Hamburgisches
WeltWirtschafts
Institut

Labour market entry of migrants in Germany – Does cultural diversity matter?

Anette Haas, Andreas Damelang

HWWI Research
Paper 3-10
by the
HWWI Research Programme
Migration Research Group

Hamburg Institute of International Economics (HWWI) | 2007
ISSN 1861-504X

Anette Haas
Institut für Arbeitsmarkt- und Berufsforschung (IAB)
der Bundesagentur für Arbeit
Forschungsbereich 5 (Regionale Arbeitsmärkte)
Regensburger Str. 104 | 90478 Nürnberg | Germany
anette.haas@iab.de

Andreas Damelang
Institut für Arbeitsmarkt- und Berufsforschung (IAB)
der Bundesagentur für Arbeit
Forschungsbereich 5 (Regionale Arbeitsmärkte)
Regensburger Str. 104 | 90478 Nürnberg | Germany
andreas.damelang@iab.de

HWWI Research Paper
Hamburg Institute of International Economics (HWWI)
Neuer Jungfernstieg 21 | 20354 Hamburg | Germany
Phone +49 (0)40 34 05 76 - 0 | Fax +49 (0)40 34 05 76 - 76
info@hwwi.org | www.hwwi.org
ISSN 1861-504X

Labour market entry of migrants in Germany – Does cultural diversity matter?

Anette Haas

Andreas Damelang

Contents

Abstract

This paper provides an analysis of the labour market entry of migrant youth in Germany after completion of an apprenticeship. We are particularly interested in the impact of local cultural diversity on a successful career start. Focusing on the cohort of people completing apprenticeships in 2000, we distinguish between Turks, citizens of former Yugoslavia, EU15 migrants and other migrants compared with Germans as the reference group. A multinomial probit model reveals that Turkish apprentices and those from the other migrant groups have a significantly lower probability of transition into the primary labour market, whereas EU15 migrants do not differ from Germans in this respect. In addition to controlling for individual and firm characteristics as well as occupation, we explicitly include regional characteristics. Our results show that if there is a high level of cultural diversity, young migrants will find employment more easily. In contrast to other studies which emphasize the impact of friends and family ties, we conclude that networks and information flows which are not restricted to an individual's own ethnic group increase the likelihood of finding a job.

JEL-Codes: F 22, J 61, J62, R23.

Keywords: migration, cultural diversity, apprenticeship training

The authors would like to thank Corinna Kleinert, Annekatrin Niebuhr, Gianmarco Ottaviano and Felix Rüb for very helpful comments. For technical support we thank Klara Kaufmann and Phan thi Hong Van. Financial support from the Volkswagen Foundation is gratefully acknowledged as part of the Study Group on Migration and Integration "Diversity, Integration and the Economy".

1 Introduction

In the ongoing and controversial debate in Germany about how migrant integration could be improved, the situation of young migrants has received a lot of attention. Although a variety of concepts for integration are being discussed, there is widespread agreement about the crucial role of labour market participation for the comprehensive integration into society. In Germany about 9% of the population are non-Germans, and unemployment in this group is disproportionately high: the unemployment rate of non-Germans is nearly twice as high (25%) as the rate for Germans (13%; Bundesagentur für Arbeit 2005).

The unequal performance of local labour markets is a well known pattern for Germany. Significant differences are visible between East and West; however, disparities show up between nearby districts within the same federal state, too. There are also pronounced regional differences regarding the labour market conditions for migrants (Riphahn 2002; Bender & Seifert 1998). Given that the migrant population is mainly concentrated in the agglomerated regions in southern and western Germany, it is quite striking that most studies neglect the regional dimension in migration research.

Regional mobility plays only a minor role because of high mobility costs and limited financial resources at the beginning of working life. Except in the case of university graduates, relevant job information is mainly available locally; so job search starts in the region of residence. Within this context, Granovetter (1973, 1983, 1985) stresses the impact of friends and family ties as an important source of information for job search. Extending this idea of the relevance of “weak ties” we hypothesize that cultural diversity - measured as the quantity and variety of different nationalities in a region - has a positive impact on the labour market entry of migrants. On the one hand, formal and informal migrant networks provide useful connections and strategies for successful job search. On the other hand indirect effects appear in regions with a larger share of migrants who are already active and visible in the labour market because that leads to a higher level of acceptance by employers, colleagues and customers. If employers are used to working with people from different cultural backgrounds, prejudices against migrants may be diminished. Moreover, con-

sumers benefit from a variety of ethnic goods and services. Finally, cultural diversity might have a positive impact on productivity because the variety of skills, abilities and ideas is regarded as enrichment (Alesina & La Ferrara 2005; Ottaviano & Peri 2006). In view of these arguments we ask what influence cultural diversity has on the dynamic process of labour market entrance.

Most empirical studies focus on the assimilation of migrants and on their chances of catching up with the native population according to Chiswick (1978) and Borjas (1994). There has been less interest in the issue of labour market entrance as an important starting point of labour market participation. We contribute to this issue and investigate for Germany whether the situation of labour market entry differs for Germans and non-Germans once they have completed an apprenticeship, and if so, in what way.

The objective of this paper is to provide evidence on the labour market entry of non-Germans, focusing in particular on the group of Turks. Turks are regarded as an extra group as this is the migrant group with the largest population in Germany. Moreover, there is evidence that they perform comparatively poorly on the German labour market (see Kalter 2005). Our analysis differs from former studies in various respects. First, we look explicitly at the impact of regional labour market conditions on the employment probability following an apprenticeship. Second, we measure cultural diversity at regional level and investigate its influence for Germans and different groups of non-Germans. Third, we explicitly control for subsidized employment also including firm effects such as firm size and sector affiliation.

The rest of the paper is organised as follows. In the next section we offer some theoretical considerations concerning labour market entry in general, the situation of non-Germans and the impact of cultural diversity in particular. Section 3 gives an overview of the German apprenticeship system with respect to its institutional setting and the differing situation of German and non-German apprentices. Section 4 reviews the existing literature and section 5 describes the data set. The regional dimension of cultural diversity is explained in section 6. Section 7 illustrates the de-

scriptive results, also for the regional dimension. Section 8 presents the results of a multinomial probit model, followed by some conclusions.

2 Theoretical considerations

In this chapter we discuss the relevant theories with regard to factors that influence labour market entry. Concerning this topic there is no dominant theory which covers all relevant aspects. The school-to-work transition process is affected by determinants at individual, firm and regional levels. One feature of vocational training in the dual system is that the transition to work is quite smooth compared with university or post-secondary full-time school training, which are characterized by higher rates of post-training unemployment. According to Winkelmann (1996) there are two different possible explanations as to why people who have completed an apprenticeship experience a smoother transition to work. First, their early attachment to the labour market may provide workplace experience that promotes a more efficient search. Second, search issues do not arise for a large percentage of young workers at all, as 69% remain in their training firm.

In the literature, human capital theory, job search theory and matching models are relevant for explaining different entry patterns of individuals (see Dietrich & Abraham 2005; Franz 2006). Furthermore Seibert (2005) stresses the relevance of signalling theory for the chances of young migrants getting their first job. Comparing the unemployment rates, the labour market situation for foreigners is different and generally poorer in comparison with Germans. According to the literature this has different causes: one argument is that these groups have less specific labour-market related capital due to migration. Furthermore administrative barriers and prejudices exist, which might lead to discrimination, but this is discussed quite controversially (see Granato & Kalter 2001; Seibert & Solga 2005). To control for the first argument, which refers to different human capital endowment, we consider only young people who have completed apprenticeship training in the German system. Therefore we presume that successful training in the dual system leads to comparable conditions for migrants and for the native population with respect to labour market entry, because it provides general skills and firm-specific capital.

The transition process could be interpreted as a result of the job search and matching processes reflecting the outcome as a success or failure. Usually in job search models the job offer arrival rate and the search activity are crucial for the outcome of the search process in addition to the qualification level: the job offer arrival rate depends on both an individual's own job search activity and on the regional labour market situation (see Jovanovich 1978; Mortensen 1986). Different network structures and diverse search strategies of migrants and the native population might explain the diverging outcomes of the search. The outcomes of job search in the regional labour market are influenced by the different degree of cultural diversity as well.

