

# Turkish Migrants and Native Germans Compared: The Effects of Inter-Ethnic and Intra-Ethnic Friendships on the Transition from Unemployment to Work

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## ABSTRACT

In this paper, we analyse whether having inter-ethnic and intra-ethnic friendships can be associated with a shorter duration of unemployment, comparing Turkish migrants and native residents in Germany. This allows us to examine the degree to which the returns from bridging and bonding social capital differ for the two groups. On the basis of the German Socio-Economic Panel (GSOEP) data, we find that for native Germans, intra-ethnic friendships shorten the duration of spells of unemployment, whereas inter-ethnic friendships do not. For the Turkish migrants, inter-ethnic friendships reduce the duration of unemployment, whereas intra-ethnic friendships do not. In other words, only friendships with German natives facilitate the transition to employment, but in particular for Turkish migrants. This effect is largest for migrants with a low level of education.

## INTRODUCTION

The importance of social capital on the labour market has been widely discussed. Social capital contributes to economic outcomes, such as social mobility and access to the labour market – both for migrants and native residents (Aguilera, 2002, 2003; Boxman et al., 1991; Drever and Hoffmeister, 2008; Franzen and Hangartner, 2006; Lin, 1999a). With regard to migrants, social capital is closely linked to their social embedding and integration in the host society (Haug, 2007: 90). Inclusion into the ethnic community can stimulate economic integration due to the resources made available through this network. On the other hand, Haug (2007) stresses the potential negative effects of ethnic social capital. When being embedded into ethnic networks, successful upward mobility may be impeded due to social obligations, pressure to conform or “downward levelling norms” (Portes, 1998), leading to ethnic segmentation or “downward assimilation” (Portes, 1995). In other words, lack of contact with the host society may hamper integration (Haug, 2007: 100). For these reasons, Haug (2007: 100) insists on distinguishing between host-country and home-country specific social capital.

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In addition, migrants and native residents may differ in their *use* of social networks. Migrants more often make use of social contacts to find employment in the presence of discrimination (Drever and Hoffmeister, 2008; Mouw, 2002). If discrimination limits opportunities, the costs of the job search process increase for minorities. To reduce the search costs, migrants may therefore rely more heavily on their social contacts than natives do. Moreover, there may be a composition effect: migrants are on average less educated than natives. Since people with more educational credentials are more proficient in finding a job through formal methods (Drever and Hoffmeister, 2008; Marsden and Hurlbert, 1988), migrants are likely to make more use of their social networks than natives.

There are few studies analyse the impact of different types of social capital simultaneously for migrants and native residents (see, e.g., Kalter, 2006; Mouw, 2002). Despite the large body of literature on social capital on the labour market and those arguments calling for differentiation by ethnic group, only few studies compare the effect of “bridging” and “bonding” social capital across ethnic groups (Aguilera, 2002; Battu et al., 2005; Kalter, 2006; Kanas et al., 2009). In view of the disadvantages faced by Turkish migrants on the labour market in Germany (cf. Hartung and Neels, 2009; Kogan, 2004, 2007; Uhlendorff and Zimmerman, 2006), this paper contributes to the existing body of literature on social capital and labour market outcomes in two ways: first, by simultaneously analysing the effect of having inter-ethnic and intra-ethnic friendships for Turkish migrants and native Germans; and, second, by making use of an event history design that allows us to deal better with the problem of reversed causality than most previous studies do. Our research question is thus: “Comparing first-generation Turkish migrants and native Germans, what are the differential effects of inter- and intra-ethnic friendships on the transition from unemployment to employment in Germany?”

## THEORY AND HYPOTHESES

### Social capital and the labour market

The positive impact of social capital, defined as “investment and use of embedded resources in social relations for expected returns” (Lin, 1999b: 30), relies on the assumption that people who are well equipped with social resources – those one can call upon through others in one’s social network – succeed better in attaining their goals. Friendships can be supportive in different dimensions: emotional support, instrumental (practical) support, information, sociality and feedback (cf. Hollstein, 2001; Petermann, 2002). Family and friends cover several of these dimensions and can therefore be considered as multiplex, while relatives, colleagues and acquaintances are rather uniplex in the sense of functional differentiation – their support is relatively limited to one or some of these dimensions (cf. Hollstein, 2001; Petermann, 2002; Plickert et al., 2007). Put differently, friends are sources of support for labour market outcomes in more than one regard. From a utilitarian perspective, people will “invest” in relations with others because of the expected future value of the resources made available by these relations (Flap and Völker, 2004). If it produces returns, a social network can thus be considered as a form of capital.

Studies on the impact of friendships on labour market outcomes often refer to the hypothesis of the strength of weak ties (Granovetter, 1973), according to which weak ties such as remote friends and acquaintances are profitable, rather than strong ties, such as family members and close friends. According to Burt (2001), however, it is not necessarily weak ties that are profitable: in order to access valuable information, it essential to “span structural holes”,

through either strong or weak ties. Friendships are found to coincide with labour market success (both for migrants and natives), such as higher wages and better occupational status (De Graaf and Flap, 1988; Lancee, 2010; Lin, 1999a) and an improved job search (Aguilera, 2002; Battu et al., 2005; Drever and Hoffmeister, 2008; Flap and Boxman, 2001; Granovetter, 1995; Patacchini and Zenou, 2008). As a general hypothesis, we therefore expect *all* friendships to be helpful when finding a job, irrespective of whether they are being intra- or inter-ethnic. However, below we argue why the size of the effect is expected to be different for migrants and native residents.

