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## **Immigration, Integration and the Labour Market**

Turkish Immigrants in Germany and the Netherlands

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## Abstract in English

On the basis of three micro datasets, the German Socio-Economic Panel 2002, the Dutch Social Position and Use of Provision Survey 2002 and the Dutch Labour Force Survey 2002, we investigate the labour market position of Turkish immigrants in Germany and the Netherlands. We compare labour market outcomes of Turkish immigrants, including both the first and second generation, and natives in both countries by using the Blinder-Oaxaca decomposition method. We find that Turkish immigrants have lower employment rates, lower tenured job rates and lower job prestige scores than natives. In both countries, the lower level of education and the age composition of the Turkish immigrants partly explains the unfavourable labour market position. The standardized gap – the gap that remains after correction for the observed individual characteristics – in the employment and tenured job rate remains large for the Netherlands, while the standardized gap in the job prestige score remains large for Germany. Differences in past immigration policies between Germany and the Netherlands are likely to be important for explaining the labour market position of Turkish men in both countries.

*Key words: Immigration, Integration, Labour Market*

*JEL code: C25, F22, J15, J61*

## Abstract in Dutch

In deze studie onderzoeken we de arbeidsmarktpositie van Turkse immigranten in Duitsland en Nederland op basis van drie onderzoeksbestanden, te weten het Duitse Sociaal-Economische Panel 2002, het Nederlandse Sociale Positie en Voorzieningsgebruik Allochtonen 2002 en de Enquête Beroepsbevolking 2002. We vergelijken de arbeidsmarktpositie van Turkse immigranten, eerste en tweede generatie, met die van autochtonen met de Blinder-Oaxaca decompositie methode. We vinden dat de Turkse immigranten minder vaak een baan, minder vaak een vaste aanstelling en een lagere beroepsstatus hebben dan autochtonen. In beide landen verklaart het lagere opleidingsniveau en het verschil in de leeftijdsverdeling van de Turken een deel van de achterstand. Het gestandaardiseerde verschil in de werkgelegenheid en de vaste aanstellingen, dus na rekening te hebben gehouden met verschillen in de geobserveerde individuele karakteristieken, blijft groot in Nederland. Het gestandaardiseerde verschil in de beroepsstatus blijft juist groot in Duitsland. Het is aannemelijk dat verschillen in gevoerd immigratiebeleid een belangrijke rol spelen in het verklaren van verschillen in de achterstand in de beide landen, en dan met name voor werkgelegenheid onder de Turkse mannen.

*Steekwoorden: Immigratie, Integratie, Arbeidsmarkt*

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## Summary (in English)

This study compares the labour market position of Turkish immigrants, including both first and second generation, in Germany and the Netherlands. By comparing immigrants from the same country of origin, so with a similar social and cultural background, in different host countries we learn about the importance of immigration and integration policies for the labour market position of immigrants. The case of the Turkish immigrants is interesting as they are the largest immigrant group in both countries. And although the countries have labour market institutions that are similar in many aspects, the immigration and integration policies are different.

The data sources for the study are the German Socio-Economic Panel 2002, the Dutch Social Position and Use of Provisions Survey 2002 (for Turkish immigrants), and the Dutch Labour Force Survey (for natives). We compare employment rates, tenured job rates and ISEI job prestige scores, which is a measure for the relative job position on a scale from 10(low) to 90(high), between Turkish immigrants and natives. We use the Blinder-Oaxaca decomposition method to disentangle the difference in labour market position in two parts: one part explained by differences in the observed individual characteristics, and one remaining part. We find that the labour market position of Turkish immigrants is unfavourable relative to natives. But in the comparison between the two countries we find contrasting results: while the Turkish immigrants in the Netherlands perform relatively unfavourable in terms of employment rates and tenured job rates, the Turkish immigrants in Germany perform relatively unfavourable in terms of the job prestige score.

Although strong conclusions are hard to draw from the empirical analysis, they at least give interesting insights.

First of all, we confirm that educational policy is important. The results make clear that an improvement in the educational attainment of Turkish immigrants will improve their labour market position considerably. Education is however not the entire story since even after correction for educational attainment a substantial gap in the labour market position remains.