Some other studies refer to the importance of the school system for selectivity in the labour transition process. Allmendinger (1989) highlights that the education system acts as a sorting machine, even at a very early stage in an individual career. In Germany, educational credentials are very important for improving the chances of labour market participation. Hence, it is not surprising that the possibilities of a successful labour market entry are also strongly correlated with the school qualifications attained. The dependence of education and primary labour market positioning ranges at a very high level. Moreover, considering the further career, the impact of education on occupational positioning remains rather strong (see Dietrich & Abraham 2005). Due to a selection process in schools, migrants have poorer labour market chances (see Kristen 2002, 2006). Conversely, this implies that apprentices who have passed this selection process might have an equal or even better endowment in terms of schooling and education compared with the native population.

With regard to former studies, the impact of diversity on economic variables (e.g. growth) is not really new at all: Jacobs (1969), for example, analysed the influence of the diversity of sectors on the success and development of cities and initiated a lot of further research. In another context Fujita (1999) developed a theory of spatial development by using "love of variety" in preferences of consumers and technology. In this paper we are interested in the impact of cultural diversity according to the concept of Alesina and La Ferrara (2005), but embedded in a regional context. They state that there are three different ways in which cultural diversity can affect the economy. First, diversity might enter the production

function and can therefore explain some of individual heterogeneity in terms of human capital endowment. Second, diversity may enter directly into individual utility, because consumers have a love of variety in different products. Third, diversity can impact economic outcomes via its influence on the strategies that individuals adopt. The first and second arguments could not be interpreted directly concerning labour market entry. But cultural diversity enriches the supply of goods in a region, because different goods and services are offered (international restaurants, exotic food stores etc.). A lot of services increase the utility of migrants and of Germans. Employers may have incentives to hire migrants of a certain nationality because of customer proximity in regions in which this particular migrant group lives. Furthermore, the larger the share of different nationalities that are already active in the labour market, the easier it is for young migrants to integrate, because of higher acceptance. In this context Boeltken (2000) and Ganter & Esser (1999) highlight the importance of everyday life experiences - which increase statistically along with the share of migrants - in reducing prejudices against foreign nationalities.

The direct effect of cultural diversity regarding labour market entry consists of the information flow for job search due to infrastructure that fosters chances for young migrants. Furthermore, in regions with a large share of different nationalities that are already active in the labour market it is easier for young migrants to become integrated because of access to helpful information regarding job search strategies. In contrast, ties providing access only to information and resources which are available within the ethnic community may not be as helpful and might constitute a trap, especially for second-generation immigrants (see Wiley 1970; Zhou 1997). In contrast to Granovetter (1973, 1983, 1985), who emphasized the impact of friends and family ties, we focus on networks and information flows that are not necessarily restricted to a person's own ethnic group, because it is assumed that the probability of interethnic relationships grows with increasing cultural diversity (Alba & Nee 2004). However, it is evident that besides the positive aspects which go along with cultural diversity, there are higher transaction costs in the form of different languages and cultural barriers which influence the economic activities. Ottaviano and Peri (2006) argue that the skills of foreign workers might complement those of the native labour force. On the other hand heterogeneity

also hampers the exchange between different cultural groups. Most theoretical models consider different costs and benefits of cultural diversity and specify various linkages between cultural diversity and economic performance. Thus the net effect has to be considered not at theoretical but rather at empirical level.

For our analysis it is important to measure cultural diversity at regional level, which is relevant for labour market entry. Since cultural diversity can be interpreted as an external effect, which could be positive or negative, the main question is in which spatial context cultural diversity is effective. With reference to labour markets, we decided to use small regional units which allow us to consider disparities in unemployment rates and diversity indices (see Blien et al. 2006). Because regional mobility is low in Germany the local labour market situation plays a crucial role for the chance of finding a job after apprenticeship (see Winkelmann 1996; Riphahn 2002).

Even though we control for the regional labour market situation, the focus of our research question is primarily at micro level: How are the gains and losses from cultural diversity distributed at regional level for the job starters of different nationalities? We decompose our analysis into two hypotheses:

1) Labour market entry: the institutional German apprenticeship system is highly standardized. The dual system supports a direct labour market entry after a successful apprenticeship. So we investigate whether young migrants have similar employment chances to Germans, whether they have the chance to complete their apprenticeship in Germany. The highly standardized training system should ensure equal chances regarding labour market entry if we control for different schooling levels[1]. We distinguish between two levels of success: the first one is full-time work in non-subsidized employment. The second level is described by marginal or part-time jobs or labour market policy measures as alternative scenarios. Our reference category is unemployment as it stands for no success.

[1] As pointed out earlier, the selection and sorting process starts very early in Germany. So the group of young migrants who have reached this education level should have equal chances compared with Germans.

2) Impact of cultural diversity: following Ottaviano & Peri (2006) and Alesina & La Ferrara (2005) we assume that cultural diversity mainly has positive aspects. Referring to their empirical evidence we assume that diversity facilitates the useful provision of information and infrastructure for migrants, which provide essential support regarding the process of labour market entry. The higher the level of cultural diversity in a region, the greater the chance of finding a non-subsidized job after apprenticeship. This could be seen as extension to the studies based on Granovetter (1973, 1983, 1985), which focus on ties to families and friends of an individual's own ethnic group.

Before presenting our empirical results, we outline the institutional setting and look at former studies on the labour market entry of migrants.

3 The institutional setting: Germans and migrants in the Dual System

We emphasize the institutional setting of the specific German dual system of vocational training because it constitutes the starting point of our analysis of integration after apprenticeship.

Besides the university education system, vocational training is a virtually essential condition for successful integration into the labour market and therefore constitutes a major factor in the process of social integration in Germany. In spite of their increasing scholastic achievements over recent years young non-Germans in Germany still have particular difficulties in finding an apprenticeship place. Alongside economic difficulties in certain regions and sectors, both the selection criteria imposed by firms and applicants' occupational choices also play a role. Although the demand for training places is higher than the supply, there are still exceptions, as for example in caring professions.

There are two tracks for initial vocational training in Germany: first the so-called dual apprenticeship, which takes place both "on the job" and at vocational schools, and second, full-time training at vocational schools or

"Berufsfachschulen" as a specialized vocational school. In our study we concentrate only on the first track[2].

The training rate for foreign nationalities is comparatively low, in particular for the Turkish group. Looking at the situation of trainees with a foreign nationality, Table 1 points to a declining participation rate, which is not due to a decreasing number of applicants. A closer look indicates that the reduction takes place basically in the industrial occupations. A further finding is that the proportion of women has grown from 36% (1993) to 45% (2003).

Non-Germans are overrepresented in full-time vocational training schools which do not lead to a specific occupational qualification. Furthermore 16% were enrolled in preparatory courses for employment and vocational foundation years, because of the decreasing number of apprenticeship positions offered by the market. In 2004, 25% of the non-Germans (age group 15-24) participated in vocational training courses within the dual system, compared with more than 50% of young Germans of the same age group (Berufsbildungsbericht 2006, p.125).

[2] For a description of the institutional background of the education and training system in Germany see Winkelmann (1996) and Euwals & Winkelmann (2002).

Table 1: Development of foreign apprentices 1993-2004[3]

Year	Total	Thereof				
		Trainees in industry	Male trainees		Female trainees	
	N	N	N	%	N	%
1993	126,283	81,324	81,256	64.3	45,027	35.7
1994	125,887	80,465	81,085	64.4	44,802	35.6
1995	121,312	76,630	77,867	64.2	43,445	35.8
1996	116,246	71,179	73,217	63.0	43,029	37.0
1997	110,061	64,981	68,081	61.9	41,980	38.1
1998	104,250	57,565	64,010	61.4	40,240	38.6
1999	100,899	55,108	60,838	60.3	40,061	39.7
2000	96,928	50,527	57,151	59.0	39,777	41.0
2001	92,300	46,374	53,523	58.0	38,777	42.0
2002	85,218	41,100	48,186	56.5	37,032	43.5
2003	79,205	36,726	43,996	55.5	35,209	44.5
2004	72,051	32,562	40,047	55.6	32,004	44.4

After this short introduction of training in the dual system we now turn to former studies that deal with the situation of young migrants.

