.0682)	(0.0689)	(0.0487)
NewChild			0.151***	0.106**	0.100**	0.103**	0.0705*
			(0.0454)	(0.0455)	(0.0458)	(0.0462)	(0.0401)
LeavingChild			0.0211	0.00448	0.00317	0.00668	0.0112
			(0.0353)	(0.0349)	(0.0348)	(0.0345)	(0.0261)
CEd				0.242***	0.238***	0.231***	0.136***
				(0.0353)	(0.0355)	(0.0354)	(0.0276)
CLo					0.119**	0.110**	0.0725*
					(0.0552)	(0.0550)	(0.0435)
Unemployed						-0.0598	0.00754
						(0.0663)	(0.0436)
Employed						0.0812**	0.0482*
						(0.0361)	(0.0266)
Observations	3,734	3,734	3,734	3,734	3,734	3,734	3,734
R-squared	0.201	0.202	0.206	0.230	0.232	0.235	0.392
Number of persons	1,834	1,834	1,834	1,834	1,834	1,834	1,834

Notes: The table reports coefficients from a linear probability model. Robust standard errors, clustered at the individual level, are presented in parentheses. All specifications account for individual fixed effects. In column (7) we use an alternative measure of friendship and focus on the acquisition of the first German friend by keeping *GermanFriend* constant at 1 after it has once changed from 0 to 1.*** Significant at 1% level, ** Significant at 5% level. * Significant at 10% level. Sample: Individuals in working age (18-64), pooled, West-Germany. Detailed description of the variables in Appendix.

Table 5: Friendship formation in the host country - Different subsamples -

	(1) Women	(2) Men	(3) Unskilled	(4) Skilled	(5) <40	(6) 40+
YSM	0.0523***	0.0520***	0.0474***	0.0526***	0.0492***	0.0729***
	(0.00562)	(0.00548)	(0.00678)	(0.00546)	(0.0110)	(0.00808)
YSM2	-0.000521***	-0.000439***	-0.000448***	-0.000393***	-9.92e-06	-0.000747***
	(0.000108)	(0.000105)	(0.000121)	(0.000116)	(0.000323)	(0.000154)
Getmarried	-0.0171	0.0426	-0.0476	0.0203	-0.167*	0.353**
	(0.103)	(0.105)	(0.133)	(0.0950)	(0.101)	(0.167)
GetmarriedG	0.0132	-0.0399		-0.0112	-0.0470	-0.0430
	(0.223)	(0.227)		(0.181)	(0.346)	(0.173)
GetDivorce	0.0181	0.134	0.0629	0.0891	0.0700	0.0779
	(0.0937)	(0.0986)	(0.110)	(0.0933)	(0.212)	(0.104)
NewChild	0.0417	0.166**	0.0836	0.134**	0.134*	0.0799
	(0.0584)	(0.0699)	(0.0691)	(0.0657)	(0.0709)	(0.203)
LeavingChild	-0.0241	0.0262	0.0676	-0.0317	-0.00356	-0.0593
	(0.0488)	(0.0478)	(0.0469)	(0.0542)	(0.241)	(0.0649)
CEd	0.205***	0.250***	0.158***	0.314***	0.321***	0.304***
	(0.0522)	(0.0478)	(0.0554)	(0.0561)	(0.0827)	(0.0801)
CLo	-0.00250	0.247***	0.0298	0.142**	0.0411	0.178*
	(0.0736)	(0.0746)	(0.101)	(0.0670)	(0.0910)	(0.106)
unemployed	-0.0309	-0.0951	0.0195	-0.181*	0.141	-0.257*
	(0.0919)	(0.0962)	(0.0906)	(0.104)	(0.0961)	(0.151)
employed	0.107**	0.0488	0.0186	0.103**	0.0866	0.152*
	(0.0464)	(0.0588)	(0.0538)	(0.0509)	(0.0700)	(0.0848)
Observations	1,898	1,836	1,862	1,872	833	1,039
R-squared	0.219	0.263	0.167	0.260	0.326	0.271
Number of persons	927	907	1,016	960	537	566

Notes: The table reports coefficients from a linear probability model. Robust standard errors, clustered at the individual level, are presented in parentheses. All specifications account for individual fixed effects. *** Significant at 1% level, ** Significant at 5% level. * Significant at 10% level. Sample: Individuals in working age (18-64), pooled, West-Germany. Detailed description of the variables in Appendix.

