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# Host-country cultural capital and labour market trajectories of migrants in Germany

## The impact of host-country orientation and migrant-specific human and social capital on labour market transitions

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## Abstract

The paper investigates effects of host-country orientation and cultural difference of migrants on their socio-economic integration in Germany, using SOEP data for the years 1988-2006. We analyze unemployment and employment durations of male and female migrants, as well as transitions from domestic work to employment for female migrants from Turkey, former Yugoslavia, Greece, Spain and Italy. Given the large gap in unemployment and employment rates between groups of migrants, we look at several economic, human capital and cultural factors in order to test whether migrant-specific characteristics can help to explain ethnic group differences in labour market outcomes, The migrant-specific cultural variables we investigate include host-country language proficiency, interethnic contacts, host-country media consumption, and religiosity. The results indicate that although labour market transitions of migrants strongly depend on the labour market context, host-country orientation and religiosity also have some impact on the labour market integration of individual migrants, especially on transitions into employment of male migrants and married migrant housewives. However; while for most of our cultural variables we find significant effects on the individual level, these factors do not help to clarify the differences among the different migrant groups, which persist at a similar level even after controlling for labour market, general human capital, as well as cultural variables.

## Zusammenfassung

Das vorliegende Paper untersucht die Effekte von Wohnlandorientierung und kultureller Differenz von Migranten aus der Türkei, dem ehemaligen Jugoslawien sowie Griechenland, Italien und Spanien auf ihre sozioökonomische Integration in Deutschland. Anhand von SOEP-Daten für die Jahre 1988-2006 werden Arbeitslosigkeits- und Erwerbstätigkeitsdauern von Frauen und Männern mit Migrationshintergrund sowie Übergänge von Hausarbeit in Erwerbstätigkeit von Migrantinnen analysiert. Angesichts der deutlichen Differenzen in den Arbeitslosigkeits- und Erwerbsquoten unterschiedlicher Migrantengruppen werden ökonomische Kontextbedingungen, Humankapitalvariablen und kulturelle Faktoren herangezogen, um zu prüfen, ob migrantenspezifische Charakteristika wie Wohnlandsprachkompetenz, interethnische Kontakte, Medienpräferenzen und Religiosität zur Erklärung von ethnischen Gruppenunterschieden im Arbeitsmarkterfolg beitragen können. Die Ergebnisse zeigen, dass Arbeitsmarktübergänge von Migranten in erster Linie von ökonomischen Kontextfaktoren bestimmt werden. Dennoch wird die Arbeitsmarktintegration von Migranten auf der individuellen Ebene auch von Wohnlandorientierung und Religiosität beeinflusst. Dieser Befund gilt insbesondere für Übergänge von männlichen Migranten und Hausfrauen mit Migrationshintergrund in Erwerbstätigkeit. Allerdings können die signifikanten Effekte, die für fast alle kulturellen Faktoren festgestellt werden, letztendlich nicht die Differenzen zwischen den verschiedenen ethnischen Gruppen erklären, die auch nach Kontrolle um Arbeitsmarkt- und Humankapitalvariablen sowie kulturelle Charakteristika bestehen bleiben.

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## Introduction

Economic participation of migrants has been a major problem in many European countries for the last decades. There is overwhelming statistical evidence for the problematic situation of migrants, but data also show that not all migrant groups are affected to the same extent. Previous research has revealed that differences in socioeconomic integration are strongly related to ethnic origin. However, this research does not allow us to firmly establish to what extent cultural and religious factors are responsible for the differential socioeconomic position of ethnic groups.

Economic participation can be defined in quite different ways, e.g. in terms of employment status, professional status, job prestige, job satisfaction, employment stability, household income or earnings. We will reduce it here to the mere basics: getting a job and keeping the job, which is the prerequisite for all later differentiations of finding a more stable, more prestigious and/or better paid job. Therefore, our analyses will refer to unemployment and employment durations. Given the large ethnic differences in labour market participation of migrant women, we will additionally explore transitions from economic inactivity into employment of married female migrants.

Research on migrant labour market integration has focused mainly on the gap between natives and (male) migrants. Studies on differences between groups of migrants are scarcer, and all available European studies aiming to explain group differences have so far been cross-sectional analyses of employment status and earnings. In contrast, the approach of our paper will be longitudinal. We will use duration data to analyze the hazard of labour market status transitions by estimating Cox regression models. Our aim is to contribute to existing research by identifying culturally related migrant-specific determinants of successful transitions into employment and of job stability.

A longitudinal approach is crucial for addressing this research question, since the relationship between socio-cultural factors such as host-country language proficiency and interethnic contacts and labour market integration is likely to be recursive. Persons with insufficient language knowledge and fewer interethnic contacts may have a harder time finding a job, but jobless immigrants also have fewer opportunities to improve their language skills and to make host society acquaintances. Therefore the results of the available cross-sectional studies focusing on group differences discussed below, which document a relationship between ethnic and religious variables and employment opportunities should be taken as preliminary because they cannot tell us with certainty to what extent socio-cultural integration is a cause or a consequence of labour market success.

The German Socio-Economic Panel provides reliable longitudinal data, allowing us to conduct analyses over a period of nearly 20 years (1988-2006). Our samples cover migrants from Turkey, Ex-Yugoslavia, Greece, Spain and Italy living in West-Germany, considering not only persons born outside Germany, but also their 2nd generation offspring. Individual longitudinal data on employment trajectories of migrants will be combined with labour market context data and relevant human capital and cultural factors. In the case of married female migrants, the analyses will moreover account for selected relevant characteristics of their non-native husbands, which have not been taken into account in earlier studies.

Recent indicators of employment and unemployment vividly illustrate the dimension of migrant integration problems in Germany. In 2007, employment rates of natives and persons with a migration background differed by 11.9 percentage points to the disadvantage of migrants. A comparison of native Germans and foreigners (persons with non-German citizenship) reveals, for the same year, a gap of as much as 15.6 percentage points. Official data on unemployment rates are available only by nationality, and here again the difference is large: the unemployment rate of foreigners in 2007 reached 20.3%, a result about twice as high as for the total population (Bundesregierung 2009: 67-68, 75).

Unemployment rates have been much higher among migrants than among natives in Germany for a long time. In 1970, they had still been low for all – about 0.7% among Germans and as little as 0.3% among foreigners. From the mid-70s on, this started to change. In 1975, unemployment rates of natives and foreigners still differed only moderately, by 2.1 percentage points (4.7% for Germans, 6.8% for foreigners), but in 2002 the gap already reached 5.2 percentage points (13.9% for Germans, 19.1% for foreigners; see Bauer et al. 2005: 213). Differences in employment and unemployment of natives and migrants have been analyzed in detail by many researchers, and all studies confirm that migrants have lower employment chances than natives, even if relevant individual characteristics like age and formal education are taken into account (e.g. Uhlendorff and Zimmermann 2006; Kogan 2004; Burkert and Seibert 2007; for comparisons of native Germans and Turkish migrants: e.g. Kalter 2006a, b; Hartung and Lancee 2009).

However, migrants are not a homogeneous group, and several studies have shown that labour market success in Germany varies with ethnic background. Exploring the differences in employment and unemployment durations between male migrants and natives in Germany, Uhlendorff and Zimmermann show that “Turkish immigrants have a significantly lower probability of leaving unemployment for a paid job”, while immigrants from Italy, Ex-Yugoslavia and Spain do not differ from natives in that respect (2006: 13-14; for similar results see e.g. Kogan 2004; Burkert and Seibert 2007).

Many articles on labour market success of migrants in Germany focus on the gap between (male) natives and migrants (e.g. Bender and Seifert 1998; Kogan 2004; Bauer et al. 2005; Kalter 2006a, b; Uhlendorff and Zimmermann 2006; Liebig 2007). To our knowledge, the specific differences between ethnic groups of migrants on the German labour market have been analyzed only by Constant, Gataullina and Zimmermann (2006) who explore the impact of a composite measure of ethnic identity on the employment situation of male and female migrants. Using cross-sectional data for the year 2001, they do not confirm ethnic employment differences, but large gaps according to religious affiliation[1] and a strong link between employment probabilities and levels of cultural separation and marginalization. Dutch researchers have also conducted a number of cross-sectional studies on migrant group differences, comparing labour market achievements of migrants from the Mediterranean (Turkey and Morocco) and the Caribbean (Suriname and Dutch Antilles), accounting for the effects of education, social and cultural integration, and concluding that the Mediterranean groups have a much weaker position on the Dutch labour market than Caribbean migrants (e.g. Kanas and van Tubergen 2007; Odé and Veenman 2003). Analyses on the situation in Great Britain discovered not only origin-related group differences, but also differences related to religion, revealing that, within their respective ethnicities, Muslim migrants are more disadvantaged than their non-Muslim co-ethnics (e.g., Berthoud and Blekesaune 2007; Clark and Drinkwater 2007).

In the following, we expand on this literature by longitudinally analyzing the determinants of the specific labour market transitions of the largest migrant groups living in Germany. We will look at several economic, human capital and cultural factors in order to test whether migrant-specific characteristics explain successful transitions into employment and the stability of jobs and can account for group differences in levels of labour market participation. Our analyses focus on migrants from Turkey, Ex-Yugoslavia, Greece, Italy and Spain, taking advantage of the fact that these groups initially had been quite similar. They immigrated roughly at the same time to Germany, during the “Gastarbeiter”-period between 1955 and 1973, and had been selected by the same criteria and for the same kind of manufacturing jobs requiring no or only little qualification. At the beginning, their stay was considered to be only temporary, thus offering no special incentive for any of the groups to invest in host country-specific human or social capital, i.e. to learn the language or make friends with Germans. The idea of a longer or even permanent stay spread only later, and the subsequent immigration of family members to Germany also started for all groups at about the same time, in the mid-1970s (Bauer et al. 2005: 211). The initial similarity is reflected in the fact that, at the start, the unemployment rates of these immigrant

1 In contrast to all other studies mentioned, Constant, Gataullina and Zimmermann do not find any ethnic gaps, but display significantly higher employment probabilities for Catholic and other Christian migrants, compared to non-denominational and Muslim persons, regardless of controlling for ethnic identification levels or not (2006: 25). Given the high correlation of ethnicity and religious affiliation, especially in the case of Turkish migrants, the results could nevertheless hint at ethnic disparities. Unfortunately, the authors do not present separate models for religious affiliation and ethnic groups.

groups were quite alike – about 0.2-0.3% for Turkish, Yugoslav and other Southern European foreigners in 1970. By 2002, however, unemployment among Turkish citizens in Germany reached 23.3%, but “only” 12.6-17.1% for the other groups (Bauer et al. 2005: 213).

Figure 1 shows that these divergent trends in labour market participation of natives and migrants from Turkey, ex-Yugoslavia and the Southern EU-countries Greece, Italy and Spain are reflected in our dataset for the years 1988-2006. Throughout our analyses, we treat immigrants from the latter three countries as one Southern EU group because the small numbers of cases in our sample for the three groups do not allow separate analyses. While employment rates are somewhat erratic for all migrant groups, it is nevertheless evident that unemployment among Turkish male migrants has increased disproportionately, and that labour market integration in general is lowest for Turkish migrants. So where does the large gap in recent labour market success result from?

In what follows, we will lay out the relevant theoretical considerations for our analysis and formulate our hypotheses. After a short description of the methodology used, we will present and discuss our results.

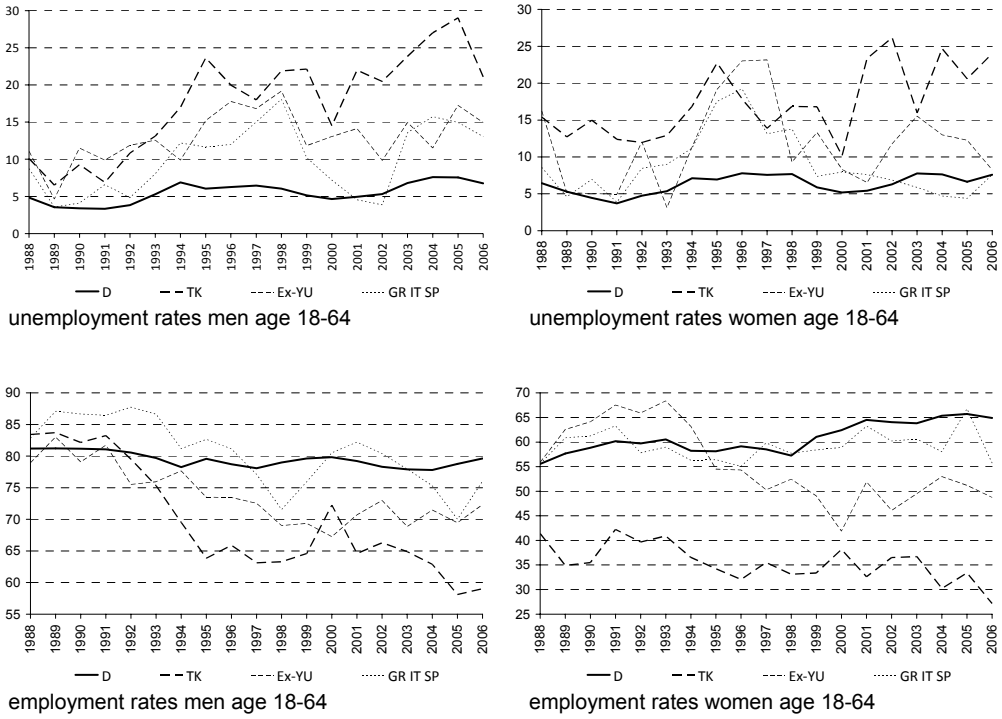



Figure 1: Unemployment and employment rates, West Germany
Data: SOEP 1988-2006, weighted data, own calculations

## Determinants of employment and unemployment duration

### *Labour market context and general individual characteristics*

Employment and unemployment depend on a variety of macro- and micro-level factors. First and foremost, chances of finding a job depend on labour force demand, and the probability of keeping a job varies according to labour market segment and skill level required for the job, i.e. *contextual factors and labour market segmentation* play a significant role. Labour force demand varies with time, season and region, and high local unemployment influences the employment prospects of both natives and migrants. But previous research has shown that job chances of migrants depend in particular on the demand for low-skilled labour. According to Kogan's comparison of the situation in Europe, migrants from non-Western countries do better in economies with a large low-skilled sector (2006: 713; 2007: 102, 187). In Germany, however, the share of persons working in jobs requiring no or only little qualification has constantly fallen since the 1980s: among employed men from 26.4% in 1988 to 17.1% in 2006, and among employed women from 42.4% to 22.7% (SOEP data, weighted, for details see table A1 in the annex). Thus, the chances of finding employment will have diminished for migrants, and so their unemployment durations may have increased over time. As our analyses will cover nearly 20 years and ten different West German federal states, we will account for time period and season effects, regional unemployment and the size of the low-skilled sector.

Employment duration is strongly correlated with labour market segment: low qualification requirements and small firm size often go along with high fluctuation, low promotion chances and bad working conditions, which are characteristics of the secondary labour market (Sesselmeier and Blauermel 1997: 224-227). Kogan (2004) has shown that migrants face higher risks of unemployment, mainly due to the fact that they are largely working in the unskilled labour market (2004: 445). If the share of migrants working in the secondary labour market differs by ethnicity, factors like firm size and required skill level could help to explain group differences in employment stability.

Further, one’s success on the labour market depends on the match between the requirements of the jobs offered and individuals’ general and specific human capital, physical ability, age, sex, mobility and soft skills, i.e. on *general (i.e. not migrant-specific) individual characteristics*. It has been widely shown that there is a strong positive correlation between levels of formal education and employment rates (e.g. Schmid 2008: 59; OECD 2009: 28-29), a fact that doesn’t make life easier for migrants who on average have lower levels of education than the native population (see e.g. OECD 2007: 221 for 2004). Age, health and marital status are further generally relevant characteristics (Ludwig-Mayerhofer 2008: 215-216; Winterhager 2006: 34-35). In a given economic macro-level context, group composition differences in terms of individual characteristics like e.g. age,

health, family status and general human capital (i.e. formal education) may account for diverging labour market outcomes.