4 Previous studies

Our empirical starting point is previous work which deals with young people's labour market integration. In addition we provide explanations about the labour market situations of migrants.

One of the few studies which analyses especially the performance of young migrants and their labour market entry is Seibert (2005). His study deals with the unequal educational endowment of foreigners and Germans. He analyses the chances of getting an apprenticeship position and the positioning on the labour market of people who have completed an apprenticeship. In his paper he asks the question: how does the dual system contribute to the integration process for young foreigners? The results

[3] Source: Berufsbildungsbericht 2006, p.127.

are in line with signalling theory, which predicts that vocational training qualifications facilitate access to better labour market positions. He states that apprenticeship exhibits a huge capability for placing foreigners in skilled labour market positions.

According to Granato & Kalter (2001) almost the entire situation of young immigrants, including their poorer labour market positioning, can be explained by a lack of human capital. In contrast with that, Seibert & Solga (2005) have shown that migrants with a German apprenticeship have a lower probability of entering the primary labour market than Germans. This especially affects the group of Turks. Unfortunately, the authors could not explain the special role of the Turkish group. Recent empirical evidence suggests that weaker German language skills and the ethnic structure of their friendship ties seem to be the reason (see Kalter 2006). The empirical analysis supports the arguments of a lack of host-specific labour market related capitals and not discrimination by employers. There might be a lack of soft skills such as cultural knowledge and language skills, which hampers productivity directly.[4] Another argument aims at intereth-nic networks with the majority group having an impact on the probability of finding an adequate job for the skill level. A further argument regarding the first immigrant generation is that the incentive to invest in human capital is low if immigrant workers regard their stay in Germany as temporary (see Kalter & Granato 2002). This fact is also relevant for the next generation because of the impact of parents on their children's human capital accumulation. Generally, the education and training situation of young foreign people has improved in recent years. The majority of the Turks aged between 20 and 30 years, however, still belong to the group of unskilled workers in the same way as their fathers do, even though their opportunities of finding a more highly skilled job have been increased by vocational training and better school qualifications.

[4] Generally, it is difficult to measure the German language skills of migrants, because of a lack of data. The only information we found is evidence based on the SOEP 2003: 53% of young Turks rate their own German language skills as "very good", whereas 63% of other migrants do so (Kalter 2006, p151). Obviously, the group of Turks rate their language skills as poorer than other migrants.

5 Data and design

The data for this analysis are drawn from the German Integrated Employment Biographies (IEB). The IEB database is generated at the Institute for Employment Research (IAB) by merging different sources of individual data collected by the German Federal Employment Agency (FEA) for administrative purposes. The IEB has become an important database for scientific research. It includes life-course information about employment spells subject to social security contributions, unemployment benefits, participation in active labour market policy schemesand job search. Although no information is available on employment not subject to social securitycontributions, e.g. civil servants or the self-employed, the IEB covers more than 80% of the labour force in Germany. The data come in spells containing a range of socioeconomic characteristics such as age, gender and education. Furthermore detailed information about the employment status, unemployment benefits, job search and participation in active labour market programmes is available. The next passages provide information about data selection and the preparation of variables.

Data selection: Regarding our question of the labour market entry of migrants we choose a special design which represents the transition process after a completed apprenticeship. Thus, we selected all people who completed their apprenticeships in 2000 and who are not older than 30 years of age. We consider only the western part of Germany (including Berlin). The eastern part is excluded from the analysis because the share of non-Germans living and working there is very small. Another important feature of our data is that we are able to differentiate between subsidized and non-subsidized training. We excluded people completing subsidized training because the chances of labour market integration are poorer compared with those completing non-subsidized training (Damelang & Haas 2006). Due to unreliable information on completed apprenticeships in the data we use the duration of training as a proxy. According to Wachter & Bender (2006), who also used the IEB, an apprenticeship is interpreted as successful if it is completed after a minimum duration of 450 days.

Target variable: We choose the first state lasting at least one month following an apprenticeship as the dependent variable. We are able to differentiate five states:

- ‘Primary labour market’, which is synonymous with successful integration.
- ‘Further training on the labour market’, which includes interns, participants in active labour market programmes and people who begin a second apprenticeship.
- ‘Unemployment’ or job search, respectively.
- ‘Gap’, which includes people who have no data set entry for 100 days or longer after completing their apprenticeship.
- ‘Drop-outs’, who are individuals who still have no data set entry by the end of the observation period (31.12.2003).

Nationality: Two aspects of nationality are of relevance in our context: the differentiation between migrants and non-migrants (Germans) and the operationalization of cultural diversity as an index. The operationalization is shown in the next chapter. Constant et al. (2006) argue that a lot of migration research focuses on non-Germans as a homogenous group, mainly due to data restrictions. Regarding the apprentices in our dataset, there are 148 nationalities. To deal with this variety, we distinguish between five groups of nationality: ‘Germans’, ‘migrants from EU15 countries’, ‘Turks’, ‘migrants from former Yugoslavia’ and ‘other migrants’. The group ‘other migrants’ contains any nation not included in the other three migrant groups. Unfortunately, we cannot measure migration background or ethnicity, respectively, so we take the nationality as an indicator[5]. The nationality, which defines our comprehension of migrants or non-Germans, is measured at the beginning of the apprenticeship.

Further independent variables: We consider determinants of labour market integration for the five groups at different levels of aggregation. First of all, individual characteristics such as age, school education, occupation and wage are considered. Second, variables at firm level (firm size, industrial sector, proportions of non-Germans, of apprentices and of highly

[5] It is therefore not possible to identify naturalized foreigners and ethnic German immigrants (Aussiedler), because they are granted German citizenship immediately upon arrival.

qualified employees) are taken into account. Third, factors at regional level are included (e.g. unemployment rate, region type, cultural diversity). The classification of the regions (districts) refers to NUTS3 level and includes 326 western German regions and Berlin.[6]

6 Regional dimension of cultural diversity

Following the approach of Ottaviano & Peri (2006), cultural diversity is defined as the quantity and variety of groups of different nationalities in a region. Due to data restrictions we deal with nationality as a proxy for cultural heritage. Our indicator of cultural diversity is based on the Herfindahl index of concentration, which is defined as the sum of the squared proportion of each nationality group. Indices are calculated for all of our 327 observed regions. The range of the Herfindahl index is from 0 to 1, presenting an even distribution of the groups up to one dominant group. Since the Herfindahl index is an index of concentration, the measure of diversity is calculated as 1 minus the Herfindahl index:

$$DIV_{it} = 1 - \sum_{k=1}^{K} s_{ikt}^2$$

The advantage of this indicator compared with similar concentration indices such as GINI is that it accounts for both richness of the distribution and a relatively even distribution across nationalities. The diversity index will increase if the number of nationalities rises or if the shares of different nationalities converge (see Ottaviano & Peri 2006). In our study, the index is based on regional data of the employed population. By controlling for regional disparities, among other things, we can investigate whether regional cultural diversity of the workforce has a positive or negative impact on the labour market entry of people completing apprenticeships.