### **Bridging and bonding social capital**

Looking at native Germans and Turkish migrants, Kalter (2006) analyses the effect of contacts with native Germans on the likelihood of being employed (also drawing on the GSOEP data). He finds a positive effect of having contacts with Germans. We also anticipate a positive effect of friendships with native Germans, both for the Turkish minority and for “native” Germans, but we expect this effect to be different for migrants. The argument stems from more recent discussions on social capital, which distinguish between “bonding” and “bridging” ties (Gitell and Vidal, 1998; Leonard and Onyx, 2003; Putnam, 2000; Schuller, 2007; Woolcock and Narayan, 2000). Loosely defined, bonding refers to within-group connections, while bridging social capital refers to between-group connections. This division may refer to different dimensions such as ethnic group or social class. We define bridging ties as relations that cut across the ethnic divide and bonding ties as those within the same ethnic group, operationalizing these as intra-ethnic and intra-ethnic friendships, respectively.

Social capital of the bridging type, in particular, is often thought to be useful for making headway on the labour market (Granovetter, 1995; Lancee, 2010, 2011; Sanders et al., 2002) as – by definition – it spans gaps (structural holes: Burt, 2001) between socio-economic variables such as class, ethnicity and age (Portes, 1998; Narayan, 1999). Ties bridging structural holes are more effective than non-bridging ties, since unique information and opportunities come within reach (Putnam, 2000: 22). In contrast, bonding ties connect to a network where the same (job market) information is being circulated and therefore they offer no additional value (see, e.g., Nannestad et al., 2008). The assumption behind the “bridging argument” is that social relations connect to people with valuable resources. The often-cited statement that bonding social capital is for “getting by” while bridging social capital is for “getting ahead” (Narayan, 1999; Putnam, 2000) is predominantly argued from the perspective of a *resource-poor* group. When adopting the perspective of a *resource-rich* group, one would expect bonding ties to be beneficial, but bridging ties not. The question is hence about the extent to which ties are accessing a network that contains resources that are useful on the labour market.

It is too simplistic to differentiate between resource-poor and resource-rich on the basis of ethnicity as such. There is, for example, ample evidence that for migrants, social capital of the bonding type yields positive returns, since intra-ethnic ties provide access to an “ethnic” economy (see, e.g., Elliott, 2001; Sanders et al., 2002; Waldinger, 1994). The distinction between resource-rich and resource-poor is based on (access to) host-country and labour-market specific resources that natives have and that, by definition, migrants have less of. Migrants building connections to the native population hence gain access to host-country specific resources. It is well established in the literature that for successful integration in the labour market of the host society, migrants need host-country specific skills, such as education and language proficiency (Borjas, 1994; Chiswick and Miller, 2002; Duleep and Regets, 1999; Friedberg, 2000; Kanas and Van Tubergen, 2009; Zeng and Xie, 2004). This argument

is at the core of bridging social capital: by building inter-ethnic contacts, migrants realize access to resources that they typically have little of themselves, depending on their length of stay in the host country, and that are greatly in demand on the labour market.

Haug (2003) points out that host-country specific social capital is beneficial, in particular, for labour market outcomes: “Since ... in Germany most employers are Germans, it is useful for immigrants to have contacts with Germans.” Kazemipur (2006: 6) explains why: “The ethnic diversity of social networks is particularly important in the case of immigrants. A less diverse social network would mean a lower frequency of contacts with the larger society and, potentially, a slower process of language acquisition and cultural adaptation, not to mention the presence of fewer job choices. In some extreme cases, immigrants with ethnically homogeneous networks have to rely on their ethnic enclaves as the only source of employment.” In this paper, therefore, “resource-rich” refers to receiving country-specific resources, such as help with applications and in the job search process, dealing with employment agencies, translating cover letters, and knowing (or being) employers. In this sense, the German natives are the resource-rich group, when compared to the first-generation Turkish community.<sup>1</sup> It is hence expected that bridging social capital is more effective for Turkish migrants than for “native Germans”.

For native Germans, on the other hand, inter-ethnic friendships have a diversifying effect, but represent a link with a resource-poor(er) group. Therefore, inter-ethnic friendships are expected to be less beneficial for native Germans. Thus, we have Hypothesis 1a: “The positive effect of having inter-ethnic friendships on finding employment is larger for Turkish migrants than it is for native Germans.” By the same token, we expect the opposite with respect to *intra*-ethnic friendships: *intra*-ethnic friendships are more favourable for native Germans than for migrants. For Germans, *intra*-ethnic friendships present a resource-rich environment – and for migrants not. This is formulated in Hypothesis 1b: “The positive effect of having *intra*-ethnic friendships on finding employment is larger for native Germans than it is for Turkish migrants.”

### **Social and human capital**

Contrary to Kalter’s study (2006), we expect the returns of social capital to differ across educational levels. The effect of having access to a resource-rich network is likely to be largest for people who possess the least resources themselves. People with fewer educational credentials are – on average – less proficient in finding a job through formal methods (Elliott, 2001; Marsden and Hurlbert, 1988). Indeed, Drever and Hoffmeister (2008) find that lower-educated migrants in Germany make more use of their personal networks in order to find a job – and also in the United States (USA) (see Elliott, 2001; Stainback, 2008). If the lower educated are less proficient in finding a job through formal channels, the effect of social capital is likely to be larger for them than for the higher educated, who have more available alternatives. Along that line of reasoning, social capital that connects to a resource-rich environment is more valuable for people who possess relatively few resources themselves. In other words, for people with a low level of education, having friendships with native Germans is more beneficial than for those with more educational credentials. Hence, we have Hypothesis 2a: “The positive effect of having friendships with German natives on finding employment is larger for those with a low level of education than for those with a high level of education.”