### *Migrant-specific characteristics*

For migrants, an additional dimension will be relevant: Besides the fact that they need to be allowed to work in terms of working permits (a condition that all individuals in our sample fulfill as legal residents), they have to possess a certain amount of host country-related human and social capital to manage job search and to meet the requirements of the job. Moreover, they need to be accepted by (mostly native) employers both as individuals and as a part of a certain ethnic group – so *migrant-specific characteristics* come into play.

Following Odé and Veenman in their summary of theories on the relation between socio-cultural and structural integration, it can be assumed that minorities with a stronger cultural and social orientation toward the host-country society will achieve a better socio-economic position (2003: 173). The smaller the cultural distance, i.e. the closer the values and behavioural patterns of a minority group correspond to those required by the host society, the more successful that group will be (2003: 174). Furthermore, social contacts that reach beyond ethnic boundaries will offer better information on available jobs (Aguilera 2002: 868). They will also helpful for learning about expectations of employers in the phase of job search and thus reduce cultural distance, which according to Odé and Veenman often disadvantages migrants from the Mediterranean, who according to them show a more “humble and reticent” attitude, “as opposed to the more confident and engaged approach valued by Dutch employers” (2003: 178-179). The synthetic indicators of ethnic identification used by Constant, Gataullina and Zimmermann confirm the importance of cultural aspects by showing that the employment probability of male migrants is strongly related to their host-country adjustment, while female migrants are more likely to work if they are connected to both host and home country (2006: 19).

In this view, for successful labour market integration, migrants have to acquire a certain degree of host-country specific human and social capital in order to gain the acceptance of employers and colleagues at work, e.g. command of German language, contacts to Germans, knowledge of expected behavioural patterns, and orientation towards cultural norms and values of the host society. Education and vocational training in the host country are further important advantages. Here again, group composition differences may help to explain specific labour market integration results.

According to the results of a descriptive trend analysis for the years 1984-2001 by Diehl and Schnell (2006), there are striking differences in the level of host-country orientation of migrants across ethnic groups. The share of migrants who claim to speak German very well, is by far lowest among both first and second-

generation Turkish migrants, if compared to the respective generation of ex-Yugoslavs or migrants from Greece, Italy and Spain. Moreover, Turkish migrants less often have a German close friend, and the percentage of those who feel "totally German" is also much smaller among Turks than among the others. With regard to ethnic self-identification and home country orientation in the sense of "wish to return", the authors do not find any differences between the three groups, but for secularization and newspaper preferences this holds only for the second generation, and the preference for origin-country cooking and music is again most pronounced among Turkish migrants regardless of their generation (2006: 800-810).

Thus, for most of the indicators, the Turkish migrants – the group with the most difficult position on the labour market – also show the lowest levels of host country-specific human and social capital, which leads us to the leading hypothesis that we investigate in this study, namely that *migrant-specific characteristics at least partly explain the differences in the unemployment and employment durations across migrant groups (H1).*

Cultural difference and host-country orientation can be measured in terms of ethnic self-identification, command of language, interethnic contacts, religiosity, modernization, and everyday behaviour such as food or newspaper preferences (Ersanilli and Koopmans 2009; Diehl and Schnell 2006; Constant, Gataullina and Zimmermann 2006; Odé and Veenman 2003). In the following, we will refer only to indicators that are available in our data set and that have an evident theoretical link to labour market success, namely language proficiency and host-country education as host-country specific human capital, interethnic social capital (contacts to natives, trade union membership), religious participation as a salient indicator of cultural difference, and host-country orientation in terms of media consumption preferences.[2]

Language proficiency and host-country education

Existing research indicates that migrants with difficulties in speaking the host-country language have lower chances of finding employment and keeping their jobs. According to the theory of statistical discrimination, migrants are disadvantaged anyway on the labour market. Due to a lack of full information on the "true" productivity of workers, potential employers impute group information instead (Sesselmeier and Blauermel 1997: 72-73), e.g. ascribing migrant job seekers lower human capital because of (presumed) language deficiencies or (presumed) lower quality of general education. Migrants who speak German fluently should be able to overcome at least to some extent the group-related statistical discrimination e.g. by proving their language skills in application letters and job interviews, thus signalling a higher productivity compared to less

2 Items in the SOEP questionnaires are changing with time. Unfortunately, food and music preferences were asked only until 2000, ethnic self-identification only until 2003. Therefore, it was not possible to include these variables in our analyses.

eloquent migrants respectively a productivity similar to native applicants (if controlled for level of education and vocational training). Kanas and van Tubergen who test the influence of origin- and destination-specific human capital on the employment and occupational status of migrants in the Netherlands, controlling for interethnic and co-ethnic contacts, confirm that immigrants "who have more command of the Dutch language are … more likely to be employed" (2007: 20; for similar results see Odé and Veenman 2003: 186). The importance of language fluency has been confirmed for Germany e.g. by Kalter (2006a: 153-154) who reveals significant effects of German language proficiency on the successful transition into employment of young migrants in Germany.

Chances of finding a job depend also on the intensity of job search and on the different channels used to find employment. Describing the different patterns of job search among migrants, the German Institute for Employment Research (IAB) shows that the extent of German language use in everyday life influences the variety of job search possibilities used by migrants. Migrants who speak only or mainly German at home, look more intensively for a job and refer more often to job ads in newspapers (IAB 2006: 3).[3]

There is no literature explicitly referring to the importance of language skills for the employment stability of migrants, but as the match of existent and required language knowledge can be assessed quite easily in job interviews, dismissal from a job only due to that specific reason might happen rather seldom. Nevertheless, lack of verbal skills will constrain the available jobs to low-qualified, manual jobs on the secondary labour market, thus indirectly influencing employment duration.

According to results from Dutch analyses (Kanas and Tubergen 2007; Odé and Veenman 2003: 186), host-country educational degrees enhance labour market integration of migrants. We will control for these effects by differentiating between migrant generations:[4] First generation migrants, who came to Germany at the age of 15 or later, mostly did not attend German schools and are therefore disadvantaged on the labour market, as their school and vocational degrees are less valued than German degrees. Migrants who were either born in Germany (second generation) or immigrated during childhood (age 0-14; 1 ½ generation) attended German schools at least for parts of their educational careers. Thus, they have German certificates, had better chances of acculturating to the host society, and should therefore be better able to deal with labour market requirements.

3 Due to its purely descriptive character, the paper does not further analyze the finding. But, of course, job search costs will be higher for migrants who are not at ease with the German language – it will take them more time or even require help to find out about jobs and to understand and answer job ads. Their efforts will therefore not result in comparable levels of job search intensity if measured in terms of frequency of applications.

4 The SOEP data set offers variables on education abroad, but the numbers of missing values is high. Tests with available observations showed no significant influence, therefore we decided to use only migrant generation for our analyses.

As a good command of German will enlarge options of job search, will be a positive signal for potential employers, and will increase the range of jobs a migrant will fit to, *we* expect that *host-country language proficiency will reduce unemployment duration (H2a).* Moreover, we expect that *first generation migrants have longer unemployment durations (H2b)* as they do not possess German educational certificates. We do not expect a direct impact of language proficiency or migrant generation on employment duration, as the match of existent and required language knowledge can be assessed quite easily before employment starts, and the signalling function of host-country educational degrees will also be limited to job search phases.

Interethnic contacts

Social capital can enhance labour market integration of migrants, provided that their social networks can impart non-redundant information on job opportunities and favourable labour market behaviour. Following results from a study by Montgomery (1992: 593-594), weak-tied networks provide employment offers more frequently, and they also provide superior offers than do strong-tied networks. Aguilera (2002) tests the influence of interethnic friendships on labour market participation of migrants in the USA and finds that both network diversity and network quality influence labour market outcomes (2002: 868). These findings should also apply to Germany: contacts to natives will increase the diversity of migrants' networks, and will reveal information on how to behave first during job search and later in the job. The idea that interethnic social capital enhances the labour market integration of migrants has been confirmed for Germany by Kalter who controls not only for command of German, but also for the number of German friends of young Turkish migrants (2006a: 153-154),[5] and by Hartung and Lancee (2009) who analyzed the effect of friendships on unemployment duration. On the other hand, Kanas and van Tubergen “find no direct effects of social capital on immigrants' employment chances” in the Netherlands (2007: 26; for similar results see Odé and Veenman 2003: 187).

In this context, we will also test for the influence of interethnic marriages which are generally supposed to positively influence assimilation and thereby labour market integration, by enhancing the host-country related human capital and diversifying the interethnic network of the migrant partner. Better labour market outcomes for intermarried migrants have been confirmed by several studies (e.g. Meng and Gregory 2005 for Australia; Meng and Meurs 2006 for France; Furtado and Theodoropoulos 2009 for US). From their detailed study on the mechanisms behind these effects, Furtado and Theodoropoulos conclude that the native

5 Seibert/Solga (2006: 415) comment on Kalter's results and differentiate between young migrants with and without vocational training, confirming an effect of language and contacts only for those without vocational training (controlling for socioeconomic status of the family) while Kalter in his reply concedes the importance of education and training, but insists on the role of language and contacts: "Danach spielen Sprachkenntnisse und die ethnische Struktur der Netzwerke ebenfalls eine wichtige Rolle, wenngleich auch nicht für jede Tätigkeit bzw. abhängige Variable (und vielleicht auch nicht für jede Gruppe) in gleichem Maße." (2006b: 420).

partners' networks play an important role in explaining higher employment probabilities of ethnically intermarried migrants (2009: 31-32).

Membership in organizations in general has not been consistently covered across all panel waves, but at least membership in trade unions was asked for repeatedly. We will consider it as an indicator for host-country adoption as migrants entering trade unions get additional opportunities to interact with natives, so that they can increase their "host-country competence". Of course, we are aware that a reduced hazard of dismissal may also partly be due to better legal support for trade union members in case of impending job loss or to special protection regulations for active trade union members, e.g. for members of work councils.

Summing up, we expect that *interethnic social capital, accumulated by way of contacts with natives, interethnic marriages or trade union membership, will both reduce unemployment durations and increase employment durations (H3).*

Religious participation

Although religious affiliation and ethnic origin are often highly correlated, they can have different effects on labour market integration, and this seems to be particularly true for Muslims: A study among migrants in the UK revealed significant employment gaps between non-Muslim and Muslim migrants sharing the same ethnic background: "When investigating religious groups within different ethnic groups, we find that all Muslim groups are in a disadvantageous employment position irrespective of which ethnic group they belong to. This is particularly true for Muslim women."[6] (Berthoud and Blekesaune 2007: 76; for similar results see Clark and Drinkwater 2007: 48). The authors do not further analyze the reasons behind these findings, but religious values and discrimination and social segregation along religious lines are possible explanations. Strong religious observance, e.g. n the form of frequent attendance of religious services in the mosque or church may be associated with conservative attitudes regarding the labour market participation of women, especially when they are married and have children, While conservative attitudes on gender roles can be found among both Muslims and Christians, other mechanisms that might affect labour market participation apply especially to the former. More orthodox forms of Islamic religiosity moreover limit interaction possibilities with host country ethnics, for instance because of avoidance of contact with persons of the opposite sex, or strict dietary rules which may inhibit contact with persons holding a different belief. Thus, religiosity may capture unobserved aspects of interetnnic social capital. Discrimination on the basis of visible signs of religious affiliation like headscarves is a further possible reason for the employment disadvantages especially of Muslim women (Open Society Institute 2009: 122).

6 adjusted for age, education, family composition, county-level unemployment and Metropolitan county

The effects of participation in religious organizations or religious events on interethnic network building are also likely to be different for Muslim immigrants than for immigrants who belong to a religion that is also prevalent among native Germans. If Catholic or Protestant migrants attend church or religious events, they will usually meet native Germans there, and thus have the chance to diversify their social network. Orthodox Christian and Muslim migrants, however, will hardly get into contact with natives on these occasions.

For this combination of reasons, we expect that *strong religious observance will decrease chances of finding a job and thus increase unemployment durations, particularly for Muslims (H4).* Furthermore, we will test whether religious participation has an impact on employment durations, without predicting an outcome – there is no previous research on whether or not religious participation influences the communication with and acceptance by native co-workers or employers to an extent that it affects employment duration.

Newspaper preferences

Newspaper preferences, if controlled for language command, will give a good idea of the individual home and/or host-country orientation of migrants. Diehl and Schnell assume that "reading only Turkish newspapers is an indicator that might be considered the most important when it comes to assessing Turkish migrants' often stated interest in home country issues" (2006: 806-807). Migrants who never read German newspapers, but exclusively rely on origin-country newspapers miss an important source of information on how Germans think and what they are concerned with, and will have difficulties in joining conversation on current affairs among native co-workers or with employers. Inversely, reading mostly or only German newspapers may help to create a common basis for communication and interaction with natives. Moreover, only German newspapers offer information on the German job market.

Therefore we expect that *exclusive reading of origin-country newspapers will reduce labour market integration of migrants, while a strong host-country orientation manifest in a preference for German news media will improve the employment situation of migrants (H5).*

## Female migrants: Determinants of transitions from domestic work to employment

According to Liebig (2007), "the employment rates of immigrant women in Germany … are among the lowest in the OECD – not only in absolute terms, but also relative to those of native women. This is especially pronounced among the Turkish women" (2007: 54). Labour market behaviour of female migrants can be

related to the situation in their home country: Female employment rates in Turkey have been the lowest in European OECD countries, and traditional patterns of family life "continue to have a powerful influence in shaping family values and norms as well as actual patterns of behaviour that develop in the new setting" (Foner 1997: 962). "Strong immigrant communities, dense ethnic networks and continued, transnational ties to the sending society" belong to the factors that promote the persistence of origin-country cultural patterns (Foner 1997: 963), and these are features characteristic of important parts of the Turkish community in Germany.

Therefore, the key question for many female migrants is not "getting a job and keeping the job", but the prior decision to look for work or not. As in patriarchal cultures the male head of the family has an important say in such decisions, we analyze the transition from economic inactivity ("domestic work") to employment of female migrants married to non-native husbands, not only controlling for all migrant-specific variables of the respective female migrant, but also taking into account the husband's migrant-specific characteristics (language, contacts, newspaper preferences, religious participation).

We expect that *the degree of cultural difference or host-country orientation on the husband's side will exert a significant influence on the transition from domestic work to employment of the wife (H6).*

## Data and methodology

### *Data and dependent variables*

For our analyses, we use data from the German Socio-Economic Panel (SOEP) for the years 1988-2006. The SOEP is a wide-ranging representative longitudinal study of private households. The panel was started in 1984, since then sampling every year nearly 11,000 households, and more than 20,000 persons.[7] From 1985 on, migrants from the main "guest workers countries" have been over-sampled in a special subsample consisting only of households with a head from Turkey, Greece, Ex-Yugoslavia, Spain or Italy.[8] In 1994/95, another migration-related sample was started, covering households with at least one recently immigrated person. For all respondents, the SOEP provides monthly information on their employment situation, and allows to arrange the data in the form of "spells": A "spell" starts with the first month of a certain employment status (e.g.

7 See http://www.gsoep.de/sixcms/detail.php?id=diw_02.c.221178.en

8 For detailed information, please refer to the SOEP "Desktop Companion" (http://www.diw.de/sixcms/detail.php/38951).

unemployment), and ends with the transition into another status (e.g. employment).

Our sample consists of first, 1,5-th and second generation migrants from Turkey, Ex-Yugoslavia, Spain, Greece, and Italy living in West-Germany.[9] We consider only migrants between the ages of 18 and 55 years, thereby taking into consideration the possibly different job search behaviour and employment situation of older workers who, at certain periods of time, enjoyed special dismissal protection and unemployment benefit regulations, and had additional exit options of early and/or partial retirement.

We analyze (1) unemployment durations, i.e. transitions from unemployment to employment (full or part-time), (2) employment durations, i.e. transitions from employment (full or part-time) to unemployment, and (3) only for female migrants married to migrants: durations of domestic work phases, i.e. transitions from domestic work to employment (full or part-time).[10]

### *Method*

The appropriate method for our analyses is a Cox regression with a random frailty term to account for unobserved heterogeneity. Our modelling will consider competing risks and repeated events, and apply Efron method for handling tied events. The following reasons support our methodological approach:

The main interest in duration analysis, if a Cox model is applied, is to know to what extent a change in a certain covariate changes the hazard of experiencing a certain event. In our paper, we investigate whether the hazard of finding or losing a job increases if a migrant belongs to a certain ethnic group or not, speaks German well or not, etc.