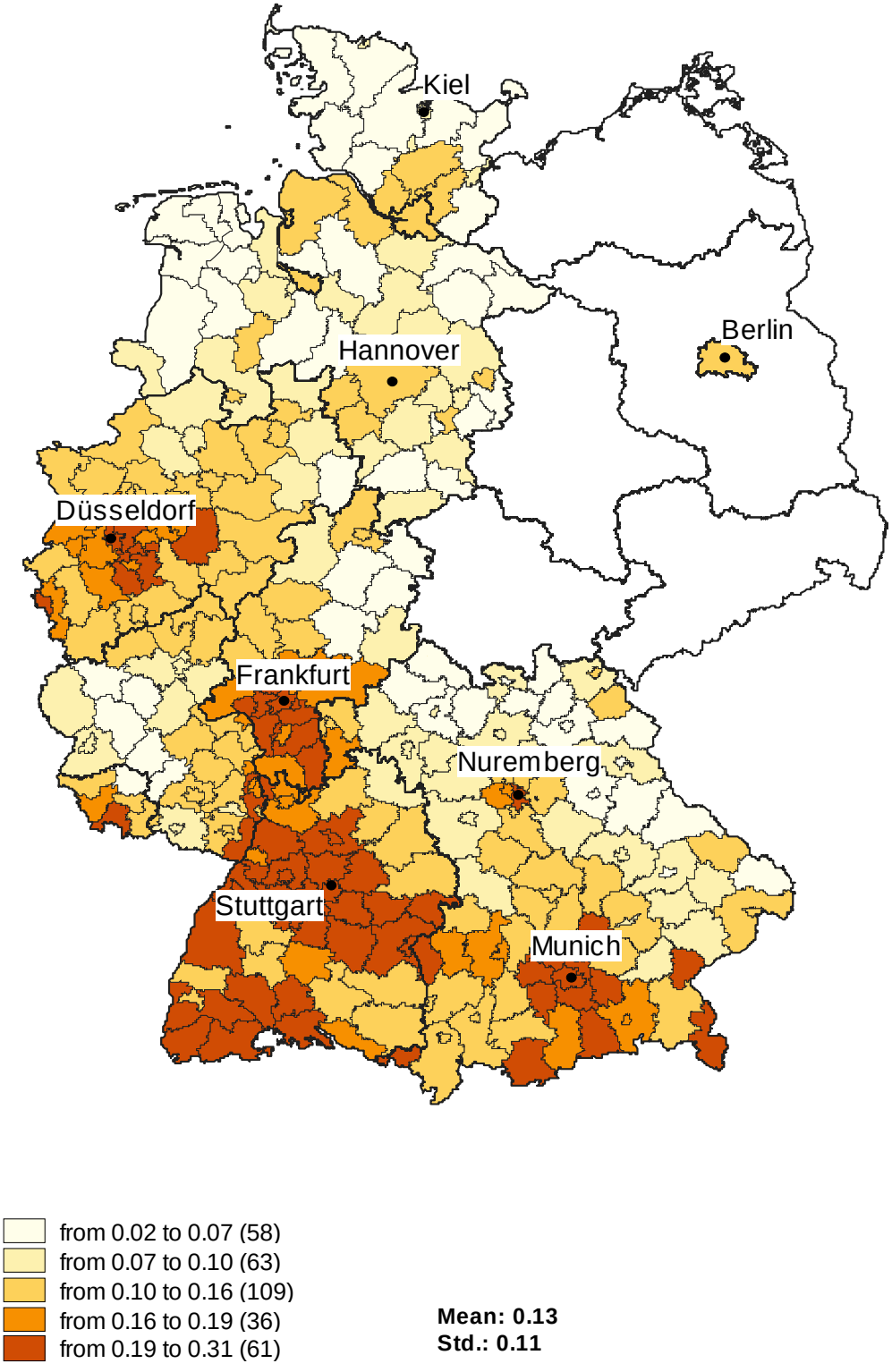
The next section provides some evidence on the regional distribution of cultural diversity in Germany as well as descriptive results on the patterns of labour market integration.

[6] See Appendix A

7 Descriptive results

The share of foreign employees is highly correlated with the cultural diversity index due to the dominant group of Germans. Figure 1 shows the cultural diversity of the workforce for the year 2000. The regional distribution is characterized by the following patterns: high concentration in urban regions, in cities and in the border regions to France, Switzerland and Austria. Furthermore, disparities between the northern and the southern parts of the country are obvious. The necessity of accounting for the regional dimension when analysing migrants on the labour market becomes apparent.

Figure 1: Cultural diversity 2000[7]



[7] Source: own calculations on the basis of IEB

Turning to the patterns of transition from a successfully completed apprenticeship to the first state afterwards, integration into the 'primary labour market' is seen as the preferred transition, while transition to the status 'gap' and 'drop-out' are of less interest but are listed for reasons of completeness.

The results displayed in Table 2 indicate that the groups of Germans, migrants from EU15 states and nationals of former Yugoslavia are very similar regarding labour market integration: more than 70% of the people completing an apprenticeship enter the primary labour market, whereas the group of Turks has a higher risk of starting with unemployment (23%) and only 65% find a job in the primary labour market. The group of other migrants has the lowest integration rate of all groups. In addition, it is worth noting that more than 4% of the EU15 group drop out of the data. As 'drop-outs' we consider people who have completed an apprenticeship and who are no longer recorded in the statistics of the FEA. It is possible that self-employment or university attendance is disproportionately high for the EU15 group, but return migration is a more likely answer.

Table 2: First state after apprenticeship[8]

	Germans		EU15		nationals of former Yugoslavia		Turks		other Migrants		Total	
	N	in %	N	in %	N	in %	N	in %	N	in %	N	in %
Primary labour market	239.604	71,5	4.299	70,9	3.877	72,7	7.434	65,2	2.608	62,3	257.822	71,2
Further training on the labour market	10.970	3,3	196	3,2	175	3,3	409	3,6	174	4,2	11.924	3,3
Unemployment	53.151	15,9	942	15,5	817	15,3	2.641	23,2	937	22,4	58.488	16,1
Gap	22.015	6,6	373	6,2	338	6,3	726	6,4	296	7,1	23.748	6,6
Drop out	9.520	2,8	250	4,1	128	2,4	194	1,7	171	4,1	10.263	2,8
Total	335.260	100,0	6.060	100,0	5.335	100,0	11.404	100,0	4.186	100,0	362.245	100,0

Summarizing the transition of the five groups, Germans, migrants from EU15 states and from former Yugoslavia have similar patterns, whereas nearly one in four of the Turkish and 'other migrant' group is unemployed. According to the descriptive results we can confirm the finding in the previously mentioned literature that compared with both the EU15 group and

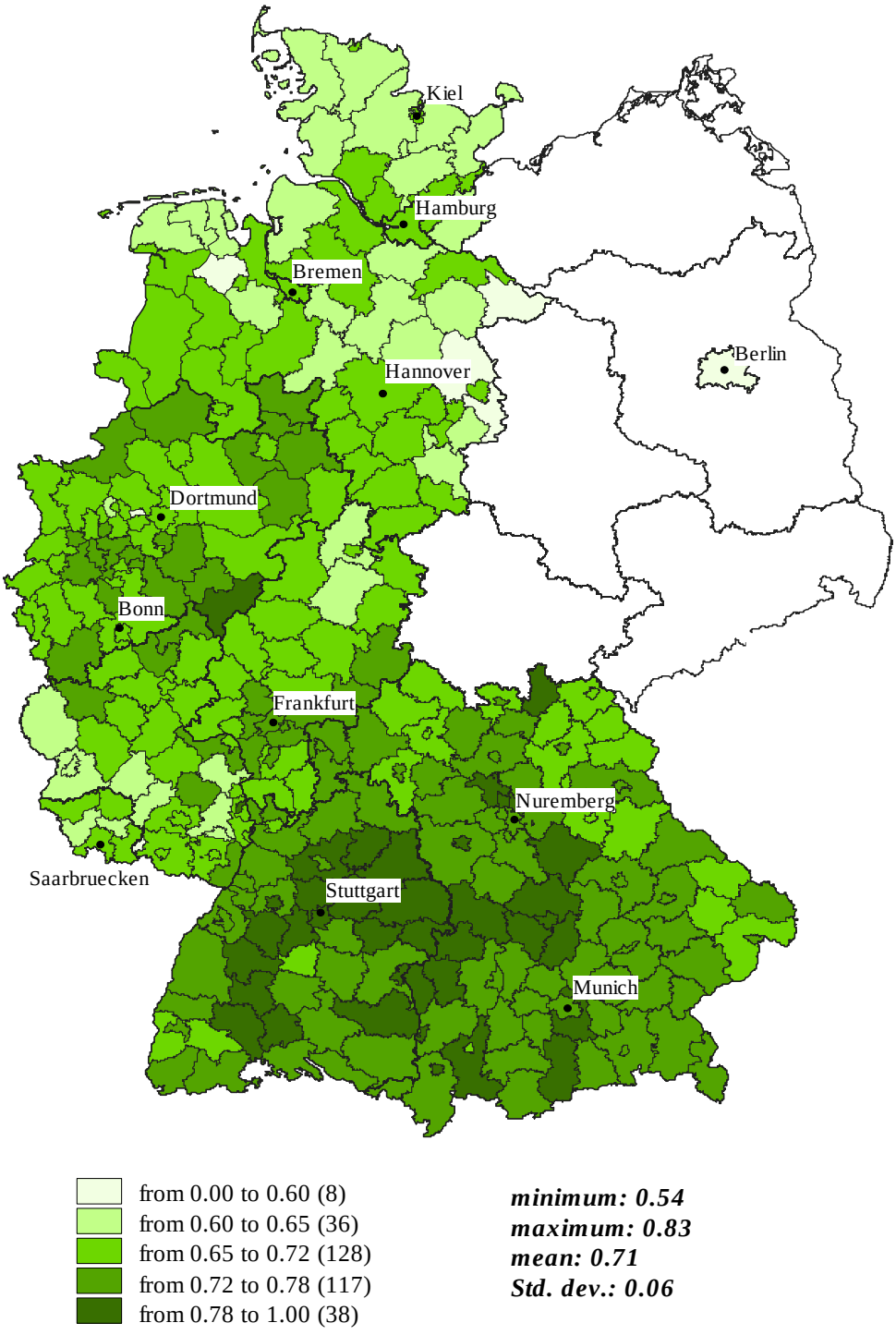
[8] Source: own calculations on the basis of IEB