However, this reasoning applies in particular to first-generation migrants, rather than to native residents. Especially for the first generation, who generally possess little host-country specific knowledge, language proficiency and education, connecting to a resource-rich network is crucial (Aguilera and Massey, 2003; Drever and Hoffmeister, 2008). This is

formulated in Hypothesis 2b: “The mechanism of H2a is stronger for Turkish migrants than for German natives.”

## METHODOLOGY

### Method of estimation

Many studies that analyse the returns of social capital suffer from an endogeneity problem, since the direction of the association between labour market outcomes and social capital is unclear (cf. Mouw, 2002; Offe and Fuchs, 2004). Both theoretical arguments are plausible: social capital may contribute to economic success, but economic participation may also enhance social capital. Longitudinal studies can isolate these effects. Therefore, in this paper we apply an event history design. Event history analysis can, moreover, exploit censored data (Allison, 1984: 11). The data was set up such that the predictors preceded the timing of the event, thus keeping the temporal order of cause and effect unambiguous (Singer and Willett, 2003).

The continuous-time hazard  $\lambda(t)$  describing the transitions from one state to another (event) is a time-specific failure rate measuring the “conditional probability of event occurrence *per unit of time*” (Singer and Willett, 2003: 474):

$$\lambda(t) = \lim_{\Delta t \rightarrow 0+} \frac{\text{pr}(t \leq T < t + \Delta t | t \leq T)}{\Delta t} \quad (1)$$

where  $T$  denotes the failure time, measured here in months (Cox, 1972: 187). The equation indicates that the event – the transition from unemployment to work – occurs at time  $T$  in the interval from  $t$  to  $t + \Delta t$ , given that it has not occurred before. The rate is measured in units of  $\Delta t$ .

Without making assumptions regarding the shape of the hazard function, Cox proportional hazards models are used to estimate the impact of the covariates. Cox regressions can generally be formulated as follows:

$$h(t_{ij}) = h_0(t_j) e^{\beta_1 X_{1ij} + \beta_2 X_{2ij} + \dots + \beta_k X_{kij}} \quad (2)$$

where  $\log h_0(t_j)$  is the unspecified general baseline log cumulative hazard function and the  $e^{\beta_1 X_{1ij} + \beta_2 X_{2ij} + \dots + \beta_k X_{kij}}$  are the covariate effects.

As the sample contains multiple records per person, which are not expected to be independent, we allow standard errors to be intra-group correlated (clustering). In that way, independence across (but not necessarily within) groups is assumed. All of the variables included in the analysis are treated as time-constant. The estimates are obtained by the Breslow method of handling tied events as if the order of the events is unknown. Finally, the proportionality assumption has been relaxed by including interactions with time when they are significant.

### Data and construction of the sample

The analysis in this paper draws on the German Socio-Economic Panel (GSOEP), a yearly panel survey that oversamples migrant households (Haiskens-Denew and Frick, 2005; Wagner et al., 1993). Furthermore, it provides a detailed monthly labour market activity calendar. Because of the availability of information on friendships, the observation period for this study is limited to 1996–2007. Regarding the sample construction, first, all of the unemployment

periods from the monthly activity calendar were selected: only the *active* working-age population is included in the sample. Second, direct transitions to work were defined as realizing, at the end of the spell of unemployment (or up to 3 months after), part-time or full-time employment that lasts for at least 3 months. Taking only the native Germans and the Turkish migrants, both male and female, and excluding left-censored spells, we retrieved a person period file ( $N = 7,803$ ) with multiple spells of unemployment per person ( $N = 5,047$ ), of which only 37.6 per cent end in a transition to work, while 16.5 per cent are right-censored.<sup>2</sup> Persons exiting the labour market were treated as censored in the analysis, thus yielding event-specific hazard models (Singer and Willett, 2003).

### Operationalization

There is no consensus in the literature about how *ethnic groups* are to be defined (for a more detailed discussion, see Sollors, 1996). Moreover, ethnic group membership is a concept that is difficult to measure. Since the options for operationalizing ethnic group membership in the GSOEP are limited or entail a heavy selection when using more recently added indicators, the ethnic groups are identified via nationality and place of birth. Persons born in Germany and with German nationality are defined as native Germans. Turkish migrants are born in Turkey, and have either a Turkish or a German nationality, hence including the naturalized first generation in the sample (for the descriptive statistics, see Table 1). Persons born in Germany and having Turkish nationality were seen as second generation and thus excluded from the sample.

With regard to *inter- and intra-ethnic friendships*, a module on social networks is included in the 1996, 2001 and 2006 waves of the GSOEP. Respondents were asked to mention up to three persons outside their household (excluding relatives) with whom they go out or meet often. The persons mentioned were subsequently classified by the type of relationship (related or not related) and nationality (German or other). For ties classified as “other”, we asked whether the respondent came from the same country as the person mentioned. The information was recoded as follows. For a Turkish person, inter-ethnic friendships are friendships

TABLE 1  
DESCRIPTIVE SAMPLE STATISTICS BY ETHNIC GROUP

	Native German		First-generation Turkish	
	Mean	SD	Mean	SD
Inter-ethnic friendships	0.04	0.24	0.43	0.82
Intra-ethnic friendships	1.35	1.27	0.98	1.16
Age	36.96	12.59	34.39	11.16
Years of full-time work experience	11.92	11.67	9.34	9.66
German-language proficiency	13	0	9.36	2.94
Duration of stay in Germany (years)	38	0	20.13	9.47
<i>Percentages</i>				
Female	47		35	
Educational attainment				
Inadequate/General Elementary	18		58	
Middle Vocational	60		29	
Vocation plus <i>Abitur</i> /Higher Vocational	10		5	
Higher Education	12		6	

Source: GSOEP, 1996–2007.