Secondly, in the Netherlands the combination of the economic crisis of the 1980s and the deactivating social security arrangements, which existed at that time, are likely to have been important. Many Turkish men became entitled to an unemployed, disability or welfare benefit during that time period, and this is consistent with our result of a low employment rate of older Turkish men in the Netherlands.

Thirdly, immigration and remigration policies are likely to have been important. The gap in the employment rate is smaller for Germany, and even becomes small after correction for the

observed individual characteristics. This is consistent with a more successful selection (composition) of immigrants in Germany compared to the Netherlands, which may be the result of the more restrictive immigration policy and the active remigration policy in Germany.

Eventually, the lack of information and networks within firms is likely to be an important explanation for the unfavourable outcomes at the upper end of the labour market. And discrimination may play a role as well. Our results show that in both countries the employed Turks with an upper secondary or tertiary education are outperformed by their employed native counterparts in terms of the (standardized) job prestige score. For employed Turks with a lower educational attainment this is true to a lesser extent, and for some groups of lowly educated the employed Turks even outperform their employed native counterparts.

## Summary (in German)

In dieser Studie wird die Arbeitsmarktposition türkischer Einwanderer der ersten und zweiten Generation in den Niederlanden und Deutschland verglichen. Stellt man die Arbeitsmarktposition von Immigranten aus dem gleichen Ursprungsland in zwei verschiedenen Gastländern einander gegenüber, erhält man neue Erkenntnisse über die Bedeutung von deren Einwanderungs- und Integrationspolitik. Besonders aufschlussreich ist das Beispiel der Türken, weil sie in beiden Ländern die größte Einwanderergruppe darstellen. Obwohl beide Staaten ähnliche Strukturen in ihren Arbeitsmärkten aufweisen, unterscheiden sie sich doch in ihrer Einwanderungs- und Integrationspolitik.

Als Quellen für diese Studie dienen das Sozio-ökonomische Panel 2002, das *Sociale Positie en Voorzieningengebruik Allochtonen Onderzoek 2002* (= Untersuchung über den Gebrauch sozialer Einrichtungen und die soziale Stellung von Ausländern in den Niederlanden) und die niederländische Arbeitskräfteerhebung 2002. Wir vergleichen die Erwerbstätigkeit, Festeinstellungen und den Index für beruflichen Status (ISEI) zwischen türkischen Einwanderern und gebürtigen Deutschen bzw. Niederländern. Dabei teilen wir den Unterschied zwischen beiden Gruppen bezüglich ihrer Position auf dem Arbeitsmarkt in zwei Komponenten auf. Die erste dieser Komponenten resultiert dabei aus den unterschiedlichen individuellen Voraussetzungen, z. B. dem durchschnittlich niedrigerem Ausbildungsniveau der Einwanderer; die zweite erfasst alle übrigen Gründe. Ein Ergebnis unserer Untersuchung ist, dass die Türken eine - relativ zu ihren Voraussetzungen gesehen - schlechtere Stellung auf dem Arbeitsmarkt haben als gebürtige Deutsche oder Niederländer. Bemerkenswert ist, dass wir beim Vergleich beider Länder voneinander abweichende Ergebnisse gefunden haben. Während die Türken in den Niederlanden in Bezug auf Erwerbstätigkeit und Festeinstellungen relativ schwach abschneiden, erhalten ihre Landsleute in Deutschland häufiger einen Arbeitsplatz. Dieser ist jedoch – häufiger als in den Niederlanden – relativ schlecht und erzielt niedrige Werte auf dem Index für beruflichen Status.

Ogleich es schwierig ist, konkrete Schlussfolgerungen aus der empirischen Analyse zu ziehen, ist sie in verschiedenen Hinsichten aufschlussreich.