the group of migrants from former Yugoslavia, the group of Turks can be considered a problematic migrant group on the labour market.

In the next step we compare the transition into the labour market at regional level. It has to be taken into consideration that the regional distribution of non-Germans completing apprenticeships is marked by the same regional disparities as the distribution of cultural diversity: the agglomerated regions of Munich, Stuttgart, Frankfurt and Duesseldorf as well as other big cities have the largest share of non-Germans completing apprenticeships.

Focusing on all apprentices, Figure 2 illustrates the ratio of people integrated into the labour market following apprenticeship to all people completing apprenticeships. Darker regions indicate a higher probability of being employed after an apprenticeship, because the ratio of people successfully finding employment after an apprenticeship to all those completing apprenticeships is closer to one. Obviously, there are systematic differences between the northern and the southern parts of the country. Even within rural regions in the south, e.g. in the north-east of Bavaria, labour market chances are better than in the urban regions and cities of the north. In fact, this pattern reflects the overall disparities in Germany's regional labour market situation.

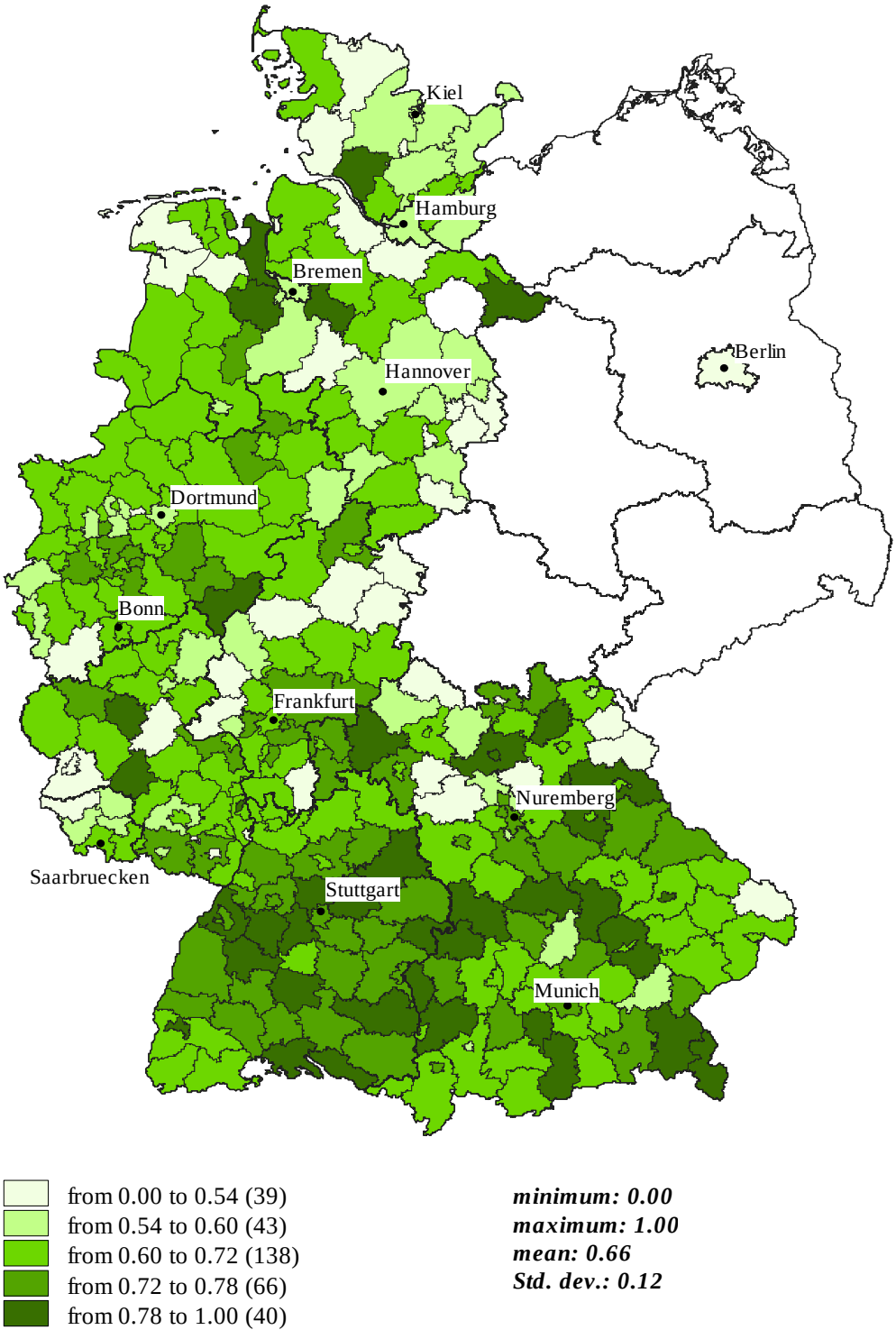
Figure 2: Ratio of individuals integrated into the labour market following apprenticeship to all people completing apprenticeships in 2000[9]



[9] Source: own calculations on the basis of IEB

What is of further interest is the regional distribution of the ratio of integrated non-German apprentices to all non-German apprentices (Figure 3). In this case the picture is more differentiated: the ratio has a lower mean indicating lower chances of integration, and the standard deviance is twice as high indicating more variance in the probability of integration for foreign nationals completing apprenticeships. The north-south difference is visible again, though not as obviously as in Figure 2. A few regions in northern Germany close to Hamburg and Bremen and in north-eastern Bavaria show a high ratio of integrated non-Germans who have completed apprenticeships. But this is accounted for by a very low number of foreign apprentices in these regions.

Figure 3: Ratio of integrated non-Germans who have completed an apprenticeship to all non-Germans completing apprenticeships in 2000[10]



[10] Source: own calculations on the basis of IEB

8 Multivariate analysis

To isolate the effect of nationality on the transition process from the group composition in terms of attributes hampering labour market entry (e.g. lack of human capital), it is necessary to disentangle these influences in a multivariate approach.