with German nationals. For a German, inter-ethnic friendships refer to the number of friends who have a nationality other than German. Intra-ethnic ties are coded inversely: for native Germans, these are friendships with German nationals; for Turkish migrants, these are friendships with people who do not have German nationality.<sup>3</sup> The friendships are matched to the spells of unemployment in such a way that the time of measurement is closest to the beginning of the spell, but not before unemployment has begun.<sup>4</sup>

As the GSOEP survey does not allow for a more refined revision of the ethnic differences in social capital, we do not analyse the *network* of ethnic minorities compared to natives but, rather, the differences in background characteristics between persons with and without inter- and intra-ethnic friendships. Furthermore, since the measurement is limited to ethnic differences in social capital, it is not possible to measure the actual resources available in the ego's network. This implies that the spanning of structural holes can only be observed with respect to the ethnic divide, and not the socio-economic differences. Therefore, we assume that social connections with native Germans as such imply having access to valuable resources. This is clearly a limitation; data on the socio-economic status of the friends would be desirable in order to describe the social composition of the networks. In that way, we could examine which socio-economic characteristics are bridged in addition to ethnicity.

The ties mentioned in name generator items (such as the ones used in this study) are biased towards strong ties (Van der Gaag and Snijders, 2004). The ties mentioned in the survey are therefore likely to be close rather than remote friendships; that is, weak ties in Granovetter's (1973) sense. As the GSOEP only distinguishes between family relations and friendships, we concentrate on friendships as the least strong ties measured.

As a first *control variable*, educational attainment was introduced. On the basis of the International Standard Classification of Education (ISCED) scheme, it is regrouped into the following categories: (1) Inadequate/General Elementary; (2) Middle Vocational; (3) Vocational plus *Abitur* (A levels)/Higher Vocational Education; and (4) Higher Education. We also control for the years of full-time working experience (also squared), age (also squared) and gender. For the Turkish migrants, we furthermore control for German-language proficiency<sup>5</sup> and the duration of their stay in Germany,<sup>6</sup> in order to test the spuriousness of these variables with regard to inter-ethnic friendships: it could be that those who have inter-ethnic friendships also speak German well, or that those who have been in Germany longer are also the ones that have inter-ethnic friendships. Finally, we include a dummy to control for regional differences (former East versus West Germany) and dummies for each survey year to control for a time trend.

## RESULTS

Table 2 displays the average number of inter-ethnic and intra-ethnic friendships for native Germans and first-generation Turkish migrants, split by educational level.<sup>7</sup> With respect to our dependent variable, only 37 per cent of the spells of unemployment end with a transition to employment in the observed time span. Figure 1 visualizes the survival curve for this transition for native Germans and Turkish migrants. Turkish migrants make a significantly slower transition to employment than Germans do.<sup>8</sup> Naturally, these survival curves are a univariate picture of the transition from unemployment to employment. To account for other individual characteristics as well, we estimate multivariate models in the remainder of this section.

Table 3 presents Cox regressions predicting the duration of the transition from unemployment to employment for Turkish migrants and native Germans separately. Models 1 and 2

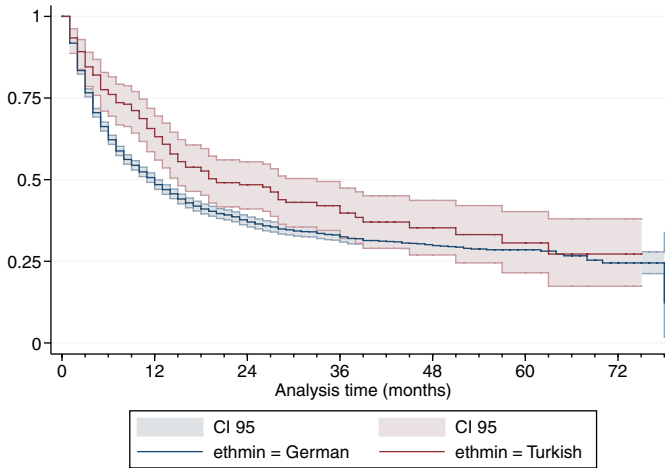
TABLE 2  
 AVERAGE NUMBER OF INTER- AND INTRA-ETHNIC FRIENDSHIPS, BY LEVEL OF EDUCATION AND ETHNIC GROUP

	Inter-ethnic friends				Intra-ethnic friends			
	Native German		First-generation Turkish		Native German		First-generation Turkish	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
	Inadequate/General Elementary	0.05	0.01	0.39	0.04	1.25	0.03	1.03
Middle Vocational	0.03	0.00	0.48	0.06	1.35	0.02	0.89	0.09
Vocational plus <i>Abitur</i> /Higher Vocational	0.05	0.01	0.68	0.19	1.52	0.04	0.81	0.22
Higher Education	0.04	0.01	0.37	0.14	1.44	0.04	1.14	0.21

Source: GSOEP, 1996–2007.

FIGURE 1

KAPLAN–MEIER SURVIVAL ESTIMATES FOR THE TRANSITION FROM UNEMPLOYMENT TO EMPLOYMENT, BY ETHNIC GROUP SOURCE: GSOEP, 1996–2007. NOTE: ESTIMATES INCLUDING 95% CONFIDENCE INTERVAL.



include inter-ethnic and intra-ethnic friendships, plus all controls. Model 1, which includes native Germans only, indicates that having friends from a different ethnic background does not make a difference for the transition from unemployment to work. On the other hand, each friend within the same ethnic group accelerates the process of finding a job by almost 4 per cent. Model 2, which includes only the Turkish first generation, suggests that Turkish migrants profit from inter-ethnic friendships: each native German friend accelerates the process of finding a job by 46 per cent. Contrary to native Germans, having intra-ethnic friendships does not affect the process of finding a job for Turkish migrants. There is hence no advantage of co-ethnic friendships with respect to, for example, the ethnic economy. This