The key advantage of a Cox model is that it does not ask for the specification of a baseline hazard, so we do not have to make any assumptions on the distributional form of the duration times. Regardless of the shape of the baseline hazard function, the model estimates whether the predictors increase or lower the baseline hazard $h_0$ for unit i. In our models, the unit i is a migrant with a given set of covariates $x_{1i} \ldots x_{ki}$.

$$h_i(t) = h_0(t)\, exp(ß_1 x_{1i} + ß_2 x_{2i} + \ldots ß_k x_{ki}) \quad (1)$$

*$h_i$ individual hazard; $h_0$ baseline hazard; $ß_{1-k}$ regression coefficients; $x_{1-k}$ indep. variables*

9 Due to limited information on migrants' ethnic background in the dataset, second-generation migrants who were German citizens throughout their SOEP participation cannot be identified. However, due to low German naturalization rates, the size of this group was very small during our period of investigation.

10 Employment and unemployment do not include phases of vocational training, requalification courses, school or university studies, maternity leave or military service. Employment includes self-employment.

These shifts in the baseline hazard are assumed to be proportional and constant over time ("proportional hazard assumption"), a condition that can be tested by means of a Schoenfelder residual test. Where the proportional hazard assumption was violated, because the effect of a predictor changes with time, we specified an interaction of the respective variable with an adequate function of time.

All results will be presented in the form of hazard ratios expressing how the predicted hazard $h_i$ changes in proportion to a one-step change in the covariate, holding all other variables constant:

$$h_i(t|x_1=n+1) / h_i(t|x_1=n) = exp(ß_1) \qquad (2)$$

*Frailty term:* Basic models assume that individuals having the same covariates are identical in their unobserved characteristics and thus have the same hazard of experiencing an event which often is not the case. The heterogeneity in unobserved characteristics can be captured with the help of a Gamma-distributed random frailty term,[11] which accounts for the fact that some individuals are more "frail" (in the sense that they do not survive so long in their initial state because they are more prone to experience an event) due to unknown or unmeasurable features, such as high intelligence, good looks, or nice behaviour, which will probably make it easier to find or keep a job. Since we are not able to include all these variables, and moreover are not interested in explicitly quantifying such effects, we add a random term (w) for frailties shared on the person-level (j), with the between-person-variance ψ, thereby clustering all observations (i) belonging to person (j):

$$h_{ij}(t) = h_0(t)\, exp(ß_1x_{1ij} + ß_2x_{2ij} + \ldots ß_kx_{kij} + w_{jψ}) \qquad (3)$$

The result is a multilevel model with the frailty term as a random parameter representing the cumulative effect of one or more omitted covariates (Gutierrez 2002: 24), which significantly improves the fit of the models. However, interpretation of the results becomes more difficult, because the hazard ratios are now conditional on the unobserved frailty. Moreover, the effect of the covariates will diminish over time in favour of the frailty effect, so the reported hazard ratios in fact represent the status at time 0 (Gutierrez 2002: 32; see also Blossfeld 2007; Golder 2008). Nonetheless, if the frailty term turns out to be significant, it should not be omitted from the model.

*Competing risks:* Unemployment does not necessarily end with a transition into employment – other exit options are transitions out of the labour force into retirement, requalification courses, military service or other inactivity. The same applies for transitions from employment: Although unemployment will usually be the first choice if people are entitled to unemployment compensations, the above mentioned transitions into economic inactivity are possible outcomes, too. All

11 For details see Gutierrez (2002) and Golder (2008).

transitions out of the labour force represent “competing risks”, and are treated by the model as right-censored spells.[12]

*Repeated events:* In the case of unemployment spells, each spell starts with the first month of unemployment[13] and ends with finding a job or transition into inactivity, resulting in cases of repeated unemployment in two or more separate spells for the same person. Repeated periods of unemployment are accounted for by clustering observations by persons,[14] and in the final models, by estimating frailty terms on the person level. Following the same logic, employment spells start with the first month of employment and end with transition into unemployment or into economic inactivity. Repeated periods of employment are accounted for by clustering observations by persons, and in the final models, by estimating frailty terms on the person level.

*Efron method for handling tied events:* Given the large number of observations in our samples, it can happen that at certain points in time, more than one unemployed person finds a job (or, in the case of employment, several persons lose their jobs at the same point in time). If more than one failure was recorded at a certain time, we have so-called “tied events”, and the composition of the risk set is not clear as these failures will not have occurred in exactly the same instant. In order to take into account how the risk set changes depending on the sequencing of these tied events, the Efron method uses probability weights (for details see Golder 2008).[15]

### *Regression models and independent variables*

We will proceed in four steps: The first model for each type of transition merely explores the difference among the migrant groups. The second model accounts for both contextual factors and general individual characteristics. In the third model, we will control for migrant-specific variables, and in the final model we will account for unobserved heterogeneity by adding the frailty term to the model.

Table A2 in the annex gives a detailed description of the independent variables.

12 The underlying assumption that the spells are randomly censored will not be violated, as one might fear with regard to the correlation of age and retirement, as we control for age, and additionally even excluded people close to retirement age.

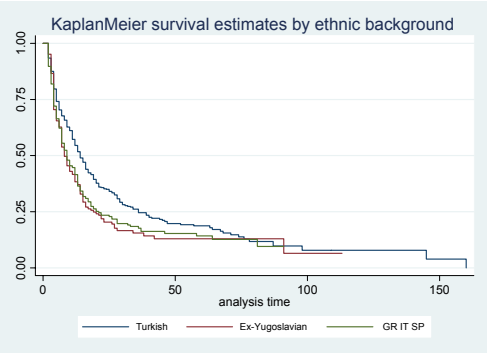
13 Available information on employment status for the years 1984-1987 has been used, so part of the spells are “late entries”. There is a number of left-truncated spells in the sample, which is due to spells starting at an unknown point in time before the respondent entered the panel or to missing values at the covariates.

14 Admittedly, we assume thereby that the baseline hazard is the same for each repetition, which might not be true. The possible solution of stratifying the model by repetitions of event would imply the assumption of proportional hazards for all variables on each strata, a condition which is impossible to meet, given the limited number of observations for higher numbers of repetitions. We therefore simply control for the number of repeated events and put up with the “robust option”, as we estimate frailty terms for the final models anyway.

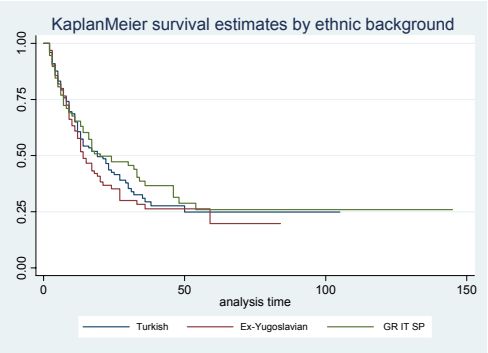
15 The method is more accurate than the Stata default Breslow method; the other options (exact partial likelihood and exact discrete likelihood method) do not work in shared frailties models.

## Descriptive findings

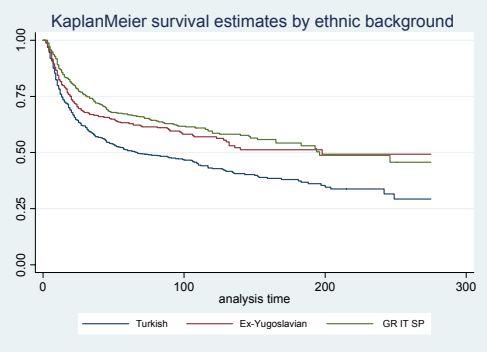
As figure 2 shows, our dependent variables, i.e. survival in unemployment resp. employment or domestic work, vary significantly among ethnic groups (except among unemployed women). The descriptive statistics in tables C1-C6 (see annex) demonstrate that there are also significant differences in sample composition and ethnic group means for nearly all contextual and individual independent variables.



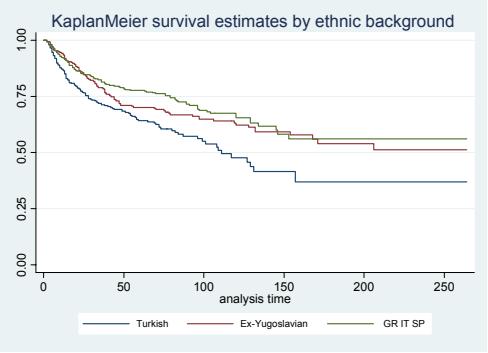

survival in unemployment, male migrants
log rank test for equality of survivor functions: 17.67***
(Differences between Ex-YU and GR IT SP are not significant.)



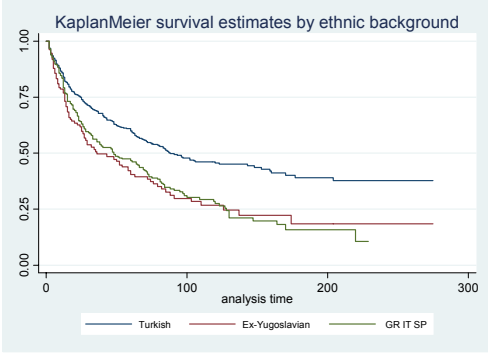

survival in unemployment, female migrants
log rank test for equality of survivor functions: 1.98 ns




survival in employment, male migrants
log rank test for equality of survivor functions: 40.04***
(Differences between Ex-YU and GR IT SP are not significant.)




survival in employment, female migrants
log rank test for equality of survivor functions: 22.26***
(Differences between Ex-YU and GR IT SP are not significant.)




survival in domestic work, female migrants married to migrants
log rank test for equality of survivor functions: 30.27***
(Differences between Ex-YU and GR IT SP are not significant.)

Figure 2: Survivor functions

*Table 1: Sample size*

| | spells | clusters (persons) | failures |
|---|---|---|---|
| unemployed male migrants | 1010 | 554 | 630 |
| unemployed female migrants | 602 | 386 | 266 |
| employed male migrants | 2426 | 1497 | 627 |
| employed female migrants | 1664 | 982 | 293 |
| domestic work (female migrants) | 1073 | 700 | 369 |

Turkish migrants are more concentrated in regions with higher unemployment rates. The level of education of migrants is quite modest. Among the unemployed men, 56% have no vocational training. In the sample of employed men, the share of the unskilled is a bit lower: 49% have never completed any vocational training.[16] There is not much ethnic group difference among male migrants, except that Turkish men seeking a job tend to be slightly better qualified than those from Greece, Italy and Spain. While this difference does not show up in the sample of employed men, Turkish men are nevertheless working significantly more often in low-qualified jobs. These results suggest that vocational training does not have the same outcome for all migrant men. Among female migrants, the share of the unskilled is even higher: 64% of unemployed female migrants and 56% among the employed have no vocational training, and in the "housewives" sample, the share even reaches 69%. In all female samples, ex-Yugoslav women are slightly more qualified than the others. The share of migrants with tertiary education does not exceed 4% in any of the samples, so there is not much variation in education.

Group-means of migrant-specific variables differ significantly among ethnicities in all samples. The results confirm the findings of Diehl and Schnell (2006) that host-country orientation in terms of German language fluency, interethnic contacts, preference for German newspapers and marriage with Germans, is lowest for Turkish migrants who at the same time show the highest level of orientation on their ethnic culture, measured by preference for origin-country newspapers and religious observance.

A comparison across samples reveals several differences concerning migrant-specific characteristics. Employed migrants have more interethnic contacts and a stronger host-country orientation in their newspaper preferences than the unemployed. The command of German is however quite alike in these groups. Muslim orientation differs only among female migrants – it is lower among the employed, if compared to the unemployed. Although these differences are significant, they are nevertheless quite small (see tables C1-C6 and figures 3 and 4 in the annex). Larger gaps show up when we compare housewives with employed or unemployed migrant women. Figure 4 illustrates that women active on the labour market, be they employed or unemployed, have not only higher levels of education, but also more host-country related cultural capital.

16 Sample differences in education (unemployed vs. employed male migrants) are significant at the $p<0.001$ level; see Table C6.

The sample differences between employed and unemployed migrants are, however, largely due to the ethnic composition of the samples: The share of Turkish migrants is much higher among unemployed men (53.5%) and women (45.5%) than among the employed (men 41.1%, women 35.6%). If we compare sample means by ethnicity (see table C6), we find significant discrepancies between employed and unemployed co-ethnics only in the level of education, but they do not really differ in host-country orientation within their ethnic group. In the "housewives" sample, the share of Turkish migrants is highest of all (54.9%). The differences between housewives and the other two female samples, however, persist even if analyzed by ethnicity, and thus allow us to generalize that female migrants active on the labour market show higher levels of host-country related cultural capital.

These descriptive findings neither consider labour market context and further individual characteristics, nor possible interrelations of e.g. education and host-country orientation. Our regression analyses will account for these factors in order to show whether and to what extent ethnic differences in host-country orientation influence the transitions from one labour market status to another.

## Regression results: Unemployment and employment duration

### *Ethnic group differences*

We find group differences by ethnic background in employment and unemployment durations mainly for male migrants. The detailed results in tables B1 and B3 show that Turkish men clearly have the weakest position. Their hazard of finding a job is significantly lower, and their employment is less stable. Group differences do not disappear, and even do not reduce if we control for labour market context, individual characteristics, migrant-specific human and social capital, host-country orientation and unobserved heterogeneity (tables B1 and B3).

Surprisingly, unemployment durations of female migrants do not differ significantly by ethnicity (table B2). But with regard to job stability, the male migrants' pattern is repeated: Women with ex-Yugoslav, Greek, Italian or Spanish background have a lower hazard of becoming unemployed than Turkish women (table B4).

### *Labour market context and general individual characteristics*

Unemployment duration of both female and male migrants strongly depends on the general labour market situation, and on seasonal demand. Part of the context effects vary with time: High unemployment rates reduce job chances the more the longer job search lasts, and the positive effect of large shares of low-skilled jobs wears out for long-term unemployed. The individual characteristics do not show any surprising effects, except that education does not have an impact on the chances of finding a job. As the share of migrants working in a low-skilled job (male: 66%, female: 75%) is much higher than the share of untrained among the employed migrants (male: 49%, female: 56%) in our samples, migrants seem to be focused on jobs where no vocational training is required, regardless of their qualification level. Thus, vocational training does not really improve the chances of finding a job (the number of high-skilled unemployed migrants in our samples is too small to allow any more detailed conclusions). The fact that repeated unemployment increases the hazard of finding a new job for male migrants seems counterintuitive, but simply indicates that men working in temporary, seasonal jobs (e.g. construction, agriculture) are easily reemployed after phases of unemployment.

Once male migrants have a job, the stability of employment depends mainly on education, labour force demand and labour market segment, findings which correspond with the respective theories on labour market segmentation and human capital. Female employment durations are not related to labour market segmentation, they are influenced only by regional unemployment rates and vocational training. Employed female migrants living with children have a significantly lower hazard of losing their job – they will either have a serious financial reason or a strong motivation to work, so that they will do their best to stay employed.

Contextual and individual variables do not explain ethnic group differences. This means that the disadvantaged position of Turkish migrants does not result from lower education levels or from a higher likelihood of working in unfavourable jobs or sectors.

### *Migrant-specific characteristics*

As shown in tables B1-B4, there are significant effects of migrant-specific variables on unemployment or employment durations of migrants. But in contrast to our first hypothesis, these characteristics do not help to explain existing differences in the labour market position of migrant groups in Germany. The only modest decrease in the AIC value and the even increasing BIC values show that the explanatory power of these variables is low (see tables B1-B4). Nevertheless, there are effects influencing the labour market chances of the individual migrant:

Language proficiency and host-country education

German language proficiency has a positive impact on the unemployment duration of male migrants. A good command of German may signal a productivity comparable to natives, and will enlarge the range of available jobs – but why there are no such effects for female migrants, is unclear. Thus, hypothesis 2a on the effect of language on unemployment duration has only been partly confirmed.