As the states 'gap' and 'drop-out' are of less interest, we excluded them from the estimation. To be able to differentiate between the three other states, we choose the multinomial probit model[11] for analysing these kinds of transition. In addition to analysing the successful integration of different nationality groups, the influence of cultural diversity on labour market integration is discussed in particular. Therefore two models are calculated, each with the state 'unemployed' as the reference category. The first model is used solely to disentangle the effect of cultural diversity, whereas the second model represents the complete specification. The first model includes basic variables such as sex and nationality. In addition, the cultural diversity index (*diversity*), the diversity squared index (*diversity*^{2}) and interaction effects with the nationality groups (*div**) enter at regional level. Furthermore, variables at regional level are included to ensure that the cultural diversity index does not act as a proxy for the regional labour market situation. These are the youth unemployment rate (*prop_unemployed<24*), GDP per employee (*GDP_empl*), the nine-year development of GDP per employee (*GDP_develop (92-00)*), region types (*core cities*, *agglomerated regions*, *rural districts*) and border regions. Finally, model 2 was extended to include age and human capital (lower *secondary school*, *upper secondary school*, *university* and *first apprenticeship*, *switch of the apprenticeship*, *second apprenticeship*), among others. Table 3 displays only the determinants of main interest; the complete estimation can be found in the appendix (B).

[11] The multinomial probit model is preferred to the multinomial logit model due to the IIA assumption (Independence of Irrelevant Alternatives), which might be a problem here and yields unreliable results when the categories modelled are substitutes. The IIA assumption must be fulfilled by the multinomial logit model, but it is not necessary for the multinomial probit model. For detailed information see Fleps (2003).

Table 3: Determinants of the transition process[12]

	Primary labour market		Further training on the labour market	
Variable	Model 1	Model 2	Model 1	Model 2
sex (male=Ref.)	0.142 ***	0.199 ***	0.069 ***	0.035 *
Germans (Ref.)	-	-	-	-
EU15	-0.112	-0.129	-0.004	0.137
Turks	-0.571 ***	-0.424 ***	-0.387 ***	-0.226 *
nationals of ex-Yugoslavia	-0.206 *	-0.158	-0.183	-0.159
others	-0.477 ***	-0.403 ***	-0.057	-0.128
diversity	**2.637** ***	**2.364** ***	**2.089** ***	**2.646** ***
diversity^2	**-2.937** ***	**-3.689** ***	**-2.052**	**-3.091** *
div*EU15	-0.271	0.517	-0.666	-0.967
div*Turks	0.829 **	1.055 **	0.767	0.431
div*ex-Yugoslavs	0.365	0.818	0.407	0.341
div*others	0.156	0.804 **	-0.592	0.113
prop_unemployed<24	-6.885 ***	-5.981 ***	-5.144 ***	-4.353 ***
GDP_employee	8.05e-07	-4.90e-06 ***	-9.91e-07	-1.16e-06
GDP_develop (92-00)	0.170 *	0.479 ***	0.177	-0.009
border regions	-0.046 ***	-0.007	-0.004	-0.013
core_cities	0.055 ***	-0.010	0.032 *	0.022
agglomerated (Ref.)	-	-	-	-
rural_district	-0.038 ***	-0.035 **	-0.062 ***	-0.073 ***
age		0.007 **		-0.065 ***
lower_sec_school (Ref.)		-		-
upper_sec_school		0.185 ***		0.329 ***
university		0.142 **		0.189 *
first_apprentice. (Ref.)		-		-
switch_apprentice.		-0.176 ***		-0.309 ***
second_apprentice.		0.010		-0.134 **

legend: * p<0.05 ** p<0.01 *** p<0.001

[12] Source: own calculations on the basis of IEB

With regard to integration into the primary labour market, we see that for the group of Turks and other migrants the probability of being employed after an apprenticeship is significantly lower than for the group of Germans. This result remains stable even after controlling for other variables. In contrast, the group of EU15 migrants and the group of migrants from former Yugoslavia does not differ significantly from that of German nationals completing apprenticeships. Taking Germans as the reference, the results suggest that the group of migrants from EU15 states and from former Yugoslavia are not disadvantaged in the transition process, while the Turkish group and the group of other migrants are.

The human capital variables in model 2 show the expected picture: the better the educational qualification level the higher the probability of becoming integrated into the labour market. However, a switch in the apprenticeship place has a negative impact. Age has only a small, but positive influence.

Turning to the regional determinants, it is worth noting that the factors at regional level matter for the individual success of labour market integration. What is intuitively plausible is that a high regional unemployment rate lowers the chance of integration and that finding employment in rural areas is more difficult due to there being fewer job offers. Border regions do not differ significantly in model 2. What is more important is that regional cultural diversity has a positive impact on the probability of finding employment, irrespective of nationality. But the negative coefficient of the squared diversity variable indicates that the probability does not increase in a linear way. Looking at the interaction effects, the positive impact is even higher for the group of Turks and other migrants than for the German group.

However, at this point we may have a problem of endogeneity, since it is well known that productive regions act like a magnet attracting also non-German workers. In order to ensure that the coefficient of ‘cultural diversity’ is not biased by approximating regional productivity, we control for this using the unemployment rate of people younger than 25, the GDP per employee and the 9-year-development of GDP per employee. The descriptive results show that the correlation between cultural diversity and the 9-year-development of GDP per employee is very weak (0.072) while the

correlation between cultural diversity and GDP per employee is of medium strength (0.477). The correlation between cultural diversity and the youth unemployment rate is negative but weak (-0.271). Additionally, we use dummies for the residential structure of the regions. Nonetheless, the influence of cultural diversity is stable and positive, though not in a linear way. This is in line with the literature that assumes an optimal degree of diversity (see Lazaer 1999, 2000). Hence, we conclude that cultural diversity is a relevant indicator with a positive impact on individual labour market success.

Turning to the state 'further training on the labour market' and looking at the nationality it can be seen that the group of other migrants does not differ significantly from Germans completing apprenticeships, whereas the Turkish group has a lower risk of being in this state. To summarize, the patterns for the Turkish nationals completing apprenticeships indicate that they have a higher risk of becoming unemployed after apprenticeship, as 'unemployed' is the reference category. Furthermore, cultural diversity has a positive but non-linear impact again. However, in the case of 'further training on the labour market' this effect does not differ for the different nationalities as indicated by the interaction effects.

9 Conclusion

In this paper the labour market integration of young migrants is analysed with reference to the context of cultural diversity and the regional labour market situation. According to this, the strong regional dimension of cultural diversity as well as the regional dimension of integration in the primary labour market is highlighted. It can be shown that including the aspect of cultural diversity is fruitful as this enriches the analysis of the effects of the regional labour market situation. It was possible to show that cultural diversity matters in the transition process in terms of fostering the possibilities in regions with high diversity.

In particular, we focus on the transition process from apprenticeship to labour market. Distinguishing two levels of labour market integration – primary labour market and further training on the labour market – with unemployment as the reference category, we work out different patterns for the groups of Turks, migrants from former Yugoslavia, EU15 migrants and other migrants in relation to the German reference group. The chance

of getting an unsubsidized job after apprenticeship is lower for migrants, especially for the group of Turks.

Furthermore we showed that the economic performance of a region measured in terms of GDP per employee and the youth unemployment rate is important for the labour market entry of young migrants and Germans. Finally, certain types of region – cities and agglomerated regions – are advantageous for finding employment, whereas the chances are lower in rural regions. All in all our results provide a new and broader insight into the issue of the labour market integration of migrants and the native population.

In addition, new evidence is provided of the poorer positioning of the Turkish group on the labour market. Besides the assumed reasons – ethnic structure of friendship ties, poorer language skills – it is worth finding more evidence of what causes this process. Moreover, our conclusions concerning cultural diversity are limited as it remains unclear through which channels this effect works. It therefore seems to be necessary for further research to open the ‘black box’ of cultural diversity in order to disentangle the direct and indirect effects.

Literature

Alba, R. & Nee, V. (2004): Assimilation und Einwanderung in den USA, IMIS-Beiträge, Heft 23, pp21 – 40.

Alba, R. D., Handl, J. & Müller, W. (1994): Ethnische Ungleichheit im Deutschen Bildungssystem, Kölner Zeitschrift für Soziologie und Sozialpsychologie, Vol. 46, pp209 – 237.