TABLE 3  
COX REGRESSIONS PREDICTING THE EFFECT OF INTER- AND INTRA-ETHNIC FRIENDSHIPS ON  
THE TRANSITION TO EMPLOYMENT (HAZARD RATIOS)

	M1: Native Germans	M2: First-generation Turkish	M3: All
Female	.577*** (.025)	.596† (.166)	.577*** (.025)
Age	1.063** (.020)	1.022 (.110)	1.062** (.020)
Age squared	.998*** (.000)	.999 (.001)	.998*** (.000)
Years of full-time work experience	1.084*** (.010)	1.198*** (.058)	1.085*** (.010)
Years of full-time work experience squared	.999*** (.000)	.995*** (.002)	.999*** (.000)
Educational attainment			
Inadequate/General Elementary	.673*** (.045)	.851 (.201)	.685*** (.043)
Middle Vocational	ref.	ref.	ref.
Vocational plus <i>Abitur</i> /Higher Vocational	1.183** (.077)	1.234 (.629)	1.191** (.077)
Higher Education	1.566*** (.090)	.650 (.638)	1.490*** (.105)
German-language proficiency		1.098† (.054)	1.057 (.044)
Duration of stay in Germany (years)		.962* (.015)	.966** (.011)
Inter-ethnic friendships	1.047 (.082)	1.460** (.168)	
Intra-ethnic friendships	1.036* (.017)	1.016 (.088)	
Native German			Ref.
First-generation Turkish			.483* (.143)
German friends			1.034* (.017)
German friends · First-generation Turkish			1.259* (.135)
Number of observations	7,503	313	7,803
Number of failures	2,830	113	2,938
Log-likelihood	-21,826.345	-480.730	-22,749.222
AIC	43,714.690	1,027.460	45,568.444
BIC	43,929.305	1,151.085	45,812.123

Source: GSOEP, 1996–2007.

Models include dummies for each survey year, a dummy for the former East Germany, and interactions with time where the model is improving (survey year, higher education, female).

†  $p < 0.10$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ ; two-tailed tests; robust standard errors clustered by individual.

could be due to a lack of trust and thus the collective efficacy, the resources and support mobilized through the ethnic network, differs across ethnic communities (Smith, 2003). Poor blacks in the USA were found to lag behind other ethnic communities on these terms (Smith, 2003). It might be that such processes also apply to the Turkish community.

These findings only partly confirm our first hypothesis that – despite a varying effect size – all friendships reduce the duration of spells of unemployment. Whereas intra-ethnic

friendships are beneficial for native Germans, they are not for Turkish migrants. Similarly, inter-ethnic friendships are beneficial for Turkish migrants but not for native Germans. From Models 1 and 2, we can conclude that friendships with native Germans accelerate the process of finding a job, rather than inter- or intra-ethnic friendships as such.

In Model 3, which analyses both ethnic groups jointly, we therefore create a different variable: the number of (native) German friends. Model 3 suggests that having German friends shortens the transition to employment for both native Germans and Turkish migrants; however, this effect is much stronger for Turkish migrants. This result supports the resource argument and hence Haug's (2007) thesis on host-country related social capital: apparently, it is friendships with Germans that are effective in smoothening the transition to employment. However, friendships that bridge across the ethnic divide and into a resource-rich environment prove to be even more effective.

With respect to the controls (gender, age, level of education, language skills and labour market experience), the findings are in line with the literature (see, e.g., Hartung and Neels, 2009; Kogan, 2004). Previous research indicates that (immigrant) men and women differ in the use of their social networks (Moore, 1990). Therefore, we conducted a robustness check and included an interaction term between inter-/intra-ethnic friendships and sex for both native German and Turkish migrants, which, however, appeared to be insignificant (output omitted).

To test the whether the effect of having friendships with Germans is more effective for those with a low level of education, we dichotomized the variable education into "high" education (Higher Vocational and Higher Education) and "low" or no education (Middle Vocational, Inadequate/General Elementary) and differentiate again by ethnic group (Table 4). The effect of having friendships with Germans is no different for high- or low-educated native Germans, and hence H2a can be rejected. However, in line with Hypothesis 2b, lower-educated migrants profit much more from friendships with Germans, when compared to higher-educated people (Model 5). Finally, to test whether, for Turkish migrants with a low level of education, the effect of having friendships with Germans is also bigger when compared to the native Germans, in Model 6 we remove the higher-educated subjects from the sample and analyse the two ethnic groups jointly. The results confirm what has been found earlier (Model 3): friendships with native Germans accelerate the process of finding a job both for low-educated native Germans and Turkish migrants. However, the returns from this form of social capital are much higher for the Turkish first generation, when compared to native Germans. Low-educated Turkish migrants hence profit most from having friendships with native Germans – more than native Germans themselves and more than higher educated migrants.

## CONCLUSION

In this paper, we have analysed the impact of inter-ethnic and intra-ethnic friendships on the transition from unemployment to work for Turkish migrants and native Germans in Germany. We expected that friendships would reduce the duration of spells of unemployment for both migrants and Germans and, more specifically, that inter-ethnic and intra-ethnic friendships would not have the same meaning for Turkish migrants and native Germans. We expected intra-ethnic friendships to be more effective for native Germans than for migrants, since having German friends implies accessing host-country specific resources and information. For Turkish migrants, intra-ethnic contacts imply accessing a relatively resource-poor environment (H1b). Conversely, we expected inter-ethnic friendships to be more effective for migrants than for native Germans (H1a).