Zunächst einmal belegt sie, dass Bildungspolitik allgemein von hoher Bedeutung ist. Aus den Resultaten ergibt sich, dass türkische Einwanderer – hätten sie ein höheres Ausbildungsniveau - eine deutlich bessere Position auf dem Arbeitsmarkt einnehmen könnten. Ausbildung ist jedoch nicht der einzige Faktor; selbst wenn die Türken eine bessere Ausbildung hätten, würde eine Lücke zwischen ihnen und den jeweils Einheimischen klaffen.

Ferner hat die Kombination aus Wirtschaftskrise und Auswirkungen der sozialen Systeme auf die Arbeitsbereitschaft in den Niederlanden der 80er Jahre einen bedeutenden Einfluss. Viele türkische Männer hatten damals Recht auf Arbeitslosengeld, Berufsunfähigkeitsrente sowie Sozialhilfe; dies entspricht einer geringen Erwerbstätigkeit älterer Türken in den Niederlanden.

Darüber hinaus haben Einwanderungs- und Rückkehrpolitik einen wichtigen Einfluss gehabt. Die existierende Lücke zwischen der Erwerbstätigkeit türkischer Einwanderer und den Einheimischen ist in Deutschland geringer als in den Niederlanden und wird sogar noch geringer, wenn man die individuellen Voraussetzungen der Türken mit in Betracht zieht. Entsprechend der restriktiven Einwanderungspolitik und der aktiv betriebenen Rückkehrpolitik sind die relativ erfolgreichen Türken in Deutschland geblieben.

Als letzter Punkt ist zu nennen, dass die Lücke zwischen türkischen Einwanderern und Einheimischen insbesondere im oberen Segment des Arbeitsmarktes besonders gross ist. Unsere Ergebnisse zeigen, dass in beiden Ländern Türken mit Abitur oder (Fach)Hochschulabschluss in Bezug auf ihren beruflichen Status schlechter gestellt sind als ihre einheimischen Kontrahenten. Dies gilt zwar auch für Türken mit niedrigerem Ausbildungsstand, allerdings in geringerem Maße. In einigen Gruppen im unteren Segment des Arbeitsmarkts überholen die türkischen Einwanderer jedoch sogar ihre einheimischen Kontrahenten.

# 1 Introduction<sup>1</sup>

Immigration and integration policy are hotly debated in many countries of the European Union. While major international institutes like the European Commission, the OECD and the United Nations plea for more liberal immigration policies, voters in many countries hold strongly restrictive views about immigration and governments in many countries accordingly implement more strict policies. This study concentrates on a dimension of immigration and integration that is of great importance: the labour market. If immigrants pay their way into the welfare state of a host country by working and paying taxes, native voters and governments may become less conservative. A good labour market performance of immigrants seems therefore crucial for the success of immigration and integration policies.

This study compares the labour market position of Turkish immigrants, including both the first and second generation, in Germany and the Netherlands. By comparing immigrants from the same country of origin, so with a similar social and cultural background, in two different host countries we learn about the importance of immigration and integration policies. Although the empirical exercise in this study is backward looking the goal is clearly forward looking. By offering new and valuable knowledge on an important flow of labour migration in the past we hope to contribute to the design of new policies.

The comparison of Turkish immigrants in Germany and the Netherlands is interesting because of two aspects. First, the Turks are a major immigrant group in both countries, in particular as both countries recruited substantial numbers of so-called ‘guest workers’ from Turkey in the 1960s and early 1970s followed by family reunification immigration afterwards. Immigration and integration policies are well documented and both countries have micro data available for this particular group. Second, while both countries have labour market institutions that are similar in many aspects, the countries followed different immigration and integration policies. Germany for some time followed an active remigration policy and was restraint in offering German nationality. Integration policies could be qualified as minimal. In contrast to the rather restrictive German policies, The Netherlands focussed on better access of immigrants to employment, housing and education, offered easy access to Dutch nationality, and at least until recently encouraged immigrants to preserve their own cultural identity (the ‘multicultural society’). By comparing the labour market outcomes of immigrants with one particular social and cultural background in the two countries we hope to learn about the importance of the above described policies. The research method has drawbacks as well, in particular as we do not

<sup>1</sup> The authors thank Pieter Bevelander, Amelia Constant, Sjeff Ederveen, Han Entzinger, Joachim Frick, John Haisken-DeNew, Holger Hinte, Michael Fertig, Pierre Koning, Peter Kooiman, Ruud Koopmans, Aslan Zorlu and participants at the SOEP User Conference 2006 and seminars at CPB, IZA and RWI Essen for comments and suggestions. The provision of data by DIW Berlin and Statistics Netherlands is acknowledged. The paper is the result of a joint CPB-SCP research project which led to the Dutch publication Dagevos *et al.* (2006).

know whether our results can be generalized to other countries and to other immigrant groups. We will therefore be careful with generalizing our results.