Migrant generation does not matter at all in our regressions, i.e. education abroad does not disadvantage first generation migrants, and host-country certificates do not help the others – so hypothesis 2b is rejected.

Interethnic contacts

As expected with hypothesis 3, interethnic contacts in terms of visits have a positive effect, at least on the unemployment duration of male migrants. Again, there is no effect for unemployed female migrants.

As we considered trade union membership as a possibility to increase interethnic contacts and host-country competence, the positive effect of this variable on male migrants' employment durations confirms our hypothesis 3, but again only in part, as there is no significant effect for women.

Marriage positively influences job search success of male migrants, if "not married" is the reference category. The difference between marriage to German or to non-German women is, however, not significant. Married migrant women have a significantly lower hazard of transition into employment. And for female migrants with German husbands, the effect is even stronger – either because only a negative selection is unemployed or because their economic position is relatively comfortable so that they can afford to be more selective than other migrant women in their job search.

According to our findings, only part of hypothesis 3 can be confirmed: The impact of interethnic social capital is much smaller than expected – but unemployed male migrants profit from contacts to Germans, and employed male migrants benefit from trade union membership.

Religious participation

The weak, but nevertheless significant negative effect of a strong Muslim orientation on unemployment durations for both men and women indicates that religious difference is indeed associated with lower chances of finding a job, confirming hypothesis 4. Further, there are no significant effects of religious participation of neither Muslims nor Christians on employment duration.

Newspaper preferences

Finally, our hypothesis 5 on newspaper preferences largely finds support. Women who mostly or exclusively read German newspapers have significantly better chances to find a job. The effect on their employment stability seems to be weak at first glance, but as it is time-variant, it gets more influential the longer employment lasts. Thus, women with a preference for German newspapers have more stable jobs, while women focused exclusively on origin-country newspapers have a comparatively high hazard of losing their job. The latter also applies for employed men.

Taken together, these results show that a certain degree of host-country orientation in the form of host-country language proficiency, interethnic contacts, and host-country media consumption pays off in terms of a more stable job situation. However, the results are not very strong compared to those of the general labour market context, and they do not always apply equally to men and women.

## Regression results: Female migrants (transitions from domestic work to employment)

Women with ex-Yugoslav, Greek, Italian or Spanish backgrounds have significantly higher hazards of transition from domestic work into employment than Turkish women (see table B5). The effect is time-stable and quite high for the ex-Yugoslavs right from the beginning. For female migrants from Greece, Spain and Italy the hazard of starting to work is also higher than for Turkish housewives, and it even increases with time. These group differences can neither be explained by labour market context, individual, or migrant-specific variables, nor by their husbands' cultural characteristics.

Labour market effects are broadly similar to the previous analyses: High local unemployment reduces the hazard of transition into employment, and seasonal demand has a positive effect in Spring. Somewhat irritating is the outcome that both a larger share of jobs for unskilled on the national level,[17] and completed vocational training reduce the hazard of transition into employment. Perhaps this unexpected result is related to the fact that 75% of employed migrant women work in unskilled jobs, although the share of unskilled among them is only 56% (see table C4). This discrepancy between supply and demand might lead female migrants who have completed vocational training to prefer staying at home if they

17 The effects of unemployment rates and shares of low-skilled jobs are time-variant again: High unemployment rates reduce transition hazards the more the longer domestic work lasts, and the negative effect of large shares of low-skilled jobs gets less influential the longer domestic work lasts.

do not find a position adequate to their level of education. Increasing age also significantly lowers the hazard of transition into a job.

Female migrants who have no or very poor command of German, tend to stay in the housewife position much longer than those who speak German. We do not know, however, whether this is due to their own (or their husbands') preferences or to a lack of chances on the labour market. Newspaper preferences and contacts to Germans have no impact. Weekly Christian religious observance significantly reduces the hazard of transition into employment, which confirms our idea that traditional conceptions of gender roles also play a role among practising Christians. Muslim religious observance of women does not have an impact, but this is probably due to the fact that attendance of services at the mosque is not a religious duty for Muslim women. Unfortunately, we did not have a better measure to tap female Muslim religiosity – e.g., wearing a headscarf – at our disposition.

Religiosity does play a role also for Muslims, but through the husbands' mosque attendance, which significantly reduces the hazard of transition into employment of the wife. More generally, we find that the husbands' cultural characteristics are at least as important as predictors of their wives transition into employment as the women's own cultural characteristics. Both the husbands' knowledge of German and their interethnic contacts have significant effects. The hazard of transition into employment is, at least in the first months of economic inactivity, nearly twice as high for female migrants whose husbands have at least a basic command of German. The effect wears out with time – the longer the women are housewives, the smaller the gap gets, but we can derive that women with husbands speaking at least some German tend to start working faster than others. Migrant housewives whose partners have interethnic contacts in terms of visits at or from Germans also have a higher hazard of transition into employment. Thus, our hypothesis 6 has been confirmed.

## Summary and discussion

The analyses presented in the paper have shown that unemployment and employment durations of migrants mainly depend on the labour market context and general individual characteristics such as age and the level of education. However, both descriptive findings and regression results show that host-country orientation and cultural characteristics have some additional impact on the labour market integration of individual migrants, especially on the crucial phase of transition from unemployment to employment. Host-country related human and social capital seems to help male migrants to better master job search. Women with strong host-country orientation also have better chances of finding a job. Further, strong Muslim religiosity reduces the hazard of finding a job for both male and female migrants.

Similar conclusions can be derived for the transition into employment of non-working married migrant women, both in relation to their own, and their husbands' cultural characteristics. Both women's own and their husbands' language proficiency strongly increase the hazard of transition into employment. Strong religiosity – this time both for Christian and for Muslim immigrants – significantly reduces the hazard of transition from domestic work to employment. Finally, the husbands' interethnic social capital significantly increases their wives' chances of taking up employment.

Once migrants have a job, their situation is less influenced by their host-country human and social capital, which may, of course, be a selection effect resulting from the above-described advantages for those who possess that kind of capital. Nevertheless, host-country orientation pays off for employed women, as their jobs are more stable, while strong origin-country orientation displayed in exclusive reading of ethnic newspapers leads to shorter employment durations for both men and women.

Although we thus find significant effects of migrant-specific cultural factors for all three types of labour market transitions, contrary to our main hypothesis (H1), different levels of host-country orientation and cultural difference do not explain the differences in labour market outcomes on the group level. The gap between male Turkish migrants and those from ex-Yugoslavia, Greece, Italy and Spain persists even if cultural variables and unobserved heterogeneity among migrants is taken into account. The same conclusion applies for female transitions from employment to unemployment, and, for married migrant women, from inactivity to employment.

Of course, it is possible that part of the group differences would be explained if we had had more and more accurate measures of cultural and religious variables at our disposition. For instance, for language proficiency we had to rely, like most studies, on self assessments. Interethnic social capital is also measured in the SOEP data in a relatively crude way, especially if we consider that weak ties tend to be more important for job opportunities than the strong friendship ties that our measure taps. Media preferences might be tapped more accurately, particularly for migrants, by television viewing preferences rather than newspaper reading. Finally, additional measures of religiosity beyond attendance of religious services might be more powerful, particularly for Muslim women, for whom such attendance is not necessarily strongly associated with religiosity.

Nevertheless, we take the fact that the measures that we did have at our disposition were not able to make any significant contribution to decreasing the strength of ethnic group differences in our regressions as evidence that cultural and religious attitudes and behaviours on the side of immigrants are certainly not the only, and perhaps not even the most important factor behind these persistent group differences. The most likely additional explanation refers to the fact that both finding employment and dismissal from a job are events that are only partly

the result of characteristics and strategies of migrants, but also those of employers. We have neglected this set of factors entirely in our analyses, due to a lack of appropriate data on attitudes and possible prejudices of German employers towards migrants. Ethnic discrimination on the German labour market has however been experimentally demonstrated for Turkish job applicants, especially for those applying for semi-skilled jobs or in small firms (Goldberg, Mourinho and Kulke 1996: 48; Kaas and Manter 2010; for empirical findings on employer discrimination based on SOEP data see Hunkler 2009: 18-19). The idea also gets some support by results from the German Allbus survey: From 1996 to 2006, the average natives' approval of having Turkish neighbours decreased from 3.92 to 3.77, while their sympathy for Italian neighbours increased from 5.0 to 5.27 (measured on a scale from 1 to 7; for details see Annex D), while simultaneously the natives' levels of perceived cultural difference increased with regard to Turks, and decreased with regard to Italians (for details see Annex D). To what extent the unexplained group-level differences we find are really due to ethnic discrimination on the labour market will have to be explored by future research.

Future research would also need to focus on more recent developments in migration patterns of different groups to Germany. Unfortunately, the structure of the SOEP dataset implies that our samples do not adequately reflect recent changes in the composition of the migrant population in Germany. Due to the sampling mechanism of the SOEP, migrants who arrived recently, are underrepresented in the samples. This is unfortunate, because the qualification structure of recent West-European migrants has significantly improved whereas more recent Turkish migrants continue to display low skill levels. For instance, 32.1% of Greek, Spanish or Italian citizens who moved to Germany between 2000 and 2005, were highly qualified. Among the recently immigrated Turkish and ex-Yugoslav citizens, the share of high-skilled is however only about 8% (data from German Microcensus 2005; for details see Annex E). Moreover, analyses on remigration have shown that qualification and ethnic background significantly influence remigration decisions. Highly qualified, employed migrants have a stronger probability of remigration than those with lower skill levels. If compared by ethnicity, Turkish migrants are significantly more likely to stay in Germany than ex-Yugoslavs and Greeks, Spaniards or Italians (Gundel and Peters 2008: 8). As a consequence, the share of Turkish migrants, and especially of low-qualified Turkish migrants, will increase, and so for the majority of migrants, labour market problems will persist, given the high influence of ethnicity on labour market chances.

## 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): 853-74.

Bauer, T., Dietz, B., Zimmermann, K.F., 2005: German migration: Development, assimilation, and labour market effects, in: Zimmermann, K.F. (ed.), *European Migration: What Do We Know?* Oxford: Oxford University Press, 197-261.

Bender, S., Seifert, W., 1998: Migrants in the German labour market: Nationality and gender specific labor market opportunities, in: Kurthen, H., Fijalkowski, J., Wagner, G. (eds.), *Immigration, citizenship and the welfare state in Germany and the United States.* Greenwich, CT: JAI Press, 95-117.

Berthoud, R., Blekesaune, M., 2007: Persistent employment disadvantage. Department for Work and Pensions Research Report No 416. http://research.dwp.gov.uk/asd/asd5/rports2007-2008/rrep416.pdf (downloaded 12.12.2009).

Blossfeld, H.-P., Golsch, K., Rohwer, G. (eds.), 2007: Event history analysis with Stata. Mahwah, NJ : Lawrence Erlbaum Associates.

Bundesregierung, 2009: Integration in Deutschland: Erprobung des Indikatorensets und Bericht zum bundesweiten Integrationsmonitoring. Berlin: Die Beauftragte der Bundesregierung für Migration, Flüchtlinge und Integration. http://www.bundesregierung.de/nsc_true/Content/DE/Artikel/IB/Anlagen/2009-06-10-indikatorenbericht,property=publicationFile.pdf/2009-06-10-indikatorenbericht (downloaded 09.09.2009).

Burkert, C., Seibert, H., 2007: Labour market outcomes after vocational training in Germany. Equal opportunities for migrants and natives? IAB Discussion paper 31/2007. Nürnberg: Institut für Arbeitsmarkt- und Berufsforschung. http://doku.iab.de/discussionpapers/2007/dp3107.pdf (downloaded 04.05.2009).

Clark, K., Drinkwater, S., 2007: Ethnic minorities in the labour market. Dynamics and diversity. York: Joseph Rowntree Foundation. http://www.jrf.org.uk/sites/files/jrf/1986-ethnic-minorities-employment.pdf (downloaded 12.12.2009).

Constant, A., Gataullina, L., Zimmermann, K.F., 2006: Gender, Ethnic Identity and Work. IZA DP No. 2420. http://ftp.iza.org/dp2420.pdf (downloaded 02.01.2010).

Diehl, C., Schnell, R., 2006: "Reactive Ethnicity" or "Assimilation"? Statements, arguments and first empirical evidence for labor migrants in Germany. *International Migration Review* 40(4): 786-816.

Ersanilli, E., Koopmans, R., 2008: Ethnic retention and host culture adoption among turkish immigrants in Germany, France and the Netherlands: A controlled comparison. WZB Discussion Paper SP IV 2009-701. Berlin: Wissenschaftszentrum Berlin für Sozialforschung.

Foner, N., 1997: The immigrant family: Cultural legacies and cultural changes. *International Migration Review* 31(4): 961-974.

Furtado, D., Theodoropoulos, N., 2009: Intermarriage and immigrant employment: The role of networks. Discussion paper 2009-03. Nicosia: University of Cyprus. http://papers.econ.ucy.ac.cy/RePEc/papers/03-09.pdf (downloaded 23.01.2010).

Goldberg, A., Mourinho, D., Kulke, U., 1996: Labour market discrimination against foreign workers in Germany. ILO International Migration Papers No. 7. http://www.ilo.org/public/english/protection/migrant/download/imp/imp07e.pdf (downloaded 04.05.2009).

Golder, M., 2008: Introduction to Duration Analysis. http://homepages.nyu.edu/~mrg217/essex.htm (downloaded 30.09.2008).

Gundel, S., Peters, H., 2008: Welche Immigranten kehren Deutschland den Rücken? Eine Paneluntersuchung für Deutschland. IÖB Discussion Paper 02/2008. Universität Münster. http://www.wiwi.uni-muenster.de/ioeb/downloads/forschen/paper/IOEB_DP_02_2008.PDF (downloaded 13.11.2009).

Gutierrez, R.G., 2002: Parametric frailty and shared frailty survival models. *The Stata Journal* 2(1): 22-44.

Hartung, A., Lancee, B., 2009: Turkish migrants and native Germans compared: The effect of inter-ethnic and intra-ethnic friendships on the transition from unemployment to work. Paper presented at the 9th Conference of the European Association, Lisbon, September 2-5th. http://www.eui.eu/Personal/Researchers/Lancee/Hartung%20Lancee%202009%20SOEP%20Lisbon.pdf (downloaded 09.09.2009).

Hunkler, C., 2009: Human capital or discrimination? Labor market entry disadvantages of second-generation Turkish migrants in Germany. Unpublished manuscript. University of Mannheim. http://www.equalsoc.org/uploaded_files/publications/Hunkler_HKD.pdf (downloaded 09.09.2009).

IAB, 2006: Kurzbericht Nr. 25/2006: Deutschkenntnisse beeinflussen Suchintensität und Suchwege. Nürnberg: Institut für Arbeitsmarkt- und Berufsforschung. http://doku.iab.de/kurzber/2006/kb2506.pdf (downloaded 04.11.2008).

Kaas, L., Manger, C., 2010: Ethnic Discriminationin Germany's Labour Market: A Field Experiment. IZA DP no. 4741. http://ftp.iza.org/dp4741.pdf (downloaded 15.02.2010).

Kalter, F., 2006a: Auf der Suche nach einer Erklärung für die spezifischen Arbeitsmarktnachteile von Jugendlichen türkischer Herkunft. *Zeitschrift für Soziologie* 35(2): 144-160.

Kalter, F., 2006b: Die Suche muss immer weitergehen, die Frage ist nur „wo und wie?" *Zeitschrift für Soziologie* 35(5): 418-420.

Kanas, A., van Tubergen, F., 2007: The impact of host-country human capital on the economic performance of immigrants in the Netherlands: Skills or contacts?" Unpublished manuscript. www.ercomer.eu/downloads/kanasvantubergen06.doc (downloaded 04.11.2008).

Kogan, I., 2004: Last hired, first fired? The unemployment dynamics of male immigrants in Germany. *European Sociological Review* 20(5): 445- 461.

Kogan, I., 2006: Labor markets and economic incorporation among recent immigrants in Europe. *Social Forces* 85(2): 697-721.

Kogan, I., 2007: Working through barriers. Host country institutions and immigrant labour market performance in Europe. Dordrecht: Springer.