TABLE 4

COX REGRESSIONS PREDICTING THE EFFECT OF FRIENDSHIPS WITH GERMANS FOR HIGH- AND LOW-EDUCATED PERSONS ON THE TRANSITION TO EMPLOYMENT (HAZARD RATIOS)

	M4: Native Germans	M5: First-generation Turkish	M6: Low level of education only
Female	.571*** (.025)	.558* (.157)	.569*** (.030)
Age	1.095*** (.020)	1.048 (.113)	1.072** (.023)
Age squared	.998*** (.000)	.999 (.001)	.998*** (.000)
Years of full-time working experience	1.078*** (.010)	1.199*** (.057)	1.091*** (.013)
Years of full-time working experience squared	.999*** (.000)	.994*** (.002)	.999*** (.000)
German-language proficiency		1.118* (.059)	1.092† (.049)
Duration of stay in Germany (years)		.959* (.016)	.971* (.012)
High level of education	Ref.	Ref.	
Low level of education	.644*** (.051)	.341** (.131)	
German friends	1.008 (.031)	.758 (.248)	1.046* (.020)
Low level of education * German friends	1.039 (.037)	2.185* (.744)	
Native German			Ref.
First-generation Turkish			.502* (.151)
German friends * First-generation Turkish			1.406*** (.141)
Number of observations	7,493	312	6,080
Number of failures	2,827	112	2,225
Log-likelihood	-21,829.751	-476.122	-16,671.655
AIC	43,717.502	1,012.244	33,405.311
BIC	43,918.232	1,124.534	33,613.406

Source: GSOEP, 1996–2007.

Models include dummies for each survey year, a dummy for the former East Germany and interactions with time where the model is improving (survey year, higher education, female).

†  $p < 0.10$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ ; two-tailed tests; robust standard errors clustered on the individual.

The results have partly confirmed our expectations. For the Turkish first generation, inter-ethnic friendships have a positive impact on the transition to employment; for the native Germans, intra-ethnic friendships have the same effect. Rather than friendships *per se*, it is having friendships with native Germans that reduces the duration of unemployment. Hence, intra-ethnic friendships are more effective for Germans; and inter-ethnic friendships are more effective for Turkish migrants. Finally, friendships with native Germans are most effective for low-educated Turkish migrants: more so than for the higher-educated Turkish, and more so than for low-educated native Germans. The role of social capital for the structural integration of migrants into the receiving society has not gained much attention. Yet our findings suggest that the receiving-country specific resources made available through one's network do contribute to reducing the ethnicity gap on the labour market.

The results of this study must be seen in the light of a few limitations. It could well be that, in the case of Turkish migrants, “knowing Germans” not only captures the impact of social capital to some extent, but also unobserved characteristics related to other dimensions of (social or psychological) integration (Mouw, 2003). In other words, it may not (only) be social capital as such that has a positive effect on the transition to work, but (possibly also) other measured dimensions of integration into the host society, indicated by “having German friends”. However, due to data limitations, these dimensions cannot be disentangled here.

In addition, the effects could be overestimated for migrants if they more often make use of their social ties in order to find employment (Drever and Hoffmeister, 2008). Mouw (2002), for instance, argues that the costs of the job search increase for minorities in the presence of discrimination. To reduce search costs, migrants may therefore rely more heavily on their social networks than natives do. Unfortunately, we were unable to include information on whether the (inter-ethnic) ties were actually used for the job search. Furthermore, one could interpret the differences between migrants and natives as a composition effect, since migrants are on average less educated than natives, and since lower-educated people often make more use of their social networks to find employment. But additionally, when we only include the low-educated subjects (Model 6), the effect of social capital is larger for Turkish migrants than for native Germans, which indicates that the difference in the effect of social capital cannot only be due to the differences in educational attainment.

A third limitation relates to the limited number of friendships recorded in the data and the bias of this name generator measurement instrument towards strong ties. In this way, we included close friendships rather than acquaintances and were unable to estimate global effect of weak ties in Granovetter’s (1973) sense. Future research could remedy this situation by investigating a person’s entire network.

Nevertheless, we are able to confirm that accessing the resources available through contacts with the native population is an effective strategy for accelerating the transition from unemployment to employment, for both migrants and native residents. Friends can provide valuable information on job offers and/or support in the application process. As a result, persons with native German friends find a job more quickly than people who do not have such friends. This holds for native Germans, but even more so for migrants. It is, however, important to note that data on the socio-economic status of the friends would be desirable in order to examine if – in addition to ethnicity – other socio-economic characteristics are also bridged. On the basis of our analysis, which sustains the temporal order required for making causal statements, we conclude that in order to make the transition from unemployment to work, friendships are most “profitable” when accessing a resource-rich environment, in combination with diversifying one’s social network by building inter-ethnic contacts. Therefore, Turkish migrants with a low level of education profit most from having native German friends: more so than native Germans, and more so than higher-educated Turkish migrants.

## NOTES

1. Regrettably, the second generation could not be included in the analysis due to data limitations (low case numbers; much more diverse social capital that would require more specification).
2. Note that the monthly calendar information was matched with other variables measured on a yearly basis. In other words, it is not possible to assign the individual information to the exact *monthly* timing of the beginning of the spell of unemployment.
3. This is the “other nationality” category. By means of the follow-up question “Do you come from the same country?”, we checked whether these ties were indeed intra-ethnic. This appeared to be the case in 97 per cent of the cases.

4. Analyses using the measurement of friendships closest to the end of the spell of unemployment yielded no substantially different results. Due to the number of cases, friendships are treated as time-invariant.
5. Language proficiency was measured in 1997, 1999, 2001, 2003 and 2005, on a scale containing three items: "Own opinion of spoken German", "Own opinion of written German" and "Language usually spoken". Reliability analysis (Cronbach's alpha varies between waves from .83 to .86), as well as cumulative scaling using Mokken analysis (Loevinger's *H* varies from .74 to .79 between waves), shows that these items represent a single construct. Native Germans were given the highest value on the scale.
6. In the combined model, the highest value of the duration of stay (38 years) was assigned to the native Germans.
7. Recall that the sample includes pooled multiple spells of unemployment from several years, and therefore cannot be claimed as representative for the whole population at a particular moment in time.
8. Naturally, these results neither say anything about the initial probability of *entering* unemployment nor about the transitions into different types of employment (for the latter, see Hartung and Neels, 2009).