Studies on the international comparison of the labour market position of immigrants were until recently limited in number. Many publications of major international institutes are based on Eurostat figures and compare nationals versus non-nationals. A well-known result is that unemployment and employment rates on non EU nationals vary strongly between countries. In some countries non EU nationals even outperform nationals. Such comparisons are however difficult to interpret as the EU countries implement different naturalisation policies, and therefore the composition of non-nationals differs between countries.<sup>2</sup>

A challenging research method on immigration is to compare labour market outcomes of immigrants with a similar background between different host countries. Model *et al.* (1999) find no substantial differences in the labour market position of black Caribbean migrants in France, Canada, the UK and the US, while Kogan (2003) finds that ex-Yugoslavs fare better in Austria than in Sweden and Lewin-Epstein *et al.* (2003) find differences for immigrants from the former Soviet Union fare better in Canada than in Israel. The latter study relates their outcomes to the explicit selection of the Canadian point system and the integration policy of Israel. Ancetol *et al.* (2003) compare immigrants to Australia, Canada and the US, and conclude that skills of immigrants are largely explained by country of origin. Using individual level data from 18 host countries for 187 different immigrant groups, Tubergen *et al.* (2004) find as well that country of origin is important and that countries with a so-called point system do not achieve better labour market outcomes for immigrants of a given country of origin. Schultz-Nielsen and Constant (2004) compare the employment rates of immigrants in Denmark and Germany and conclude that both in absolute and relative terms the employment rate of non-Western foreigners is lower in Denmark and claim that differences in the composition of the immigrant populations are likely to be important. Büchel and Frick (2004, 2005) investigate the relative income position of immigrants in several European countries and find that the outcomes differ substantially between countries. They relate the differences in outcomes to differences in immigration policy, and claim there is scope for a selective immigration policy in Europe. Boeri (2006) finds that after correction for individual labour market characteristics immigrants in several European countries do not have a larger probability than natives to be dependent on the welfare state.

In this study, we use three different micro datasets to compare the labour market position of Turkish immigrants and natives in the year 2002: for Germany we use the Socio-Economic Panel, and for the Netherlands we use the Social Position and Use of Provisions Survey (for

<sup>2</sup> See for example Figure I.10 and Box I.3 of OECD (2004). The box explains that the difference between foreigners and foreign-born residents is particularly important for Australia, Canada, the Netherlands and Sweden.

Turks) and the Labour Force Survey (for natives). The analysis includes both first and second generation immigrants, but it does not explore the differences between the generations. For Germany we select natives living in West-Germany as the Turkish immigrants moved to this country and currently still live there. For both countries we find that the labour market position of Turkish immigrants is less favourable than the position of natives: In Germany and the Netherlands, the employment rate for Turkish men is 14 and 23%-points lower than for native men. Moreover, the observed gap in the employment rate in Germany is largely explained by differences in educational attainment, which implies a small standardized gap. This is true to a lesser extent for the Netherlands, where the standardized gap remains large. The tenured job rates among those employed is 5 and 15%-points lower for Turks than for natives in Germany and the Netherlands. In particular in Germany the lower average age of the Turks explains a major part of the observed gap in the tenured job rate, implying a standardized gap that is almost equal to zero. Again this is true to a lesser extent for the Netherlands, where the standardized gap remains large. The job prestige score (ISEI), which is a measure for the relative job position on a scale from 10 (low) to 90 (high), are lower for employed Turks than for employed natives in both countries. The gap is particularly large for the highly educated in Germany with 17 points against 10 points in the Netherlands. In both countries differences in educational attainment play an important role, but for this particular labour market outcome the standardized gap remains larger in Germany than in the Netherlands.