Table 6: Friendship formation in the host country - Selected ethnic groups -

	(1) Turks	(2) East-Europeans	(3) South-Europeans	(4) Ex-Yugoslavians
YSM	0.0218***	0.0650***	0.0615***	0.0242*
	(0.00630)	(0.0104)	(0.0132)	(0.0138)
YSM2	-8.19e-05	-0.000388	-0.000521***	-4.52e-05
	(0.000117)	(0.000379)	(0.000199)	(0.000251)
Getmarried	-0.0410	-0.0388	-0.253***	0.141
	(0.172)	(0.110)	(0.0911)	(0.169)
GetmarriedG	0.0422	0.0772		
	(0.198)	(0.260)		
GetDivorce	0.0428	0.155	0.0606	0.0879
	(0.126)	(0.134)	(0.109)	(0.195)
NewChild	0.0204	0.232**	0.0485	0.252
	(0.0672)	(0.103)	(0.103)	(0.158)
LeavingChild	-0.0116	-0.0562	0.00539	0.112
	(0.0500)	(0.0725)	(0.0736)	(0.104)
CEd	0.222***	0.314***	0.184**	0.0508
	(0.0650)	(0.0643)	(0.0710)	(0.0858)
CLo	0.132*	0.0149	0.144	0.263
	(0.0688)	(0.121)	(0.123)	(0.204)
unemployed	-0.153	-0.0707	0.196	-0.280**
	(0.0966)	(0.132)	(0.161)	(0.112)
employed	-0.00410	0.0926	0.295***	0.187
	(0.0499)	(0.0722)	(0.105)	(0.138)
Observations	1,250	1,074	683	449
R-squared	0.121	0.408	0.257	0.184
Persons	553	536	347	239

The table reports coefficients from a linear probability model. Robust standard errors, clustered at the individual level, are presented in parentheses. All specifications account for individual fixed effects. *** Significant at 1% level, ** Significant at 5% level. * Significant at 10% level. Sample: Individuals in working age (18-64), pooled, West-Germany. Detailed description of the variables in Appendix.

Appendix: Description of variables

Tables 2, 3

SocialActive is a dummy coded as 1 if the respondent is socially active (active in any kind of unions, clubs, etc.), WorOwnEcon is a dummy coded as 1 if the respondent is very worried about his/own own economic situation, WorJob is a dummy coded as 1 if the respondent is very worried about job security, WorEuro is a dummy coded as 1 if the respondent is very worried about the introduction of the euro, WorCrime is a dummy coded as 1 if the respondent is very worried about crime, WorEnv is a dummy coded as 1 if the respondent is very worried about environment, WorXeno is a dummy coded as 1 if the respondent is very worried about xenophobia, StrongInPol is a dummy coded as 1 if the respondent has strong interests in politics, conservative is a dummy coded as 1 if the respondent has preferences for conservative parties (CDU, CSU, FDP), Left is a dummy coded as 1 if the respondent has preferences for left parties (SPD, Greens, PDS).

Tables 4-6 (Panel estimates)
Maximum four observations per individual, t=1996, 2001, 2006, 2011
Focus on first generation migrants (foreign born) who have no German Friend in their first spell

GermanFriend is a dummy coded as 1 if the respondent has at least one German friend, YSM measures the years since the immigrant has immigrated to Germany, YSM^2 squared YSM, Getmarried is a dummy coded as 1 if an individual married to a non-German between t-1 and t-5 and was not a married (single or widowed) in t-5, GetmarriedG is a dummy coded as 1 if an individual married to a German between t-1 and t-5 and was not a married (single or widowed) in t-5, GetDivorce is a dummy coded as 1 if an individual became single (due to divorce or being widowed) between t-5 and t-1 and was not a single (married or widowed) in t-5, NewChild is a dummy coded as 1 if a household between t-1 and t-5 has a child (younger than 16) and had no child (younger than 16) in t-5, LeavingChild is a dummy coded as 1 if a household has no child (younger than 16) between t-1 and t-5 in at least one year and had a child (younger than 16) in t-5, EducLag is a dummy is coded as 1 if an individual has acquired a higher educational degree (isced) between t-1 and t-5, LocChangeLag is a dummy coded as 1 if an individual changed his residence between t-1 and t-5, WorkLag is a is a dummy coded as 1 if an individual changed work status from not working to working between t-5 and t-1, NotWorkingLag is a is a dummy coded as 1 if an individual changed work status from working to not working between t-5 and t-1.