## REFERENCES

- Aguilera, M.B.  
 2002 "The impact of social capital on labor force participation: evidence from the 2000 social capital benchmark survey", *Social Science Quarterly*, 83(3): 854–874.  
 2003 "The impact of the worker: how social capital and human capital influence the job tenure of formerly undocumented Mexican immigrants", *Sociological Inquiry*, 73(1): 52–83.
- Aguilera, M.B., and D.S. Massey  
 2003 "Social capital and the wages of Mexican migrants: new hypotheses and tests", *Social Forces*, 82(2): 671–701.
- Allison, P.D.  
 1984 *Event History Analysis: Regression for Longitudinal Event Data*, SAGE Publications, Beverly Hills, CA.
- Battu, H., P. Seaman, and Y. Zenou  
 2005 "Job contact networks and the ethnic minorities", *CEPR Discussion Paper No. 5225*, Centre for European Labour Market Research.
- Borjas, G.J.  
 1994 "The economics of integration", *Journal of Economic Literature*, 32(4): 1667–1717.
- Boxman, E.A.W., P.M. De Graaf, and H.D. Flap  
 1991 "The impact of social and human capital on the income attainment of Dutch managers", *Social Networks*, 13(1): 51–73.
- Burt, R.S.  
 2001 "Structural holes versus network closure as social capital", in N. Lin, K. Cook and R.S. Burt (Eds), *Social Capital: Theory and Research*, Aldine De Gruyter, New York: 31–56.
- Chiswick, B.R., and P.W. Miller  
 2002 "Immigrant earnings: language skills, linguistic concentrations and the business cycle", *Journal of Population Economics*, 15(1): 31–57.
- Cox, D.R.  
 1972 "Regression models and life-tables", *Journal of the Royal Statistical Society, Series B (Methodological)*, 34(2): 187–220.
- De Graaf, P.M., and H. Flap  
 1988 "With a little help from my friends: social resources as an explanation of occupational status and income in the Netherlands, the United States and West Germany", *Social Forces*, 67(2): 453–472.
- Drever, A.I., and O. Hoffmeister  
 2008 "Immigrants and social networks in a job-scarce environment: the case of Germany", *International Migration Review*, 42(2): 425–448.

- Duleep, H., and M. Regets  
1999 "Immigrants and human capital investment", *American Economic Review*, 89(2): 186–190.
- Elliott, J.R.  
2001 "Referral hiring and ethnically homogenous jobs: how prevalent is the connection and for whom?" *Social Science Research*, 30: 401–425.
- Flap, H., and E.A.W. Boxman  
2001 "Getting started: the influence of social capital at the start of a career", in N. Lin, K. Cook and R.S. Burt (Eds), *Social Capital: Theory and Research*, Aldine de Gruyter, New York: 159–185.
- Flap, H.D., and B. Völker (Eds)  
2004 *Creation and Returns of Social Capital*, Routledge, London.
- Franzen, A., and D. Hangartner  
2006 "Social networks and labor market outcomes: the non-monetary benefits of social capital", *European Sociological Review*, 22(4): 353–368.
- Friedberg, R.M.  
2000 "You can't take it with you? Immigrant assimilation and the portability of human capital", *Journal of Labor Economics*, 18(2): 221–251.
- Gitell, R., and A. Vidal  
1998 *Community Organizing: Building Social Capital as a Development Strategy*, SAGE Publications, Thousand Oaks, CA.
- Granovetter, M.  
1973 "The strength of weak ties", *American Journal of Sociology*, 78(6): 1360–1380.  
1995 *Getting a Job: A Study of Contacts and Careers*, second edition, The University of Chicago Press, Chicago.
- Haiskens-Denew, J.P., and J.R. Frick  
2005 *DTC: Desktop Companion to the German Socio-Economic Panel (SOEP)*, DIW, Berlin.
- Hartung, A., and K. Neels  
2009 "Destination manual worker or clerk? Ethnic differences in the transition from school to work", *Schmollers Jahrbuch (Journal of Applied Social Science Studies)*, 129(2): 343–356.
- Haug, S.  
2003 "Interethnische Freundschaftsbeziehungen und soziale Integration. Unterschiede in der Ausstattung mit sozialem Kapital bei jungen Deutschen und Immigranten", *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 55(4): 716–736.  
2007 "Soziales Kapital als Ressource im Kontext von Migration und Integration", in J. Lüdicke and M. Diewald (Eds), *Soziale Netzwerke und soziale Ungleichheit: Zur Rolle von Sozialkapital in modernen Gesellschaften*, VS Verlag für Sozialwissenschaften, Wiesbaden: 85–112.
- Hollstein, B.  
2001 *Grenzen sozialer Integration: Zur Konzeption informeller Beziehungen und Netzwerke*, Leske + Budrich Verlag, Opladen.
- Kalter, F.  
2006 "Auf der Suche nach einer Erklärung für die spezifischen Arbeitsmarktnachteile von Jugendlichen türkischer Herkunft", *Zeitschrift für Soziologie*, 35(2): 144–160.
- Kanas, A., and F. Van Tubergen  
2009 "The impact of origin and host country schooling on the economic performance of immigrants", *Social Forces*, 88(2): 893–916.
- Kanas, A., F. Van Tubergen, and T. Van der Lippe  
2009 "Immigrant self-employment: testing hypotheses about the role of origin- and host-country human capital and bonding and bridging social capital", *Work and Occupations*, 36(3): 181–208.
- Kazempur, A.  
2006 "The market value of friendship: social networks of immigrants", *Canadian Ethnic Studies Journal*, 38(2): 47–71.
- Kogan, I.  
2004 "Last hired, first fired? The unemployment dynamics of male immigrants in Germany", *European Sociological Review*, 20(5): 445–461.  
2007 "A study of immigrants' employment careers in West Germany using the sequence analysis technique", *Social Science Research*, 36(2): 491–511.