Liebig, T., 2007: The labour market integration of migrants in Germany. OECD Social, Employment and Migration Working Papers No. 47. Paris: OECD. http://www.oecd.org/dataoecd/28/5/38163889.pdf (downloaded 07.01.2009).

Ludwig-Mayerhofer, W., 2008: Arbeitslosigkeit, in: Abraham, M., Hinz, T. (eds.), *Arbeitsmarktsoziologie. Probleme, Theorien, empirische Befunde.* 2. Auflage. Wiesbaden: Verlag für Sozialwissenschaften, 199-239.

Meng, X., Gregory, R.G., (2005): Intermarriage and the economic assimilation of immigrants. *Journal of Labor Economics* 23: 135-175.

Meng, X., Meurs, D., 2006: Intermarriage, language and economic assimilation process: A case study of France. IZA DP no. 2461. http://ftp.iza.org/dp2461.pdf (downloaded 10.12.2009).

Montgomery, J.D., 1992: Job search and network composition: Implications of the strength-of weak-ties hypothesis. *American Sociological Review* 57: 586-596.

Odé, A., Veenman, J., 2003: The ethno-cultural and socio-economic position of ethnic minority groups in the Netherlands, in: Hagendoorn, L., Veenman, J., Vollebergh, W. (eds.), *Integrating immigrants in the Netherlands: Cultural versus socio-economic integration*. Aldershot: Ashgate, 173-198.

OECD, 2007: Jobs for Immigrants (Vol. 1): Labour Market Integration in Australia, Denmark, Germany and Sweden. Paris: OECD.

OECD, 2009: *OECD Factbook 2009: Economic, Environmental and Social Statistics.* Paris: OECD.

OECD iLibrary, 2009: http://stats.oecd.org/Index.aspx?DatasetCode=LFS_SEXAGE_I_R (downloaded 17.08.2009).

Open Society Institute, 2009: Muslims in Europe. A report on 11 cities. http://www.soros.org/initiatives/home/articles_publications/publications/muslims-europe-20091215/g-muslims-eu-20091215-employment.pdf

Schmid, G., 2008: *Full Employment in Europe. Managing Labour Market Transitions and Risks.* Cheltenham, UK: Edward Elgar.

Seibert, H., Solga, H., 2006: Die Suche geht weiter … *Zeitschrift für Soziologie* 35(5): 413-417.

Sesselmeier, W., Blauermel, G., 1997: *Arbeitsmarkttheorien*. Heidelberg: Physica.

StataCorp, 2005: Stata survival analysis and epidemiological tables. Reference manual. Release 9. College Station, TX: StataCorp LP.

Uhlendorff, A., Zimmermann, K.F., 2006: Unemployment dynamics among migrants and natives. IZA DP no. 2299. ftp://repec.iza.org/RePEc/Discussionpaper/dp2299.pdf (downloaded 07.09.2008).

Winterhager, H., 2006: Determinanten der Arbeitslosigkeitsdauer – Neue Erkenntnisse aus der IEB? ZEW Discussion Paper N. 06-077. http://hdl.handle.net/10419/24532 (downloaded 07.09.2009).

## Annex


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**Table A1: Share of employed persons with jobs requiring no or only little qualification, 1988 – 2006, in percent of all employed persons**

| | male employed | female employed |
|---|---|---|
| 1988 | 26.43 | 42.43 |
| 1989 | 26.28 | 39.63 |
| 1990 | 24.01 | 36.97 |
| 1991 | 23.99 | 37.90 |
| 1992 | 24.10 | 35.74 |
| 1993 | 23.55 | 36.41 |
| 1994 | 22.02 | 34.50 |
| 1995 | 24.04 | 31.61 |
| 1996 | 24.64 | 31.41 |
| 1997 | 22.52 | 31.47 |
| 1998 | 23.01 | 27.77 |
| 1999 | 23.21 | 28.29 |
| 2000 | 19.86 | 26.16 |
| 2001 | 19.89 | 25.97 |
| 2002 | 20.21 | 27.59 |
| 2003 | 19.32 | 25.70 |
| 2004 | 17.93 | 24.81 |
| 2005 | 16.35 | 23.67 |
| 2006 | 17.14 | 22.72 |

percentage of employed respondents in a job requiring "no training, brief or extensive on-the-job training" on all employed respondents, annual averages for all employees (Germans and migrants)

Data: SOEP, weighted data, own calculations

**Table A2: Independent variables**

| | |
|---|---|
| **M1:** | **ethnic groups** |
| • | 0=Turkey (ref cat); vs. 1=Ex-Yugoslavia; vs. 2=Greece/Spain/Italy |
| | |
| **M2:** | **Labour market context and general individual characteristics** |
| | *labour force demand:* |
| • | season: Oct-Dec (ref cat); vs. Jan-March; vs. April-June; vs. July-Sept |
| • | local unemployment rate, centered: annual averages by federal state, for total population [zivile abhängige Erwerbspersonen], source: ANBA |
| • | share of low skilled jobs on all jobs, centered: percentage of employed respondents in a job requiring "no training, brief or extensive on-the-job training" on all employed respondents, annual averages for all employees (Germans and migrants) estimated from weighted SOEP data, separately for men and women |
| | |
| | *labour market segmentation (for employment duration)* |
| • | low-qualified job: 0="attended courses, completed vocational training or completed higher education required" (ref cat) vs. 1="no training, brief or extensive on-the-job training" |
| • | size of firm: 0="≤200 employees" (ref cat) vs. 1=">200 employees" |
| | |
| | *general individual characteristics* |
| • | age (in years), age squared (in years), centered |
| • | children living in household: 0="no children living in household" (ref cat) vs. 1="children living in household" |
| • | level of education: 0="no vocational training" (ref cat) vs. 1="vocational training"; vs. 2="tertiary education" |
| • | handicapped: 0="not handicapped" (ref cat) vs. 1="handicapped" |
| • | for employment duration: repeated spells of employment (linear) |
| • | for unemployment duration: repeated spells of unemployment: 0="0-4 previous spells of unemployment" (ref cat) vs. 1="more than 4 previous spells of unemployment" |
| | |
| **M3:** | **migrant-specific characteristics** |
| • | migrant generation: 0="not first generation: born outside Germany and immigration during childhood at the age 0 - 14 or born in Germany" (ref. cat.) vs. 1="first generation: born outside Germany and immigration to Germany at the age of 15 or later" |
| | |
| • | German nationality: 0="no German citizenship" (ref cat) vs. 1="German citizenship" |
| • | trade union membership*: 0="no member" (ref cat) vs. 1="member" |
| • | self-rated ability to speak German*: 0="no or poor command" (ref. cat.) vs. 1="satisfactory or good command"; vs. 2="very good command of German" |
| • | contacts to Germans*: 0="did not visit Germans last year and did not have German visitors" (ref. cat.) vs. 1="visited Germans last year or had German visitors last year" |
| • | marital status: 0="single" (ref cat) vs. 1="married with non-German partner"; vs. 2="married with native German" |
| • | religious observance**: 0="no weekly attendance of relig. Events, i.e. attending relig. events never or less often than once a week" (ref cat) vs. 1="Muslim and attending relig. events at least once a week"; vs. 2="Christian (catholic or protestant) and attending relig. events less often than once a week" |
| • | newspaper preference*: 0="no preference" vs. 1="reading exclusively newspapers from country of origin"; vs. 2="reading mostly or only German newspapers" |
| **M 3a:** | **husband's level of host country orientation** |
| (only married female migrants, transition from domestic work to employment): | |
| • | husband: religious observance (Muslim and Christian), newspaper preferences, contacts to Germans (visits), self-rated ability to speak German |
| **M 3b:** | **migrant specific characteristics and husband's level of host country orientation** |
| **M4:** | **unobserved heterogeneity (frailty term)** |
| | |

* variables available from 1988 on, but not for all years. If the variable was not part of the questionnaire in one year, values from previous year have been imputed (for trade union membership: most recent values imputed for the following years)

** The frequency of religious participation has been asked only from 1990 on. Values of 1990 are imputed for the years 1988 and 1989, as religious participation is a variable which is quite stable over time.

**Table B1: Cox regression: Unemployment duration 1988-2006, hazard ratios of transition into employment for unemployed male migrants from TK, ex-YU, GR/IT/SP in West Germany, 18-55 years**

| | M1 | M2 | M3 | M4 |
|---|---|---|---|---|
| migrant background *ref cat: Turkish* | | | | |
| Ex-Yugoslav | **1.362*** | **1.404**** | **1.403**** | **1.450*** |
| | **(2.37)** | **(2.61)** | **(2.60)** | **(2.53)** |
| GR IT SP | **1.353**** | **1.450***** | **1.398**** | **1.522**** |
| | **(2.79)** | **(3.50)** | **(2.86)** | **(3.15)** |
| quarter *ref cat. October-December* | | | | |
| Jan-March | | **1.837***** | **1.809***** | **1.728***** |
| | | **(4.64)** | **(4.48)** | **(4.19)** |
| April-June | | **2.257***** | **2.243***** | **2.249***** |
| | | **(6.06)** | **(6.05)** | **(6.37)** |
| July-September | | **1.677***** | **1.682***** | **1.718***** |
| | | **(3.64)** | **(3.65)** | **(4.02)** |
| local (=Bundesland) unemployment rate*ln(time) | | **0.981**** | **0.979**** | **0.972***** |
| | | **(-3.02)** | **(-3.26)** | **(-3.37)** |
| share of low qualified workers in Germany/ln(time) | | **1.098***** | **1.097***** | **1.117***** |
| | | **(3.81)** | **(3.77)** | **(4.13)** |
| repeated spells of unemployment (> 4) | | **2.420***** | **2.250***** | **1.927***** |
| | | **(4.42)** | **(4.50)** | **(3.56)** |
| children living in household | | 1.050 | 0.932 | 0.948 |
| | | (0.55) | (-0.68) | (-0.48) |
| level of education: *ref cat: no vocat. training* | | | | |
| vocat. training | | 1.097 | 1.083 | 1.050 |
| | | (1.03) | (0.87) | (0.48) |
| higher education | | 1.341 | 1.377 | 1.561 |
| | | (1.07) | (1.13) | (1.31) |
| age cent. | | **0.973***** | **0.963***** | **0.958***** |
| | | **(-5.50)** | **(-5.91)** | **(-5.98)** |
| age squared cent. | | 0.999 | 1.000 | 0.999 |
| | | (-1.14) | (-0.70) | (-1.41) |
| handicapped | | **0.371***** | **0.356***** | **0.353***** |
| | | **(-4.01)** | **(-4.11)** | **(-4.22)** |
| command of German *ref cat: not at all or very poor* | | | | |
| poor or satisfactory command of German | | | **1.310+** | **1.363+** |
| | | | **(1.69)** | **(1.93)** |
| good or very good command of German | | | **1.738**** | **1.797**** |
| | | | **(2.85)** | **(3.00)** |
| visits at/from Germans | | | **1.344*** | **1.313*** |
| | | | **(2.55)** | **(2.06)** |
| marriage *ref cat: not married* | | | | |
| non-German partner | | | **1.490**** | **1.493**** |
| | | | **(2.93)** | **(2.66)** |
| German partner [a] | | | 1.277 | **1.598+** |
| | | | (1.04) | **(1.71)** |
| 1st generation migrant | | | 1.147 | 1.217 |
| | | | (1.04) | (1.26) |
| religious observance *ref cat.: partipation at relig. events: never or less than once a week or no answer* | | | | |
| Muslim and participation at relig. events | | | **0.767+** | **0.740+** |
| at least once a week | | | **(-1.85)** | **(-1.79)** |
| Christian and participation at rel. events | | | 1.206 | 1.170 |
| at least once a week/ln(time) | | | (0.61) | (0.51) |
| newspaper preferences *ref cat: no preferences* | | | | |
| reading mostly or only German newspapers | | | 0.889 | 0.895 |
| | | | (-1.12) | (-0.99) |
| reading only newspapers from country of origin | | | 0.871 | 0.789 |
| | | | (-0.96) | (-1.50) |
| German nationality | | | 1.025 | 0.920 |
| | | | (0.10) | (-0.28) |
| frailty | | | | .305*** |
| (SE) | | | | .099 |
| n (spells) | 1010 | 1010 | 1010 | 1010 |
| N (persnr) | 554 | 554 | 554 | 554 |
| N (failures) | 630 | 630 | 630 | 630 |
| AIC | 7544.737 | 7383.877 | 7372.841 | 7356.186 |
| BIC | 7559.714 | 7488.712 | 7560.048 | 7543.393 |
| Wald test model $\chi^2$ | 10.24** | 183.90*** | 244.85*** | 189.65*** |
| df | 2 | 14 | 25 | 25 |
| | robust standard errors, clustered by person | | | frailty term |

[a] The difference between marriage to non-German partner and marriage with native German is not statistically significant.
t values in parantheses, + p<0.1, * p<0.05, ** p<0.01, *** p<0.001

**Table B2: Cox regression: Unemployment duration 1988-2006, hazard ratios of transition into employment for unemployed female migrants from TK, ex-YU, GR/IT/SP in West Germany, 18-55 years**

| | M1 | M2 | M3 | M4 |
|---|---|---|---|---|
| migrant background *ref cat: Turkish* | | | | |
| Ex-Yugoslav | 1.304 | **1.600**** | 1.248 | 1.377 |
| | (1.58) | **(2.62)** | (1.10) | (1.35) |
| GR IT SP | 1.002 | 1.091 | 0.882 | 0.945 |
| | (0.01) | (0.53) | (-0.69) | (-0.26) |
| quarter *ref cat. October-December* | | | | |
| Jan-March | | **1.419*** | **1.435*** | **1.419+** |
| | | **(2.00)** | **(2.08)** | **(1.93)** |
| April-June | | **1.683**** | **1.724**** | **1.738**** |
| | | **(2.89)** | **(3.05)** | **(3.10)** |
| July-September | | 1.127 | 1.140 | 1.157 |
| | | (0.59) | (0.64) | (0.75) |
| local (=Bundesland) unemployment rate*ln(time) | | 0.988 | 0.981 | **0.973+** |
| | | (-0.90) | (-1.45) | **(-1.95)** |
| share of low qualified workers in Germany/ln(time) | | **1.059**** | **1.069**** | **1.064**** |
| | | **(2.92)** | **(3.28)** | **(2.78)** |
| repeated spells of unemployment (> 4) | | 0.737 | 0.602 | 0.517 |
| | | (-0.60) | (-1.00) | (-1.04) |
| children living in household | | 0.930 | 1.060 | 1.113 |
| | | (-0.51) | (0.39) | (0.64) |
| level of education: *ref cat: no vocat. training* | | | | |
| vocat. training | | 0.957 | 0.886 | 0.937 |
| | | (-0.28) | (-0.78) | (-0.34) |
| higher education | | 1.428 | 1.394 | 1.340 |
| | | (1.39) | (1.03) | (0.47) |
| age cent. | | **0.960***** | **0.974*** | **0.970*** |
| | | **(-5.11)** | **(-2.58)** | **(-2.53)** |
| age squared cent. | | 0.999 | 0.999 | 0.999 |
| | | (-1.00) | (-1.12) | (-1.25) |
| handicapped | | 0.656 | 0.628 | 0.594 |
| | | (-1.42) | (-1.62) | (-1.34) |
| command of German *ref cat: not at all or very poor* | | | | |
| poor or satisfactory command of German | | | 0.992 | 0.841 |
| | | | (-0.03) | (-0.62) |
| good or very good command of German | | | 1.265 | 1.121 |
| | | | (0.75) | (0.35) |
| visits at/from Germans | | | 1.221 | 1.364 |
| | | | (1.02) | (1.42) |
| marriage *ref cat: not married* | | | | |
| non-German partner | | | 0.780 | **0.729+** |
| | | | (-1.63) | **(-1.67)** |
| German partner | | | **0.414*** | **0.348+** |
| | | | **(-2.39)** | **(-1.89)** |
| 1st generation migrant | | | 0.976 | 0.897 |
| | | | (-0.10) | (-0.40) |
| religious observance *ref cat.: partipation at relig. events: never or less than once a week or no answer* | | | | |
| Muslim and participation at relig. events | | | **0.491+** | **0.469+** |
| at least once a week | | | **(-1.80)** | **(-1.68)** |
| Christian and participation at rel. events | | | 1.122 | 1.157 |
| at least once a week/ln(time) | | | (0.28) | (0.33) |
| newspaper preferences *ref cat: no preferences* | | | | |
| reading mostly or only German newspapers | | | **1.415*** | **1.469*** |
| | | | **(2.35)** | **(2.15)** |
| reading only newspapers from country of origin | | | 1.060 | 1.074 |
| | | | (0.23) | (0.28) |
| German nationality | | | 1.089 | 1.286 |
| | | | (0.20) | (0.54) |
| frailty | | | | .600*** |
| (SE) | | | | .232 |
| n (spells) | 602 | 602 | 602 | 602 |
| N (persnr) | 386 | 386 | 386 | 386 |
| N (failures) | 266 | 266 | 266 | 266 |
| AIC | 2956.342 | 2906.212 | 2903.556 | 2891.178 |
| BIC | 2970.210 | 3003.292 | 3076.914 | 3064.536 |
| Wald test model $\chi^2$ | 3.25 ns | 66.14*** | 93.44*** | 86.28*** |
| df | 2 | 14 | 25 | 25 |
| | robust standard errors, clustered by person | | | frailty term |