Although strong conclusions are hard to draw, the results give interesting insights. First of all, we confirm that educational policy is important. The results make clear that an improvement in the educational attainment of Turkish immigrants will improve their labour market position considerably. Education is however not the entire story since even after correction for educational attainment a substantial gap in the labour market position remains. Secondly, in the Netherlands the combination of the economic crisis of the 1980s and the deactivating social security arrangements, which existed at that time, are likely to have been important. Many Turkish men became entitled to an unemployed, disability or welfare benefit during that time period, and this is consistent with our result of a low employment rate of older Turkish men in the Netherlands. Thirdly, immigration and remigration policies are likely to have been important. The gap in the employment rate is smaller for Germany, and even becomes small after correction for the observed individual characteristics. This is consistent with a more successful selection (composition) of immigrants in Germany compared to the Netherlands, which may be the result of the more restrictive immigration policy and the active remigration policy in Germany. And eventually, the lack of information and networks within firms is likely to be important explanation for the unfavourable outcomes at the upper end of the labour market. And discrimination may play a role as well. Our results show that in both countries the employed Turks with an upper secondary or tertiary education are outperformed by their employed native counterparts in terms of the (standardized) job prestige score. For employed

Turks with a lower educational attainment this is true to a lesser extent, and for some groups of lowly educated the employed Turks even outperform their employed native counterparts.

The remainder of the study is organized as follows. First of all, section 2 discusses the literature on the labour market position and labour market performance of immigrants. Section 3 discusses the history of immigration, naturalisation and integration policy in Germany and the Netherlands. Section 4 introduces the three micro datasets, while Section 5 presents the empirical results. Section 6 concludes.

## 2 Literature

What evidence exists on the labour market position of immigrants? Although we are mainly interested in the impact of immigration and integration policies, it is clear that the position is affected by many other aspects as well. The literature contains a large number of studies, and we discuss a selection only. One connecting thread in the literature is the formation of country specific human capital. Aspects like language proficiency and integration are clearly important for the labour market position. A second connecting thread is selection: while several immigration policies practiced in the world explicitly select on human capital, self-selection (induced by the choice of the immigrants themselves) is another potentially important result of immigration policy. Selection is likely to be partly induced by labour market and welfare state institutions, which is of particular importance for the current study.

### 2.1 Integration and country specific human capital

Integration and the acquisition of country specific human capital are important issues in the literature on immigration, in particular as it led to a dispute in the US literature.<sup>3</sup> There is a clear spill-over to the European literature, whereby the European situation is recognized to be different as in many European countries the settlement of labour migration in the 1960s and 1970s was supposed to be temporary. The impact of integration policies should be prominent on the research agenda as it is a major topic in the public debate, but empirical evidence still hardly exists.

Does the acquisition of country specific human capital during the residency period in a host country lead to a convergence of immigrant earnings towards native earnings? This empirical question led to a dispute in the US literature with the two main authors being, with respect for the many other authors, Chiswick (1978, Chiswick *et al.*, 2005) and Borjas (1985, 1995). The dispute did not lead to a final answer, partly due to disagreements on a proper definition of a control group. The European literature took up the discussion as well as labour migration started to become controversial from the economic crisis of the 1980s onwards. There are however major differences as compared to the US literature. First, the inflexibility of the European labour markets implied that unemployment and social position are more important than earnings.<sup>4</sup> Second, during the 1960s and 1970s labour immigration was expected to be temporary and immigrants invested little in country specific human capital. For this reason, convergence in earnings and social position may not be expected (Dustmann, 1999, 2000). In contrast to the first generation, second generation immigrants were more likely to invest in

<sup>3</sup> Note that the US literature refers to 'assimilation' instead of 'integration'.