Alesina, A. & La Ferrara, E. (2005): Ethnic Diversity and Economic Performance, Journal of Economic Literature, Vol. XLIII, pp762 – 800.

Allmendinger, J. (1989): Career mobility dynamics. A comparative analysis of the United States, Norway and West Germany, Berlin: Max-Planck-Institut für Bildungsforschung.

Blien, U., Suedekum, J. & Wolf, K. (2006): Local Employment Growth in West Germany. A Dynamic Panel Approach, Labor Economics, Vol. 13, pp445 – 458.

Boeltken, F. (2000): Soziale Distanz und räumliche Nähe – Einstellungen und Erfahrungen im alltäglichen Zusammenleben von Ausländern und Deutschen im Wohngebiet, in: Alba, R., Schmidt, P. & Wasmer, M. (Ed.): Deutsche und Ausländer: Freunde, Fremde oder Feinde?, Wiesbaden: Westdeutscher Verlag, pp147 – 194.

Borjas, G. J. (1994): The Economics of Immigration, Journal of Economic Literature, Vol. 32 (4), pp1667-1717.

Bundesagentur für Arbeit (2005): Amtliche Nachrichten der Bundesagentur für Arbeit, Arbeitsstatistik, Jahreszahlen, Nürnberg.

Bundesministerium für Bildung und Forschung (2006): Berufsbildungsbericht 2006, p127.

Chiswick, B.R. (1978): The Effect of Americanization on the Earnings of Foreign-born Men, Journal of Political Economy, Vol. 86, Nr. 51, pp897 – 921.

Constant, A., Gataulina, L. & Zimmermann, K. F. (2006): Ethnosizing Immigrants, IZA Discussion Paper, Nr. 2040.

Damelang, A. & Haas, A. (2006): Arbeitsmarkteinstieg nach dualer Berufsausbildung – Migranten und Deutsche im Vergleich, IAB-Forschungsbericht, Nr. 17/2006.

Dietrich, H. & Abraham, M. (2005): Eintritt in den Arbeitsmarkt, in: Abraham, M. & Hinz, T. (Eds.): Arbeitsmarktsoziologie. Probleme, Theorien, empirische Befunde, Wiesbaden: VS Verlag für Sozialwissenschaften, pp69 – 98.

Esser, H. (2003): Does the New Immigration Require a New Theory of Intergenerational Integration?, MZES Working Paper, Nr. 71.

Euwals, R. & Winkelmann, R. (2002): Mobility after apprenticeship - Evidence from Register Data, Applied Economics Quarterly, Vol. 48, pp256 - 278.

Fleps, H. (2003): Alternative Verfahren der Schätzung und Gütebeurteilung von Marktanteilsmodellen anhand ausgewählter Konsumgüterwarengruppen, Stuttgart: Ibidem-Verlag.

Franz, W. (2006): Arbeitsmarktökonomik, Berlin: Springer.

Fujita, M., Krugman, P., Venables, A.J., (1999): The Spatial Economy: Cities, Regions, and International Trade, Cambridge, MA: MIT Press.

Ganter, S. & Esser, H. (1999): Ursachen und Formen der Fremdenfeindlichkeit in der Bundesrepublik Deutschland (Expertise im Auftrag der Friedrich-Ebert-Stiftung), 2. Aufl, Bonn: Friedrich-Ebert-Stiftung.

Granato, N. & Kalter, F. (2001): Die Persistenz ethnischer Ungleichheit auf dem deutschen Arbeitsmarkt. Diskriminierung oder Unterinvestition in Humankapital?, Kölner Zeitschrift für Soziologie und Sozialpsychologie, Vol. 53, pp497 – 520.

Granovetter, M. (1973): The Strength of Weak Ties, The American Journal of Sociology, Vol. 78, Nr. 6, pp1360 – 1380.

Granovetter, M. (1983): The Strength of Weak Ties. A Network Theory Revisited, Sociological Theory, Vol. 1, pp201 – 233.

Granovetter, M. (1985): Economic Action and Social Structure. The Problem of Embeddedness, American Journal of Sociology, Vol. 91, pp481 – 510.

Jacobs J. (1969): The Economy of Cities, New York: Vintage.

Jovanovic, B. (1979) Firm-Specific Capital and Turnover, Journal of Political Economy, Vol. 87 (5), pp972-990.

Kalter, F. & Granato, N. (2002): Ethnic Minorities' Education and Occupational Attainment. The Case of Germany, MZES Working Paper, Nr. 58.

Kalter, F. (2006): Auf der Suche nach einer Erklärung für die spezifischen Arbeitsmarktnachteile von Jugendlichen türkischer Herkunft, Zeitschrift für Soziologie, Vol. 35, pp144 – 160.

Kogan, I. (2003): A Study of Employment Careers of Immigrants in Germany, MZES Working Paper, Nr. 66.

Kristen, C. (2000): Ethnic Differences in Educational Placement: The Transition from Primary to Secondary Schooling, MZES Working Paper, Nr 32.

Kristen, C. (2002): Hauptschule, Realschule oder Gymnasium? Ethnische Unterschiede am ersten Bildungsübergang, Kölner Zeitschrift für Soziologie und Sozialpsychologie, Vol. 54, pp534 – 552.

Kristen, C. (2006): Ethnische Diskriminierung in der Grundschule? Die Vergabe von Noten und Bildungsempfehlungen, Kölner Zeitschrift für Soziologie und Sozialpsychologie, Vol. 58, pp79 – 97.

Lazear, E.P. (1999): Culture and Language, Journal of Political Economy, Vol. 107 (6), pp95 – 126.

Lazear, E.P. (2000): Diversity and Immigration, in: G. J. Borjas (ed.): Issues in the Economics of Immigration, Chicago: University of Chicago Press, pp117 – 142.

Mortensen, D. T. (1986): Job Search and Labor Market Analysis in: Mortensen, D. T., Ashenfelter, O., Layard, R. (Eds.): Handbook of Labor Economics, Vol. 2, Amsterdam: North- Holland, ch. 15.

Nauck, B. (1995): Educational climate and intergenerative transmission in Turkish families: A comparison of migrants in Germany and non-migrants, in: Noack, P., Hofer, M. & Youniss, J. (Eds.): Psychological responses to social change. Human development in changing environment, New York: de Gruyter, pp67-85.

Niebuhr, A. (2006): Migration & Innovation. Does regional diversity matter for R&D activity?, IAB Discussion Paper, Nr. 14.

Ottaviano, G. I. P. & Peri, G. (2006): The Economic Value of Cultural Diversity. Evidence from US Cities, Journal of Economic Geography, Vol. 6, pp9 – 44.

Riphahn, R. T. (2002): Residential Location and Youth Unemployment: The Economic Geography of School-To-Work Transitions, Journal of Population Economics, Vol. 15, Nr. 1, pp115–135.

Seibert, H. (2005): Integration durch Ausbildung? Berufliche Platzierung ausländischer Ausbildungsabsolventen der Geburtsjahrgänge 1960 bis 1971, Berlin: Logos Verlag.

Seibert, H. & Solga, H. (2005): Gleiche Chancen dank einer abgeschlossenen Ausbildung? Zum Signalwert von Ausbildungsabschlüssen bei ausländischen und deutschen jungen Erwachsenen, Zeitschrift für Soziologie, Vol. 34, pp364 – 382.

Wachter, T. v. & Bender, S. (2006): In the right place at the wrong time – The role of firms and luck in young workers' careers, American Economic Review, Vol. 96, Nr. 5, pp1679 – 1705.

Wiley, N. F. (1970): The Ethnic Mobility Trap and Stratification Theory, in: Rose, P.I. (Ed.), The Study of Society. An Integrated Anthology, 2. Ed., New York and Toronto, pp397 – 408.

Winkelmann, R. (1996): Employment Prospects and Skill Acquisition of Apprenticeship-Trained Workers in Germany, Industrial and Labor Relations Review, Vol. 49, pp658 – 672.

Zhou, M. (1997): Segmented Assimilation: Issues, Controversies, and Recent Research on the New Second Generation, International Migration Review, Vol. 31, Nr. 4, pp975 – 1008.