t values in parantheses, + p<0.1, * p<0.05, ** p<0.01, *** p<0.001

**Table B3: Cox regression: Employment duration 1988-2006, hazard ratios of transition into unemployment for employed male migrants from TK, ex-YU, GR/IT/SP in West Germany, 18-55 years**

| | M1 | M2 | M3 | M4 |
|---|---|---|---|---|
| migrant background *ref cat: Turkish* | | | | |
| Ex-Yugoslav | **0.725*** | **0.757*** | **0.753*** | **0.718*** |
| | **(-2.05)** | **(-2.06)** | **(-1.96)** | **(-2.20)** |
| GR IT SP | **0.597***** | **0.603***** | **0.580***** | **0.569***** |
| | **(-4.33)** | **(-4.35)** | **(-4.38)** | **(-4.37)** |
| quarter *ref cat. October-December* | | | | |
| Jan-March | | 1.119 | 1.123 | 1.133 |
| | | (0.86) | (0.88) | (1.08) |
| April-June | | 0.881 | 0.882 | 0.902 |
| | | (-0.94) | (-0.93) | (-0.84) |
| July-September | | **0.763*** | **0.763*** | **0.776*** |
| | | **(-2.13)** | **(-2.12)** | **(-2.04)** |
| local (=Bundesland) unemployment rate | | 1.019 | 1.022 | **1.040*** |
| | | (1.18) | (1.35) | **(2.07)** |
| share of low qualified workers in Germany | | **0.932***** | **0.935***** | **0.938***** |
| | | **(-3.78)** | **(-3.55)** | **(-3.37)** |
| repeated spells of employment | | **1.150***** | **1.158***** | **1.102**** |
| | | **(5.79)** | **(5.53)** | **(3.02)** |
| children living in household | | 0.946 | 0.983 | 0.931 |
| | | (-0.54) | (-0.17) | (-0.67) |
| level of education: *ref cat: no vocat. training* | | | | |
| vocat. training | | **0.804*** | **0.799*** | **0.780*** |
| | | **(-2.14)** | **(-2.17)** | **(-2.39)** |
| higher education | | **0.456**** | **0.427**** | **0.430**** |
| | | **(-2.59)** | **(-2.71)** | **(-2.65)** |
| age cent. | | 0.993 | 0.995 | 0.990 |
| | | (-1.23) | (-0.71) | (-1.31) |
| age squared cent. | | 1.001 | 1.000 | 1.001 |
| | | (1.21) | (0.83) | (1.19) |
| large firm (>200 employees) | | **0.585***** | **0.611***** | **0.592***** |
| | | **(-5.41)** | **(-4.71)** | **(-5.19)** |
| low skilled job | | **1.652***** | **1.610***** | **1.505***** |
| | | **(4.58)** | **(4.28)** | **(3.81)** |
| trade union member | | | **0.805+** | **0.771*** |
| | | | **(-1.68)** | **(-2.20)** |
| command of German *ref cat: not at all or very poor* | | | | |
| poor or satisfactory command of German | | | 0.879 | 0.953 |
| | | | (-0.85) | (-0.32) |
| good or very good command of German | | | 1.038 | 1.210 |
| | | | (0.20) | (1.03) |
| visits at/from Germans | | | 0.887 | 0.841 |
| | | | (-0.98) | (-1.43) |
| marriage *ref cat: not married* | | | | |
| non-German partner | | | 0.874 | 0.863 |
| | | | (-1.12) | (-1.11) |
| German partner/ln(time) | | | 0.911 | 0.793 |
| | | | (-0.15) | (-0.43) |
| 1st generation migrant | | | 1.025 | 1.150 |
| | | | (0.18) | (0.91) |
| religious observance *ref cat.: partipation at relig. events: never or less than once a week or no answer* | | | | |
| Muslim and participation at relig. events | | | 0.864 | 0.875 |
| at least once a week | | | (-1.05) | (-0.86) |
| Christian and participation at rel. events | | | 1.246 | 1.170 |
| at least once a week | | | (0.98) | (0.70) |
| newspaper preferences *ref cat: no preferences* | | | | |
| reading mostly or only German newspapers | | | 0.907 | 0.893 |
| | | | (-0.87) | (-1.04) |
| reading only newspapers from country of origin | | | **1.267+** | **1.353*** |
| | | | **(1.71)** | **(2.08)** |
| German nationality | | | 0.945 | 0.902 |
| | | | (-0.19) | (-0.35) |
| frailty | | | | .732*** |
| (SE) | | | | .169 |
| n (spells) | 2426 | 2426 | 2426 | 2426 |
| N (persnr) | 1497 | 1497 | 1497 | 1497 |
| N (failures) | 627 | 627 | 627 | 627 |
| *AIC* | 8354.114 | 8198.298 | 8204.058 | 8158.111 |
| *BIC* | 8371.482 | 8328.559 | 8438.526 | 8392.580 |
| Wald test model $\chi^2$ | 19.85*** | 219.36*** | 252.23*** | 161.80*** |
| df | 2 | 15 | 27 | 27 |
| | robust standard errors, clustered by person | | | frailty term |

t values in parantheses, + p<0.1, * p<0.05, ** p<0.01, *** p<0.001

**Table B4: Cox regression: Employment duration 1988-2006, hazard ratios of transition into unemployment for employed female migrants from TK, ex-YU, GR/IT/SP in West Germany, 18-55 years**

| | M1 | M2 | M3 | M4 |
|---|---|---|---|---|
| migrant background *ref cat: Turkish* | | | | |
| Ex-Yugoslav | **0.638*** | **0.688*** | 0.761 | **0.699+** |
| | **(-2.56)** | **(-2.06)** | (-1.40) | **(-1.69)** |
| GR IT SP | **0.548***** | **0.559***** | **0.580**** | **0.564**** |
| | **(-3.70)** | **(-3.47)** | **(-3.02)** | **(-3.18)** |
| quarter *ref cat. October-December* | | | | |
| Jan-March | | 0.939 | 0.941 | 0.956 |
| | | (-0.38) | (-0.37) | (-0.26) |
| April-June | | 0.834 | 0.831 | 0.852 |
| | | (-0.99) | (-1.01) | (-0.89) |
| July-September | | 1.083 | 1.080 | 1.093 |
| | | (0.45) | (0.44) | (0.52) |
| local (=Bundesland) unemployment rate | | **1.066*** | **1.066*** | **1.064*** |
| | | **(2.32)** | **(2.33)** | **(2.23)** |
| share of low qualified workers in Germany | | 1.004 | 1.002 | 0.998 |
| | | (0.28) | (0.12) | (-0.10) |
| repeated spells of employment | | **1.159**** | **1.151**** | **1.143*** |
| | | **(2.92)** | **(2.72)** | **(2.34)** |
| children living in household | | **0.687**** | **0.721*** | **0.709*** |
| | | **(-2.60)** | **(-2.37)** | **(-2.30)** |
| level of education: *ref cat: no vocat. training* | | | | |
| vocat. training | | **0.657**** | **0.667*** | **0.630**** |
| | | **(-2.59)** | **(-2.48)** | **(-2.68)** |
| higher education | | **0.439+** | **0.441+** | 0.448 |
| | | **(-1.89)** | **(-1.87)** | (-1.61) |
| age cent. | | 0.988 | 0.998 | 0.992 |
| | | (-1.30) | (-0.20) | (-0.64) |
| age squared cent. | | 1.001 | 1.001 | 1.001 |
| | | (1.43) | (0.66) | (0.81) |
| large firm (>200 employees) | | 1.015 | 1.036 | 1.033 |
| | | (0.11) | (0.24) | (0.24) |
| low skilled job | | 1.318 | 1.340 | 1.276 |
| | | (1.38) | (1.43) | (1.22) |
| trade union member | | | 0.823 | 0.862 |
| | | | (-1.07) | (-0.74) |
| command of German *ref cat: not at all or very poor* | | | | |
| poor or satisfactory command of German | | | 1.198 | 1.195 |
| | | | (0.85) | (0.79) |
| good or very good command of German | | | 1.144 | 1.128 |
| | | | (0.52) | (0.43) |
| visits at/from Germans | | | 0.846 | 0.823 |
| | | | (-0.94) | (-1.08) |
| married[a] | | | **0.717*** | 0.792 |
| | | | **(-2.15)** | (-1.39) |
| | | | | |
| | | | | |
| | | | | |
| 1st generation migrant | | | 0.849 | 0.860 |
| | | | (-0.80) | (-0.64) |
| religious observance *ref cat.: partipation at relig. events: never or less than once a week or no answer* | | | | |
| Muslim and participation at relig. events | | | 0.932 | 0.880 |
| at least once a week | | | (-0.22) | (-0.37) |
| Christian and participation at rel. events | | | 0.975 | 0.898 |
| at least once a week | | | (-0.11) | (-0.39) |
| newspaper preferences *ref cat: no preferences* | | | | |
| reading mostly or only German newspapers*time | | | **0.994*** | **0.994*** |
| | | | **(-2.00)** | **(-1.97)** |
| reading only newspapers from country of origin | | | 1.371 | **1.418+** |
| | | | (1.54) | **(1.77)** |
| German nationality | | | 0.808 | 0.765 |
| | | | (-0.49) | (-0.61) |
| frailty | | | | .732*** |
| (SE) | | | | .169 |
| n (spells) | 1664 | 1664 | 1664 | 1664 |
| N (persnr) | 982 | 982 | 982 | 982 |
| N (failures) | 293 | 293 | 293 | 293 |
| *AIC* | 3677.068 | 3651.933 | 3658.511 | 3633.318 |
| *BIC* | 3694.092 | 3779.613 | 3879.823 | 3854.630 |
| Wald test model $\chi^2$ | 15.06*** | 219.36*** | 252.23*** | 161.80*** |
| df | 2 | 15 | 26 | 26 |
| | robust standard errors, clustered by person | | | frailty term |

a Due to low number of cases for marriages with native German partners, a differentiation between non-German and native German partner was not possible.

t values in parantheses, + p<0.1, * p<0.05, ** p<0.01, *** p<0.001

**Table B5: Cox regression: Domestic work duration 1988-2006, hazard ratios of transition from domestic work to employment for female migrants from TK, ex-YU, GR/IT/SP married to migrants in West Germany, 18-55 years**

| | M1 | M2 | M3 | M3a | M3b | M4 |
|---|---|---|---|---|---|---|
| migrant background *ref cat: Turkish* | | | | | | |
| Ex-Yugoslav | **1.785*** ** | **1.728** ** | **1.593** ** | **1.490*** | **1.496*** | **1.670** ** |
| | **(3.71)** | **(3.24)** | **(2.80)** | **(2.39)** | **(2.43)** | **(2.64)** |
| GR IT SP*ln(time) | **1.143*** ** | **1.124** ** | **1.120** ** | **1.082+** | **1.090*** | **1.130*** |
| | **(3.72)** | **(3.13)** | **(2.61)** | **(1.95)** | **(2.05)** | **(2.50)** |
| quarter *ref cat. October-December* | | | | | | |
| Jan-March | | **2.110*** ** | **2.136*** ** | **2.113*** ** | **2.124*** ** | **2.163*** ** |
| | | **(3.84)** | **(3.93)** | **(3.83)** | **(3.89)** | **(4.11)** |
| April-June | | 1.250 | 1.267 | 1.251 | 1.259 | 1.284 |
| | | (0.95) | (1.02) | (0.96) | (0.99) | (1.19) |
| July-September | | 1.299 | 1.303 | 1.295 | 1.297 | 1.318 |
| | | (1.20) | (1.22) | (1.18) | (1.19) | (1.34) |
| local (=Bundesland) unemployment rate*ln(time) | | **0.902*** ** | **0.895*** ** | **0.898*** ** | **0.895*** ** | **0.867*** ** |
| | | **(-4.59)** | **(-4.92)** | **(-4.75)** | **(-4.95)** | **(-5.18)** |
| share of low qualified workers in Germany/ln(time) | | 0.991 | 0.992 | 0.993 | 0.995 | **0.979+** |
| | | (-0.82) | (-0.64) | (-0.65) | (-0.44) | **(-1.77)** |
| children living in household | | 0.880 | 0.852 | 0.867 | 0.848 | 0.810 |
| | | (-0.74) | (-0.91) | (-0.82) | (-0.94) | (-1.12) |
| level of education: *ref cat: no vocat. training* | | | | | | |
| vocat. training | | 0.838 | **0.803+** | **0.796+** | **0.775*** | **0.739*** |
| | | (-1.41) | **(-1.70)** | **(-1.83)** | **(-1.97)** | **(-2.04)** |
| higher education | | 1.627 | 1.370 | 1.489 | 1.350 | 1.754 |
| | | (0.80) | (0.51) | (0.66) | (0.49) | (0.87) |
| age cent. | | 1.004 | 1.003 | 1.006 | 1.007 | 1.009 |
| | | (0.49) | (0.41) | (0.86) | (0.95) | (1.02) |
| age squared cent. | | **0.996*** ** | **0.996*** ** | **0.996*** ** | **0.996*** ** | **0.996*** ** |
| | | **(-4.65)** | **(-4.38)** | **(-4.48)** | **(-4.36)** | **(-5.24)** |
| command of German *ref cat: not at all or very poor* | | | | | | |
| poor or satisfactory command of German | | | **1.386*** | | **1.328*** | **1.424*** |
| | | | **(2.29)** | | **(1.98)** | **(2.47)** |
| good or very good command of German | | | **1.526+** | | 1.316 | 1.346 |
| | | | **(1.89)** | | (1.28) | (1.37) |
| visits at/from Germans | | | 1.230 | | | |
| | | | (1.44) | | | |
| 1st generation migrant | | | 1.138 | | | |
| | | | (0.75) | | | |
| religious observance *ref cat.: partipation at relig. events: never or less than once a week or no answer* | | | | | | |
| Muslim and participation at relig. events | | | 0.815 | | | |
| at least once a week | | | (-0.82) | | | |
| Christian and participation at rel. events | | | **0.611*** | | **0.613*** | **0.512** ** |
| at least once a week | | | **(-2.18)** | | **(-2.19)** | **(-2.66)** |
| newspaper preferences *ref cat: no preferences* | | | | | | |
| reading mostly or only German newspapers | | | 0.926 | | | |
| | | | (-0.49) | | | |
| reading only newspapers from country of origin | | | 0.985 | | | |
| | | | (-0.10) | | | |
| German nationality | | | 0.941 | | | |
| | | | (-0.14) | | | |
| partner: command of German *ref cat: not at all or very poor* | | | | | | |
| poor or satisfactory command of German*ln(time) | | | | **1.796+** | **1.818+** | **1.886+** |
| | | | | **(1.71)** | **(1.78)** | **(1.90)** |
| good or very good command of German*ln(time) | | | | **1.494+** | **1.484*** | 1.337 |
| | | | | **(1.92)** | **(2.02)** | (1.35) |
| partner: visits at/from Germans | | | | **1.340*** | **1.308+** | **1.313+** |
| | | | | **(2.03)** | **(1.93)** | **(1.82)** |
| partner: religious observance *ref cat.: partipation at relig. events: never or less than once a week or no answer* | | | | | | |
| Muslim and participation at relig. events | | | | **0.619*** | **0.622*** | **0.622*** |
| at least once a week*ln(time) | | | | **(-2.30)** | **(-2.29)** | **(-2.29)** |
| Christian and participation at rel. events | | | | 0.866 | | |
| at least once a week | | | | (-0.63) | | |
| partner: newspaper preferences *ref cat: no preferences* | | | | 0.966 | | |
| reading mostly or only German newspapers | | | | (-0.19) | | |
| | | | | 1.094 | | |
| reading only newspapers from country of origin | | | | (0.64) | | |
| | | | | 1.035 | | |
| partner: German nationality | | | | 1.035 | | |
| | | | | (0.09) | | |
| frailty | | | | | | .657*** |
| (SE) | | | | | | .212 |
| n (spells) | 1073 | | 1073 | 1073 | 1073 | 1073 |
| N (persnr) | 700 | | 700 | 700 | 700 | 700 |
| N (failures) | 369 | | 369 | 369 | 369 | 369 |
| AIC | 4269.446 | 4209.435 | 4210.162 | 4205.910 | 4194.952 | 4177.157 |
| BIC | 4286.386 | 4311.075 | 4388.032 | 4375.309 | 4355.881 | 4338.086 |
| Wald test model $\chi^2$ | 20.70*** | 110.10*** | 126.52*** | 137.44*** | 140.62*** | 126.56*** |
| df | 2 | 12 | 21 | 20 | 19 | 19 |
| | robust standard errors, clustered by person | | | | | frailty term |