<sup>4</sup> There are some European studies on wage convergence, including Bell (1997), Edin *et al.* (2000), Husted *et al.* (2001) and Barth *et al.* (2004). Most of the public debate in Europe is however on unemployment and the use of welfare.

country specific human capital. Intergenerational mobility therefore attracts substantial attention (see Riphahn, 2003, for an example on Germany, and van Ours and Veenman, 2003, on the Netherlands). And although the second generation improves her educational attainment relative to the first generation in both Germany and the Netherlands, the OECD (2006) reports that the second generation still has not succeeded to catch up with native children.

To counteract the less favourable educational attainment and labour market performance of non-Western immigrants, some European countries implemented integration policies. Such policies should, in this paper, be understood as combined policy measures to facilitate the adaptation of immigrants to their new environment. The policy measures may be pursued in the interest, economic or otherwise, of the immigrants as well as the host country. Within Europe, countries implemented different integration policy strategies: while countries like the UK, the Netherlands and Sweden are inspired by a multiculturalist ideology, countries like France, Germany and Austria give – for different reasons – immigrants little room for cultural and religious expressions in the public sphere (Entzinger *et. al*, 2005).<sup>5</sup> The long-run impact of the different policies on integration and labour market performance has until recently hardly been studied in an internationally comparative manner.

## 2.2 Labour market and welfare state

Labour market and welfare state institutions are likely to impact the labour market performance of immigrants in several ways. First of all, there may be a pre-entry impact as some institutions may lead to self-selection of immigrants. And secondly, there may be a post-entry effect as the labour market and welfare state institutions may work (de-)activating in itself.

Are labour migrants positively or negatively selected? Although it is clear that both the US and Europe attracted substantial numbers of both high and low skilled immigrants, there is an ongoing discussion on whether immigrants are on average more positively or negatively selected. Selective migration policies – like in Australia and Canada – are obviously important. But furthermore immigrants may be self-selected on the basis of characteristics that are unobservable for authorities. Chiswick (1978, 1999), on the one hand, argues that labour migrants are positively self-selected as in particular they are the ones that are able to overcome the fixed costs of migration. Borjas (1987), on the other hand, argues that countries with a small wage dispersion attract a negative selection of immigrants as in particular for this group migration pays off. This argument may play an important role for Europe as minimum wages and collective wage agreements impact the wage dispersion in many countries. In addition to the latter argument, Dustmann (1993) argues that in case of temporary migration due to involuntary unemployment in the source country labour migrants may be negatively self-

<sup>5</sup> In many countries, and in particular the Netherlands, these policies have been revised in recent years(see next section).

selected as well. As both Germany and the Netherlands experienced a shortage of low-skilled labour and attracted labour migrants from the Mediterranean countries, the last argument seems particularly relevant for the labour migrants of the 1960s in these two countries.

In addition to the impact of wage levels and wage dispersion, welfare state institutions may play a differential role in immigrant self-selection as well. Borjas (1999) formulates the so-called 'welfare magnet' hypothesis, stating that countries with more generous welfare states attract more (low-skilled) immigrants than other countries. Moreover, Heitmueller (2005) predicts that generous welfare state arrangements will attract risk averse immigrants. While some empirical studies have shown that this may indeed be the case, including studies of Borjas, other empirical studies (Zavodny, 1997, Pedersen *et al.*, 2004, Kaushal, 2005) show that the relevance of the hypothesis is likely to be limited as network effects dominate all other effects. Immigrants choose their country of destination largely on the basis of the presence of family, friends and other fellow-country men, and the welfare state may hardly play a role.

Do immigrants have an excess probability, compared to natives, to become unemployed or dependent on welfare? Evidence on this issue has been controversial and did not lead to a clear answer yet. There is some evidence that immigrants more often depend on welfare than comparable natives (Borjas and Hilton, 1996, Hansen and Lofstrom, 2003, Riphahn, 2004), but some other studies show there is no statistically significant difference (Bird *et al.*, 2001, Boeri, 2006). For the Netherlands, there is clear evidence that non-Western immigrants have an excess probability to be dependent on the welfare state (Roodenburg *et al.*, 2003). As there are differences in the welfare state institutions of Germany and the Netherlands, for example in the access to and the replacement rates of the social security arrangements, this aspect is potentially important as well.