Appendix

A: Composition of the data

Dummy Variables	N	in %
Sex		
Male	205,009	56.6
Female	157,236	43.4
Nationality		
Germans	335,260	92.6
EU15 (except Germans)	6,060	1.7
Turks	11,404	3.1
ex-Yugoslavs	5,335	1.5
Other Migrants	4,186	1.2
Educational level		
Lower secondary school	313,880	86.6
Upper secondary school	45,562	12.6
University	2,803	0.8
Apprenticeship		
First apprenticeship	317,889	87.8
Switch of apprenticeship	31,994	8.8
Second apprenticeship	12,362	3.4
Vocational education		
Car mechanic	15,504	4.3
Electrician	14,127	3.9
Retail salesman/wholesaler	20,201	5.6
Salesman	19,221	5.3
Bank clerk	15,650	16.5
Office worker	59,732	6.1
Doctor's receptionist	22,234	6.1
Hair cutter	9,288	2.6
Other occupation	186,288	51.4
Size of training firm		
1 < 20	133,884	37.0
20 < 250	139,193	38.4
> 249	89,168	24.6
Industrial sector		
Manufacturing	112,956	31.2
Building	36,653	10.1
Distributive services	70,428	19.4
Economic services	30,748	8.5
Domestic services	26,581	7.3
Social services	54,501	15.0
Others	8,525	2.4
Missing	21,853	6.0
Type of region		
Border regions (yes=1)	48,440	14.8
Core cities	127,060	35.1
Agglomerated regions	173,147	47.8
Rural districts	62,038	17.1
sample size (n)	362,245	100.0

Metric Variables	N	Mean	Std.dev.
Individual characteristics			
Age (16 - 30)	362,245	21.10	2.10
Wage	337,755	24.28	8.96
Firm characteristics			
aver_firm_wage	348,850	67.44	26.21
prop_highqualified	359,523	0.10	0.15
prop_apprentices	359,523	0.18	0.19
prop_foreigners	359,523	0.06	0.10
Regional characteristics			
Diversity	362,245	0.15	0.06
prop_unemployed<24	362,245	0.07	0.04
GDP_employee	362,245	54,015.17	8,602.00
GDP_develop (92-00)	362,245	0.15	0.06
sample size (n)	362,245		

B: Determinants of the transition process (complete estimation)[13]

		Primary labour market		Further training on the labour market	
Variable		Model 1	Model 2	Model 1	Model 2
sex (male=Ref.)		0,142 ***	0.199 ***	0.069 ***	0.035 *
Germans (Ref.)		-	-	-	-
EU15		-0.112	-0.129	-0.004	0.137
Turks		-0..571 ***	-0.424 ***	-0.387 ***	-0.226 *
nationals of former Yugoslavia		-0.206 *	-0.158	-0.183	-0.159
others		-0.477 ***	-0.403 ***	-0.057	-0.128
diversity	Regional characteristics	2.637 ***	2.364 ***	2.089 ***	2.646 ***
diversity^2		-2.937 ***	-3.689 ***	-2.052	-3.091 *
div_EU15		-0.271	0.517	-0.666	-0.967
div_turks		0.829 **	1.055 **	0.767	0.431
div_ex-yugoslavs		0.365	0.818	0.407	0.341
div_others		0.156	0.804 **	-0.592	0.113
prop_unemployed<24		-6.885 ***	-5.981 ***	-5.144 ***	-4.353 ***
GDP_employee		8.05e-07	-4.90e-06 ***	-9.91e-07	-1.16e-06
GDP_develop (92-00)		0.170 *	0.479 ***	0.177	-0.009
border region		-0.046 ***	-0.007	-0.004	-0.013
core_cities		0.055 ***	-0.010	0,.032 *	0.022
agglomerated (Ref.)		-	-	-	-
rural_district		-0.038 ***	-0.035 **	-0.062 ***	-0.073 ***
age			0.007 **		-0.065 ***
ln_wage			0.831 ***		-0.075 *
lower_sec_school (Ref.)	Human Capital		-		-
upper_sec_school			0.185 ***		0.329 ***
university			0.142 **		0.189 *
first_apprentice. (Ref.)			-		-
switch_apprentice.			-0.176 ***		-0.309 ***
second_apprentice.			0.010		-0.134 **
office worker (Ref.)	Occupations		-		-
car_mechanic			-0.544 ***		-0.217 ***
electrician			0.242 ***		0.301 ***
wholesaler			-0.219 ***		0.001
salesman			-0.305 ***		-0.032
bank_clerk			0.136 ***		0.128 **
doctors_recept			0.262 ***		0.075
hair_cutter			0.138 ***		-0.111 *
other_occup			-0.203 ***		0.005
prop_highqualified	Firm Characteristics		-0.132 ***		0.121 *
prop_apprentices			-0.606 ***		-0.282 ***
prop_foreigners			-0.265 ***		0.053
ln_firm_wage			0.192 ***		0.016
firmsize < 20			-0.058 ***		-0.038 *
firmsize 20-249 (Ref.)			-		-
firmsize > 249			0.239 ***		0.051 *
manufacturing (Ref.)	Sector		-		-
building			-0.409 ***		-0.218 ***
distributive services			-0.066 ***		-0.076 ***
economic services			-0.003		-0.031
domestic services			-0.181 ***		0.039
social services			-0.346 ***		-0.118 ***
others			-0.123 ***		-0.038
cons		1.211 ***	-1.681 ***	-0.893 ***	0.658 ***

legend: * p<0.05 ** p<0.01 *** p<0.001

[13] Source: own calculation on the basis of IEB.

HWWI Research Papers
by the HWWI Research Programme „Migration Research Group“

9. Skills and remittances: The case of Afghan, Egyptian, and Serbian immigrants in Germany
Florin Vadean
Hamburg, April 2007

8. Rethinking the effects of immigration in wages
Gianmarco I.P. Ottaviano, Giovanni Peri
Hamburg, April 2007

7. Regional disparities in employment of high-skilled foreigners – Determinants and options for migration policy in Germany
Carola Burkert, Annekatrin Niebuhr, Rüdiger Wapler
Hamburg, March 2007

6. Social relations and remittances: evidence from Canadian micro data
Don J. DeVoretz, Florin Vadean
Hamburg, February 2007

5. Egyptian, Afghan, and Serbian diaspora communities in Germany: How do they contribute to their country of origin?
T. Baraulina, M. Bommes, T. El-Cherkeh, H. Daume, F. Vadean
Hamburg, January 2007

4. Arbeitsmarkt und Migration – eine empirische Analyse der Lohn- und Beschäftigungseffekte der Zuwanderung in Deutschland
Max Steinhardt
Hamburg, November 2006

3. Peer Effects, Social Multipliers and Migration at School: An International Comparison
Horst Entorf, Martina Lauk
Hamburg, July 2006

2. The Impact of Student Diversity in Secondary Schools. An Analysis of the International PISA Data and Implications for the German Education System
Katharina Michaelowa, Jean Bourdon
Hamburg, July 2006

1. Migration and Innovation. Does Cultural Diversity Matter for Regional R&D Activity?
Annekatrin Niebuhr
Hamburg, July 2006

The **Hamburg Institute of International Economics (HWWI)** is an independent economic research institute, based on a non-profit public-private partnership, which was founded in 2005. The University of Hamburg and the Hamburg Chamber of Commerce are shareholders in the Institute .

The HWWI's main goals are to:

- Promote economic sciences in research and teaching;
- Conduct high-quality economic research;
- Transfer and disseminate economic knowledge to policy makers, stakeholders and the general public.

The HWWI carries out interdisciplinary research activities in the context of the following research programmes: Economic Trends and Hamburg, International Trade and Development, Migration Research and International Climate Policy.

Hamburg Institute of International Economics (HWWI)

Neuer Jungfernstieg 21 | 20354 Hamburg | Germany
Phone +49 (0)40 34 05 76 - 0 | Fax +49 (0)40 34 05 76 - 76
info@hwwi.org | www.hwwi.org