t values in parantheses, + p<0.1, * p<0.05, ** p<0.01, *** p<0.001

**Tables C1 – C6: Descriptive statistics, 1988-2006**

**Table C1: unemployment duration, sample of male migrants from TK, ex-YU, GR/IT/SP in West Germany, 18-55 years, first month of spell in sample**

| | Turkish | Ex-Yugosl. | GR IT SP | Total | |
|---|---|---|---|---|---|
| n spells | 540 | 187 | 283 | 1,010 | |
| % of total | 53.47 | 18.51 | 28.02 | 100.0 | |

| | Turkish (% of "yes") | Ex-Yugosl. (% of "yes") | GR IT SP (% of "yes") | Total (% of "yes") | Significance of difference [a] TK - Ex-YU | TK - GR IT SP | Ex-YU - GR IT SP |
|---|---|---|---|---|---|---|---|
| children in household | 68.15 | 58.29 | 44.17 | 59.60 | ** | *** | ** |
| level of education | | | | | ns | + | ns |
| no vocational training | 53.70 | 57.75 | 57.95 | 55.64 | | | |
| vocational training | 43.52 | 38.50 | 40.28 | 41.68 | | | |
| higher education | 2.78 | 3.74 | 1.77 | 2.67 | | | |
| repeated spells of unemployment (> 4) | 6.30 | 11.76 | 4.24 | 6.73 | * | + | ** |
| handicapped | 5.74 | 6.95 | 9.19 | 6.93 | ns | * | ns |
| marriage | | | | | ns | * | * |
| not married | 35.56 | 40.11 | 52.30 | 41.09 | | | |
| non-German partner | 62.96 | 51.87 | 38.16 | 53.96 | | | |
| German partner | 1.48 | 8.02 | 9.54 | 4.95 | | | |
| command of German | | | | | * | * | ns |
| no or very poor | 13.33 | 11.23 | 10.95 | 12.28 | | | |
| poor or satisfactory | 61.48 | 54.55 | 55.83 | 58.61 | | | |
| very good | 25.19 | 34.22 | 33.22 | 29.11 | | | |
| visits at/from Germans | 77.22 | 85.56 | 88.69 | 81.98 | ** | *** | ns |
| 1st generation migrant | 45.37 | 59.89 | 45.94 | 48.22 | *** | ns | ** |
| religious participation | | | | | | | |
| Muslim and relig. part. every week | 18.15 | 2.14 | 0.00 | 10.10 | *** | *** | * |
| Christian and relig. part. every week | 0.74 | 4.28 | 10.25 | 4.06 | * | *** | ** |
| newspaper preferences | | | | | | | |
| mostly or only German | 23.33 | 44.92 | 49.12 | 34.55 | *** | *** | ns |
| only from country of origin | 18.52 | 6.42 | 9.89 | 13.86 | *** | *** | + |
| German nationality | 4.81 | 2.14 | 1.06 | 3.27 | * | *** | ns |

| | Turkish mean (SD) | Ex-Yugosl. mean (SD) | GR IT SP mean (SD) | Total mean (SD) | Significance of difference [a] TK - Ex-YU | TK - GR IT SP | Ex-YU - GR IT SP |
|---|---|---|---|---|---|---|---|
| regional unemployment rate | 8.93 | 8.34 | 8.13 | 8.60 | ** | *** | ns |
| | (2.67) | (2.67) | (2.25) | (2.58) | | | |
| share low skilled jobs | 22.49 | 22.58 | 22.92 | 22.63 | ns | * | + |
| | (2.87) | (2.69) | (2.63) | (2.78) | | | |
| age | 32.07 | 34.84 | 33.63 | 33.02 | ** | * | ns |
| | (10.69) | (12.50) | (11.17) | (11.22) | | | |

[a] one-tailed t-tests, unequal variances, + p<0.1, * p<0.05, ** p<0.01, *** p<0.001

**Table C2: unemployment duration, sample of female migrants from TK, ex-YU, GR/IT/SP in West Germany, 18-55 years, first month of spell in sample**

| | Turkish | Ex-Yugosl. | GR IT SP | Total | |
|---|---|---|---|---|---|
| n spells | 274 | 144 | 184 | 602 | |
| % of total | 45.51 | 23.92 | 30.56 | 100.0 | |

| | Turkish (% of "yes") | Ex-Yugosl. (% of "yes") | GR IT SP (% of "yes") | Total (% of "yes") | Significance of difference [a] TK - Ex-YU | TK - GR IT SP | Ex-YU - GR IT SP |
|---|---|---|---|---|---|---|---|
| children in household | 66.06 | 48.61 | 51.09 | 57.31 | *** | *** | ns |
| level of education | | | | | *** | ns | ** |
| no vocational training | 71.17 | 50.00 | 65.22 | 64.00 | | | |
| vocational training | 26.64 | 48.61 | 32.61 | 34.00 | | | |
| higher education | 2.19 | 1.39 | 2.17 | 1.99 | | | |
| repeated spells of unemployment (>4) | 1.82 | 1.39 | 1.09 | 1.50 | ns | ns | ns |
| handicapped | 2.55 | 8.33 | 5.43 | 4.82 | * | + | ns |
| marriage | | | | | ns | ns | ns |
| not married | 35.04 | 45.83 | 42.93 | 40.03 | | | |
| non-German partner | 64.23 | 49.31 | 54.35 | 57.64 | | | |
| German partner | 0.73 | 4.86 | 2.72 | 2.33 | | | |
| command of German | | | | | ** | ** | ns |
| no or very poor | 15.33 | 11.81 | 8.15 | 12.29 | | | |
| poor or satisfactory | 60.22 | 50.69 | 58.70 | 57.48 | | | |
| very good | 24.45 | 37.50 | 33.15 | 30.23 | | | |
| visits at/from Germans | 78.83 | 85.42 | 86.96 | 82.89 | * | * | ns |
| 1st generation migrant | 41.24 | 64.58 | 44.02 | 47.67 | *** | ns | *** |
| religious participation | | | | | | | |
| Muslim and relig. part. every week | 10.95 | 0.69 | 0.00 | 5.15 | *** | *** | ns |
| Christian and relig. part. every week | 0.00 | 8.33 | 13.04 | 5.98 | *** | *** | + |
| newspaper preferences | | | | | | | |
| mostly or only German | 17.52 | 48.61 | 41.85 | 32.39 | *** | *** | ns |
| only from country of origin | 21.90 | 3.47 | 7.61 | 13.12 | *** | *** | * |
| German nationality | 4.74 | 3.47 | 1.09 | 3.32 | ns | ** | + |

| | Turkish mean (SD) | Ex-Yugosl. mean (SD) | GR IT SP mean (SD) | Total mean (SD) | Significance of difference [a] TK - Ex-YU | TK - GR IT SP | Ex-YU - GR IT SP |
|---|---|---|---|---|---|---|---|
| regional unemployment rate | 8.95 | 8.76 | 8.20 | 8.68 | ns | ** | * |
| | (3.05) | (3.60) | (2.37) | (3.02) | | | |
| share low skilled jobs | 32.99 | 33.19 | 33.52 | 33.20 | ns | ns | ns |
| | (6.05) | (5.62) | (5.48) | (5.77) | | | |
| age | 31.49 | 36.76 | 33.45 | 33.35 | *** | * | ** |
| | (9.79) | (12.02) | (11.58) | (11.09) | | | |

[a] one-tailed t-tests, unequal variances, + p<0.1, * p<0.05, ** p<0.01, *** p<0.001

**Table C3: employment duration, sample of male migrants from TK, ex-YU, GR/IT/SP in West Germany, 18-55 years, first month of spell in sample**

| | Turkish | Ex-Yugosl. | GR IT SP | Total |
|---|---|---|---|---|
| n spells | 997 | 461 | 968 | 2,426 |
| % of total | 41.10 | 19.00 | 39.90 | 100.0 |

| | Turkish (% of "yes") | Ex-Yugosl. (% of "yes") | GR IT SP (% of "yes") | Total (% of "yes") | Significance of difference [a] TK - Ex-YU | TK - GR IT SP | Ex-YU - GR IT SP |
|---|---|---|---|---|---|---|---|
| children in household | 70.61 | 55.10 | 51.55 | 60.06 | *** | *** | ns |
| level of education | | | | | *** | ns | *** |
| no vocational training | 50.05 | 41.21 | 51.24 | 48.85 | | | |
| vocational training | 46.24 | 53.80 | 44.83 | 47.11 | | | |
| higher education | 3.71 | 4.99 | 3.93 | 4.04 | | | |
| firm size (> 200 employees) | 44.23 | 41.87 | 39.05 | 41.71 | ns | ** | ns |
| low skilled job | 70.71 | 62.47 | 63.12 | 66.12 | ** | *** | ns |
| trade union member | 26.48 | 24.73 | 23.76 | 25.06 | ns | + | ns |
| command of German | | | | | *** | ** | + |
| no or very poor | 12.34 | 7.16 | 9.92 | 10.39 | | | |
| poor or satisfactory | 65.60 | 63.34 | 62.71 | 64.01 | | | |
| very good | 22.07 | 29.50 | 27.38 | 25.60 | | | |
| marriage | | | | | ns | * | ns |
| not married | 31.59 | 35.36 | 42.98 | 36.85 | | | |
| non-German partner | 67.00 | 59.87 | 48.45 | 58.24 | | | |
| German partner | 1.40 | 4.77 | 8.57 | 4.91 | | | |
| visits at/from Germans | 79.64 | 85.90 | 88.74 | 84.46 | ** | *** | + |
| 1st generation migrant | 50.95 | 68.76 | 54.13 | 55.61 | *** | + | *** |
| religious participation | | | | | | | |
| Muslim and relig. part. every week | 21.66 | 0.43 | 0.00 | 8.99 | *** | *** | + |
| Christian and relig. part. every week | 0.60 | 5.21 | 10.02 | 5.23 | *** | *** | *** |
| newspaper preferences | | | | | | | |
| mostly or only German | 22.47 | 45.77 | 44.01 | 35.49 | *** | *** | ns |
| only from country of origin | 17.45 | 4.99 | 8.99 | 11.71 | *** | *** | ** |
| German nationality | 3.11 | 4.12 | 0.31 | 2.18 | ns | *** | *** |

| | Turkish mean (SD) | Ex-Yugosl. mean (SD) | GR IT SP mean (SD) | Total mean (SD) | Significance of difference [a] TK - Ex-YU | TK - GR IT SP | Ex-YU - GR IT SP |
|---|---|---|---|---|---|---|---|
| regional unemployment rate | 8.65 | 7.92 | 7.92 | 8.22 | *** | *** | ns |
| | (2.86) | (2.76) | (2.53) | (2.74) | | | |
| share of low skilled jobs | 23.62 | 23.68 | 24.24 | 23.88 | ns | *** | *** |
| | (2.83) | (2.71) | (2.52) | (2.70) | | | |
| repeated spells of employment | 1.15 | 1.12 | 1.18 | 1.16 | ns | ns | ns |
| | (1.50) | (1.70) | (1.81) | (1.67) | | | |
| age | 32.02 | 36.53 | 34.79 | 33.98 | *** | *** | ** |
| | (10.24) | (11.17) | (10.96) | (10.85) | | | |

[a] one-tailed t-tests, unequal variances, + p<0.1, * p<0.05, ** p<0.01, *** p<0.001

**Table C4: employment duration, sample of female migrants from TK, ex-YU, GR/IT/SP in Germany, 18-55 years, first month of spell in sample**

| | Turkish | Ex-Yugosl. | GR IT SP | Total |
|---|---|---|---|---|
| n spells | 592 | 382 | 690 | 1,664 |
| % of total | 35.58 | 22.96 | 41.47 | 100.0 |

| | Turkish (% of "yes") | Ex-Yugosl. (% of "yes") | GR IT SP (% of "yes") | Total (% of "yes") | Significance of difference [a] TK - Ex-YU | TK - GR IT SP | Ex-YU - GR IT SP |
|---|---|---|---|---|---|---|---|
| children in household | 70.78 | 56.81 | 59.42 | 62.86 | *** | *** | ns |
| level of education | | | | | *** | * | ** |
| no vocational training | 61.32 | 45.29 | 56.52 | 56.00 | | | |
| vocational training | 35.64 | 52.62 | 39.71 | 41.00 | | | |
| higher education | 3.04 | 2.09 | 3.77 | 3.13 | | | |
| firmsize (> 200 employees) | 37.16 | 40.05 | 37.10 | 37.80 | ns | ns | ns |
| low skilled job | 77.20 | 73.04 | 73.19 | 74.58 | + | * | ns |
| trade union member | 9.29 | 14.40 | 12.46 | 11.78 | ** | * | ns |
| command of German | | | | | *** | *** | * |
| no or very poor | 16.55 | 6.81 | 12.17 | 12.50 | | | |
| poor or satisfactory | 58.61 | 52.62 | 51.01 | 54.09 | | | |
| very good | 24.83 | 40.58 | 36.81 | 33.41 | | | |
| marriage | | | | | * | ns | * |
| not married | 29.73 | 37.43 | 33.33 | 32.99 | | | |
| non-German partner | 69.26 | 59.42 | 60.43 | 63.34 | | | |
| German partner | 1.01 | 3.14 | 6.23 | 3.67 | | | |
| visits at/from Germans | 79.56 | 89.79 | 86.96 | 84.98 | *** | *** | + |
| 1st generation migrant | 45.10 | 67.80 | 47.25 | 51.20 | *** | ns | *** |
| religious participation | | | | | | | |
| Muslim and relig. part. every week | 9.80 | 0.26 | 0.00 | 3.55 | *** | *** | ns |
| Christian and relig. part. every week | 0.00 | 7.33 | 14.93 | 7.87 | *** | *** | *** |
| newspaper preferences | | | | | | | |
| mostly or only German | 22.80 | 54.45 | 41.88 | 37.98 | *** | *** | *** |
| only from country of origin | 20.27 | 3.14 | 8.41 | 11.42 | *** | *** | *** |
| German nationality | 5.41 | 2.88 | 0.72 | 2.88 | * | *** | ** |

| | Turkish mean (SD) | Ex-Yugosl. mean (SD) | GR IT SP mean (SD) | Total mean (SD) | Significance of difference [a] TK - Ex-YU | TK - GR IT SP | Ex-YU - GR IT SP |
|---|---|---|---|---|---|---|---|
| regional unemployment rate | 8.25 | 7.78 | 7.96 | 8.02 | ** | * | ns |
| | (2.56) | (2.92) | (2.47) | (2.61) | | | |
| share of low qual jobs | 33.57 | 34.87 | 34.96 | 34.44 | *** | *** | ns |
| | (6.24) | (6.49) | (6.28) | (6.34) | | | |
| repeated spells of employment | 1.177 | 0.924 | 1.243 | 1.147 | ** | ns | *** |
| | (1.39) | (1.19) | (1.77) | (1.53) | | | |
| age | 30.89 | 35.40 | 34.12 | 33.26 | *** | *** | * |
| | (8.91) | (10.41) | (10.27) | (10.00) | | | |