### **3 Turkish immigrants in Germany and the Netherlands**

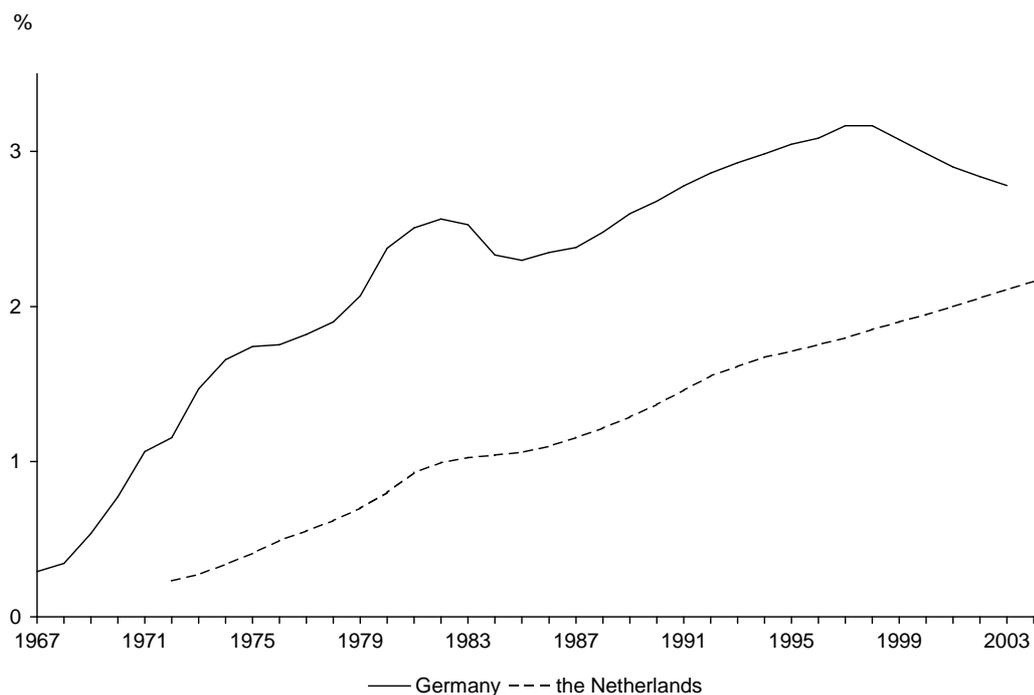
Both Germany and the Netherlands started to recruit substantial numbers of so-called ‘guest workers’ from Turkey from the middle of the 1960s on. Nowadays, the Turks are one of the major immigrant groups in both countries. At the end of 2003, about 1 880 000 persons with Turkish nationality lived in Germany. This is about 2.3% of the German population and 2.8% of the population of the West German states. At January 1, 2004, about 350 000 first and second generation Turks lived in the Netherlands. This is about 2.2% of the Dutch population. As the German figure does not include Turks which switched to German nationality, Germany clearly hosts relatively more Turkish immigrants than the Netherlands.

The statistical offices of both countries use different definitions of immigrants, and a direct comparison of national statistics is therefore problematic. While the German definition is based on nationality, the Dutch definition of ‘allochthonous’ people is based on country of birth of an individual and the individual’s parents. The Dutch ‘allochthonous’ people are first and second generation immigrants, and in the international literature this is a common definition. In the empirical part of this study we will therefore use the latter definition. The current chapter will discuss the history of Turkish immigrants on the basis of the official statistics of both countries. As in Germany the number of naturalisations was limited until the middle of the 1990s, the official data is reasonably comparable between the countries until that time.

#### **3.1 Immigration and remigration policy**

Both Germany and the Netherlands went through a long period of economic growth during the 1960s, and in both countries the number of Turkish immigrants started to grow strongly from the end of the 1960s onwards (figure 3.1). The first oil crisis was the end of the official recruitment of Turkish guest workers, and the number of entrants decreased. For Germany the slowdown in the growth in the number of immigrants was however temporary, and the number of new entrants again peaked in the 1980s. The second oil crisis resulted into an economic crisis in both countries, and long-term unemployment became a serious problem. From that moment on migration from Turkey almost exclusively existed of family and asylum migration. Immigration and remigration policy started to develop differently between the countries. While until that time Turkish guest workers were viewed to be temporary immigrants, the Dutch government started to change its view on the temporary aspect during the 1980s. It took until the end of the 1990s before the German government changed its view as well. Below we discuss three major differences in immigration policy during the 1980s and 1990s.