- Lancee, B.  
 2010 “The economic returns of immigrants’ bonding and bridging social capital: the case of the Netherlands”, *International Migration Review*, 44(1): 202–226.  
 2011 “The economic returns of bonding and bridging social capital for immigrant men in Germany”, *Ethnic and Racial Studies*, DOI:10.1080/01419870.2011.591405
- Leonard, R., and J. Onyx  
 2003 “Networking through loose and strong ties: an Australian qualitative study”, *Voluntas: International Journal of Voluntary and Non-profit Organizations*, 14(2): 189–203.
- Lin, N.  
 1999a “Social networks and status attainment”, *Annual Review of Sociology*, 25: 467–487.  
 1999b “Building a network theory of social capital”, *Connections*, 22(1): 28–51.
- Marsden, P.V., and J.S. Hurlbert  
 1988 “Social resources and mobility outcomes: a replication and extension”, *Social Forces*, 66(4): 1038–1059.
- Moore, G.  
 1990 “Structural determinants of men’s and women’s personal networks”, *American Sociological Review*, 55(5): 726–735.
- Mouw, T.  
 2002 “Racial differences in the effects of job contacts: conflicting evidence from cross-sectional and longitudinal data”, *Social Science Research*, 31(4): 511–538.  
 2003 “Social capital and finding a job: do contacts matter?” *American Sociological Review*, 68(6): 868–898.
- Nannestad, P., G.L.H. Svendsen, and G.T. Svendsen  
 2008 “Bridge over troubled water? Migration and social capital”, *Journal of Ethnic and Migration Studies*, 34(4): 607–631.
- Narayan, D.  
 1999 “Bonds and bridges: social capital and poverty”, *Policy Research Working Paper Series*, The World Bank, Washington, DC.
- Offe, C., and S. Fuchs  
 2004 “A decline of social capital? The German case”, in R.D. Putnam (Ed), *Democracies in Flux: The Evolution of Social Capital in Contemporary Society*, Oxford University Press, New York: 189–244.
- Patacchini, E., and Y. Zenou  
 2008 “Ethnic networks and employment outcomes”, *Discussion Paper No. DP(3331)*, IZA, Bonn.
- Petermann, S.  
 2002 *Persönliche Netzwerke in Stadt und Land: Siedlungsstruktur und soziale Unterstützungsnetzwerke im Raum Halle/Saale*, Westdeutscher Verlag, Wiesbaden.
- Plickert, G., R. Côté, and B. Wellman  
 2007 “It’s not who you know, it’s how you know them: Who exchanges what with whom?” *Social Networks*, 29: 405–429.
- Portes, A. (Ed.)  
 1995 *The Economic Sociology of Immigration: Essays on Networks, Ethnicity and Entrepreneurship*, Russell Sage Foundation, New York.
- Portes, A.  
 1998 “Social capital: its origins and applications in modern sociology”, *Annual Review of Sociology*, 24(1): 1–24.
- Putnam, R.D.  
 2000 *Bowling Alone: The Collapse and Revival of American Community*, Simon and Schuster, New York.
- Sanders, J., V. Nee, and S. Sernau  
 2002 “Asian immigrants’ reliance on social ties in a multiethnic labor market”, *Social Forces*, 81(1): 281–314.
- Schuller, T.  
 2007 “Reflections on the use of social capital”, *Review of Social Economy*, 65(1): 11–28.

- Singer, J.D., and J.B. Willett  
 2003 *Applied Longitudinal Data Analysis: Modelling Change and Event Occurrence*, Oxford University Press, New York.
- Smith, S.S.  
 2003 “Exploring the efficacy of African-American’s job referral networks: a study of the obligations of exchange around job information and influence”, *Ethnic and Racial Studies*, 26(6): 1029–1045.
- Sollors, W. (Ed.)  
 1996 *Theories of Ethnicity: A Classical Reader*, New York University Press, New York.
- Stainback, K.  
 2008 “Social contacts and race/ethnic job matching”, *Social Forces*, 87(4): 857–886.
- Uhlendorff, A., and K.F. Zimmerman  
 2006 “Unemployment dynamics among migrants and natives”, *IZA Discussion Paper No. 5872*, IZA, Bonn.
- Van der Gaag, M.P.J., and T.A.B. Snijders  
 2004 “Proposals for the measurement of individual social capital”, in H. Flap and B. Völker (Eds), *Creation and Returns of Social Capital*, Routledge, London: 199–218.
- Wagner, G.G., R. Burkhauser, and F. Behringer  
 1993 “The English language public use file of the German Socio-Economic Panel”, *Journal of Human Resources*, 28(2): 429–433.
- Waldinger, R.  
 1994 “The making of an immigrant niche”, *International Migration Review*, 28(1): 3–30.
- Woolcock, M., and D. Narayan  
 2000 “Social capital: implications for development theory, research and policy”, *World Bank Research Observer*, 15(2): 225–249.
- Zeng, Z., and Y. Xie  
 2004 “Asian-Americans. Earnings disadvantage reexamined: the role of place of education”, *American Journal of Sociology*, 109(5): 1075–1108.