[a] one-tailed t-tests, unequal variances, + p<0.1, * p<0.05, ** p<0.01, *** p<0.001

**Table C5: domestic work phase duration, sample of female migrants from TK, ex-YU, GR/IT/SP in West Germany, married to migrants, 18-55 years, first month of spell in sample**

| | **Turkish** | **Ex-Yugosl.** | **GR IT SP** | **Total** |
|---|---|---|---|---|
| n spells | 589 | 165 | 319 | 1073 |
| % of total | 54.89 | 15.38 | 29.73 | 100.0 |

| | **Turkish** (% of "yes") | **Ex-Yugosl.** (% of "yes") | **GR IT SP** (% of "yes") | **Total** (% of "yes") | **Significance of difference [a]** TK - Ex-YU | TK - GR IT SP | Ex-YU - GR IT SP |
|---|---|---|---|---|---|---|---|
| children in household | 84.04 | 72.12 | 75.86 | 79.78 | ** | ** | ns |
| education | | | | | *** | ns | *** |
| no vocational training | 72.33 | 55.76 | 70.53 | 69.25 | | | |
| vocational training | 26.83 | 42.42 | 28.84 | 29.82 | | | |
| higher education | 0.85 | 1.82 | 0.63 | 0.93 | | | |
| command of German | | | | | *** | *** | ns |
| no or very poor | 45.16 | 21.82 | 20.38 | 34.20 | | | |
| poor or satisfactory | 44.82 | 60.61 | 62.70 | 52.56 | | | |
| very good | 10.02 | 17.58 | 16.93 | 13.23 | | | |
| visits at/from Germans | 65.87 | 84.85 | 80.88 | 73.25 | *** | *** | ns |
| 1st generation migrant | 73.01 | 89.70 | 57.99 | 71.11 | *** | *** | *** |
| religious participation | | | | | | | |
| Muslim and relig. part. every week | 14.43 | 0.61 | 0.00 | 8.01 | *** | *** | ns |
| Christian and relig. part. every week | 0.85 | 8.48 | 17.55 | 6.99 | *** | *** | ** |
| newspaper preferences | | | | | | | |
| mostly or only German | 8.49 | 33.33 | 32.29 | 19.38 | *** | *** | ns |
| only from country of origin | 33.79 | 7.88 | 12.23 | 23.39 | *** | *** | + |
| German nationality | 4.24 | 1.21 | 0.63 | 2.70 | ** | *** | ns |
| Partner: command of German | | | | | ns | * | * |
| no or very poor | 12.22 | 9.09 | 16.30 | 12.95 | | | |
| poor or satisfactory | 71.65 | 75.76 | 70.85 | 72.04 | | | |
| very good | 16.13 | 15.15 | 12.85 | 15.00 | | | |
| Partner: religious participation | | | | | | | |
| Muslim and relig. part. every week | 26.66 | 0.00 | 0.00 | 14.63 | *** | *** | ns |
| Christian and relig. part. every week | 1.02 | 7.27 | 11.60 | 5.13 | *** | *** | + |
| Partner: newspaper preferences | | | | | | | |
| mostly or only German | 14.77 | 36.36 | 30.09 | 22.65 | *** | *** | + |
| only from country of origin | 18.88 | 5.45 | 12.54 | 14.82 | *** | ** | ** |
| Partner: visits | 74.02 | 84.24 | 79.94 | 77.35 | ** | + | ns |

| | **Turkish** mean (SD) | **Ex-Yugosl.** mean (SD) | **GR IT SP** mean (SD) | **Total** mean (SD) | **Significance of difference [a]** TK - Ex-YU | TK - GR IT SP | Ex-YU - GR IT SP |
|---|---|---|---|---|---|---|---|
| regional unemployment rate | 8.79 | 8.21 | 8.20 | 8.48 | * | ** | ns |
| | (2.72) | (2.99) | (2.61) | (2.74) | | | |
| share low skilled jobs | 34.11 | 34.76 | 35.43 | 34.60 | ns | ** | ns |
| | (6.75) | (6.87) | (6.68) | (6.78) | | | |
| age | 32.54 | 38.27 | 37.13 | 34.78 | *** | *** | ns |
| | (9.51) | (9.90) | (9.56) | (9.90) | | | |

[a] one-tailed t-tests, unequal variances, + p<0.1, * p<0.05, ** p<0.01, *** p<0.001

**Table C6: Significance of sample differences (for first months of spell in sample)**

| | unemployed vs. employed men | unemployed vs. employed women | unemployed women vs. housewives | employed women vs. housewives |
|---|---|---|---|---|
| ethnic group | *** | *** | * | *** |
| regional unempl. rate | *** | *** | + | *** |
| size of low-skilled sector | *** | *** | *** | ns |
| children in household | ns | ** | *** | *** |
| age | * | ns | ** | *** |
| level of education | *** | *** | * | *** |
| command of German | ns | ns | *** | *** |
| marriage to German | * | *** | | |
| visits at/from Germans | * | ns | *** | *** |
| 1st generation migrant | *** | + | *** | *** |
| rel. participation | | | | |
| Muslim and rel. part. every week | ns | + | ** | *** |
| Christian and rel. part. every week | + | + | ns | ns |
| newspaper preferences | | | | |
| only origin country | * | ns | *** | *** |
| only or mostly German | ns | ** | *** | *** |
| German nationality | * | ns | ns | ns |

**Table C6a: Turkish migrants: Significance of sample differences (for first months of spell in sample), selected variables**

| TK | unemployed vs. employed men | unemployed vs. employed women | unemployed women vs. housewives | employed women vs. housewives |
|---|---|---|---|---|
| level of education | + | ** | ns | *** |
| command of German | ns | ns | *** | *** |
| visits at/from Germans | ns | ns | *** | *** |
| rel. participation | | | | |
| Muslim and rel. part. every week | + | ns | + | ** |
| newspaper preferences | | | | |
| only origin country | ns | ns | *** | *** |
| only or mostly German | ns | * | *** | *** |

**Table C6b: Ex-Yugoslav migrants: Significance of sample differences (for first months of spell in sample), selected variables**

| Ex-YU | unemployed vs. employed men | unemployed vs. employed women | unemployed women vs. housewives | employed women vs. housewives |
|---|---|---|---|---|
| level of education | *** | ns | ns | * |
| command of German | ns | + | *** | *** |
| visits at/from Germans | ns | + | ns | + |
| rel. participation | | | | |
| Muslim and rel. part. every week | + | ns | ns | ns |
| newspaper preferences | | | | |
| only origin country | ns | ns | * | * |
| only or mostly German | ns | ns | ** | *** |

**Table C6c: GR IT SP migrants: Significance of sample differences (for first months of spell in sample), selected variables**

| GR IT SP | unemployed vs. employed men | unemployed vs. employed women | unemployed women vs. housewives | employed women vs. housewives |
|---|---|---|---|---|
| level of education | ** | ** | + | *** |
| command of German | ns | ns | *** | *** |
| visits at/from Germans | ns | ns | * | ** |
| rel. participation | | | | |
| Muslim and rel. part. every week | - | - | - | - |
| newspaper preferences | | | | |
| only origin country | ns | ns | * | * |
| only or mostly German | + | ns | * | ** |

one-tailed t-tests, unequal variances, + p<0.1, * p<0.05, ** p<0.01, *** p<0.001

## Annex D ALLBUS results on opinions towards selected migrant groups, 1996 and 2006

native Germans, age 18 +, living in West-Germany

How strongly, in your opinion, do … people who live in Germany differ from Germans in their lifestyles?

1 not at all, 7 very strongly

**Allbus 1996**

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| italians | 1851 | 3.290113 | 1.522659 | 1 | 7 |
| turks | 1865 | 5.076139 | 1.472784 | 1 | 7 |

**Allbus 2006**

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| italians | 1717 | 2.944089 | 1.404835 | 1 | 7 |
| turks | 1751 | 5.143918 | 1.413351 | 1 | 7 |

How pleasant or unpleasant would it be for you to have an … person as a neighbour?

1 very unpleasant, 7 very pleasant (recoded; original scale: -3 to + 3)

**Allbus 1996**

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| italian | 1926 | 5.006231 | 1.338719 | 1 | 7 |
| turkish | 1926 | 3.92783 | 1.50099 | 1 | 7 |

**Allbus 2006**

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| italian | 1778 | 5.272778 | 1.333247 | 1 | 7 |
| turkish | 1780 | 3.776966 | 1.67588 | 1 | 7 |

Source: ALLBUS 1996 and 2006, own calculations

**Annex E Recent immigrants, according to ethnicity and qualification, 2005**

**year of immigration: 2000-2005**
first generation migrants from Turkey, ex-Yugoslavia and Greece/Italy/Spain
age 18-64, male/female: ca. 50%/50%; N=828

| **origin** (weighted; row percentages) | **TK** | **Ex-YU** | **GR IT SP** | **total** |
|---|---|---|---|---|
| | 49.03 | 27.66 | 23.31 | 100.0 |

| **level of education** (weighted; column percentages) | **TK** | **Ex-YU** | **GR IT SP** | **total** |
|---|---|---|---|---|
| ISCED 0-2 (low qualified) | 77.4 | 57.5 | 42.5 | 63.8 |
| ISCED 3-4 | 14.9 | 36.5 | 25.4 | 23.3 |
| ISCED 5-6 (tertiary education) | 7.7 | 6.1 | 32.1 | 13.0 |
| | 100.0 | 100.0 | 100.0 | 100.0 |

International Standard Classification of Education (ISCED) 1997, see
http://www.unesco.org/education/information/nfsunesco/doc/isced_1997.htm

Data: Mikrozensus 2005, weighted data; own calculations

**Figure 3:** **Male migrants: Sample differences for education level and selected migrant-specific variables**
Sample means, by ethnic background

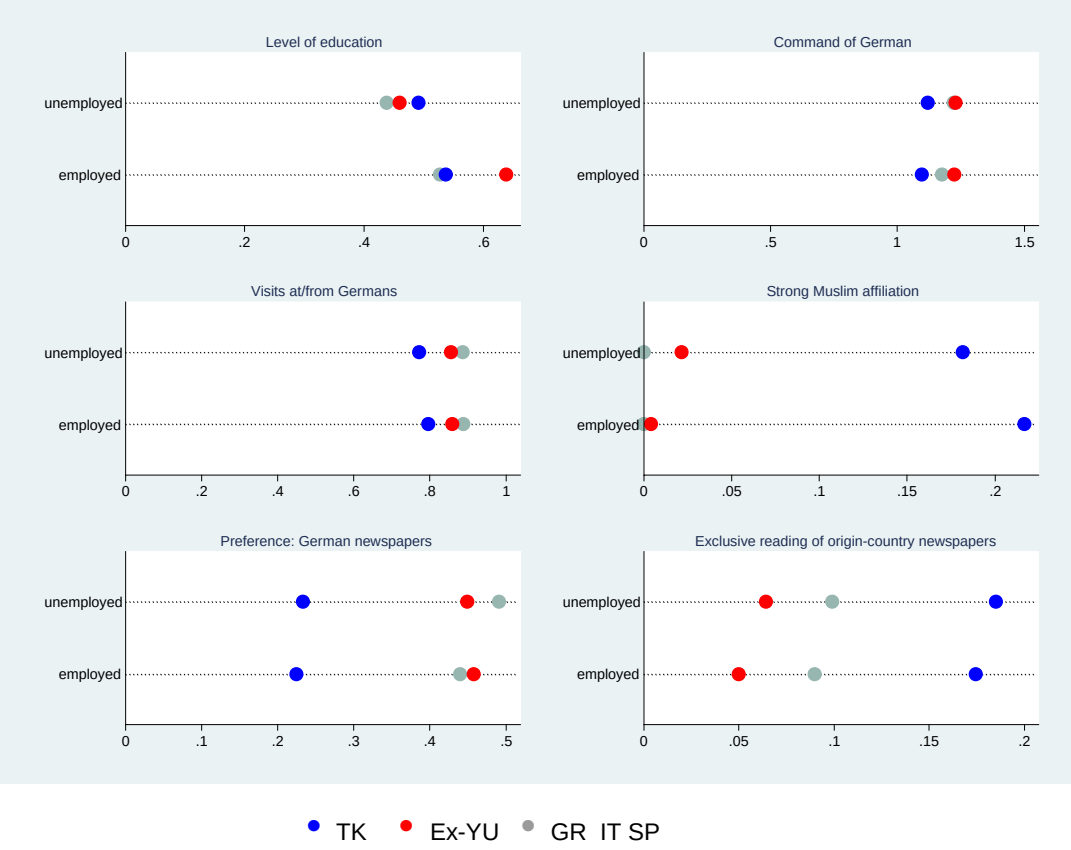
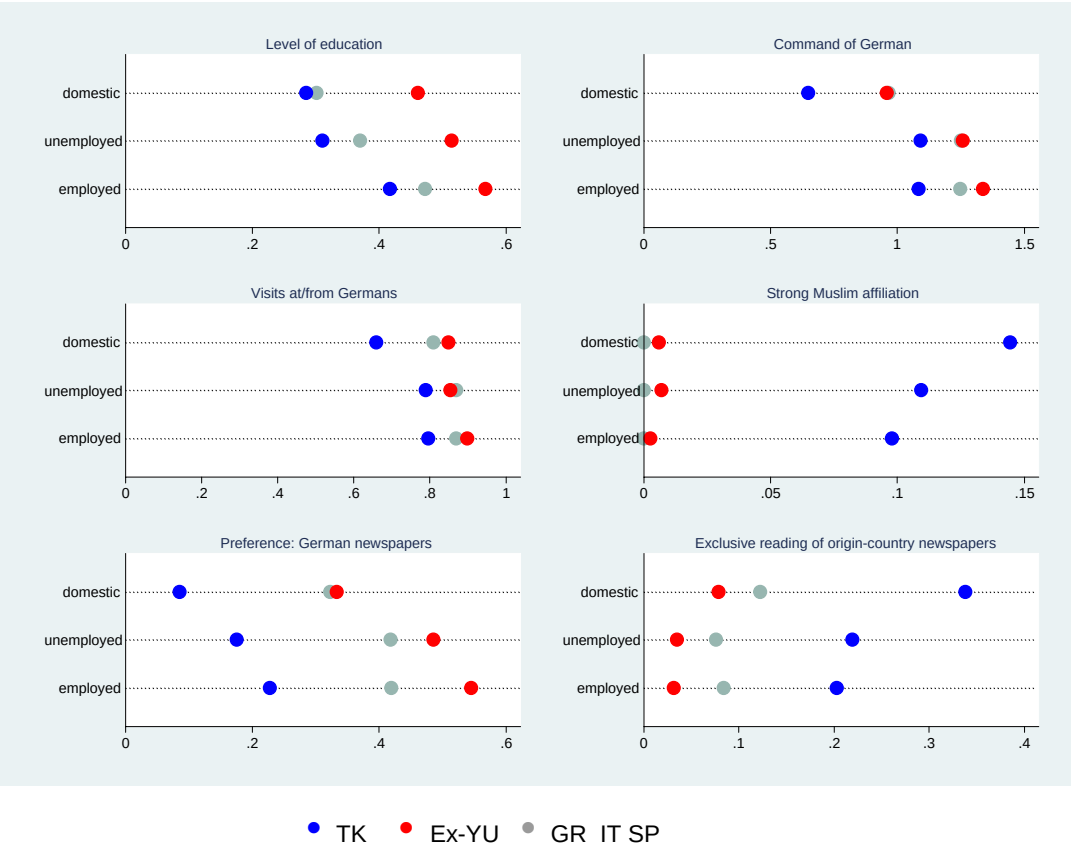


**Figure 4:** **Female migrants: Sample differences for education level and selected migrant-specific variables**
Sample means, by ethnic background



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