**Figure 3.1 Turkish immigrants as a fraction of the population, 1967–2004<sup>a</sup>**



<sup>a</sup> The German definition of a Turkish immigrant is based on nationality, while the Dutch definition is based on the country of birth of an individual and the individual's parents.

Source: Eurostat, Statistics Germany, Statistics Netherlands.

A first difference between the countries concerns the requirements for a permanent residency permit. In Germany, immigrants could apply for such a permit after eight years of stay and were required to prove to be economically self-reliant. In the Netherlands, the term was five years and requirements with respect to economic self-reliance were in practice more lenient.

A second major difference was in family reunification and family formation policy. While the German policy was rather restrictive as employment and income conditions were imposed, the Dutch policy was more liberal. So although the recruitment of guest workers had stopped completely in 1980s, the number of Turkish immigrants living in the Netherlands continued growing (figure 3.1). In the first years this was mainly due to family reunification, but later on family formation became important as well as the children of the guest workers often married persons from their parents' country of birth. In Germany immigration continued as well, but asylum immigration played a much more important role leading to more skilled immigration. Recently, both Germany and the Netherlands reviewed their policy such that they became more similar: while Germany became less restrictive with respect to family reunification and family formation, the Netherlands became more restrictive. The impact of the most recent policy changes is however hardly visible in figure 3.1 as the policy changes were installed by the beginning of the new century.

A third major difference between the countries was in remigration policy. While Germany followed an active remigration policy in 1983 and 1984, the Netherlands never installed such a policy. The result of the policy is visible in figure 3.1: in those years the number of Turkish immigrants living in Germany decreased, and in 1984 more than 200 000 Turks left Germany.

A last fact that is clearly visible from figure 3.1 is a decrease in the number of individuals with Turkish nationality living in Germany since the end of the 1990s. This is clearly not related to remigration: they still live in Germany but changed to German nationality which became easier due to a change in naturalisation policy.

### **3.2 Naturalisation policy**

The difference in the official view on the temporary residency of the guest workers led to a difference in naturalisation policy between the two countries.<sup>6</sup> German nationality was and still is difficult to acquire for persons without German ancestors. Germany considered guest workers to be temporary labour migrants so that naturalisation policy was not an issue. Not earlier than from July 1, 1993, onwards new legislation allowed first (second) generation immigrants to acquire German nationality after a residency period of 15 (8) years. From 2000 on the residency period became 8 years for first generation immigrants while second generation immigrants could opt for German nationality at reaching maturity. The number of naturalisation increased strongly, reached a maximum of about 100 000 in 1999 and the number became 50 000 in the years afterwards.

Dutch nationality is relatively easy to acquire for immigrants as the necessary residency period is rather short (3 to 5 years). Second generation immigrants with both parents non-Dutch can opt for citizenship when they become mature and have lived their whole life in the country. Moreover, between 1992 and 1997 immigrants could even have a double citizenship by keeping their original nationality. This led to a peak in the number of naturalisation in 1996 and 1997. But even afterwards the number of naturalisations remained high. And although after 1997 immigrants were allowed to have one nationality only, many Turkish immigrants were exempted from this regulation. From 2003 onwards Dutch naturalisation policy started to become somewhat more strict as an applicant needs to pass a test.

### **3.3 Integration policy**

Like for naturalisation policy, integration policy was not an issue in Germany for a long time as permanent immigrants were supposed to assimilate, while the Netherlands implemented

<sup>6</sup> For a detailed description of the German naturalization policy, see for example Diehl and Blom (2003), while for the Netherlands, see for example Bevelander and Veenman (2006).

integration policies from the 1980s onwards. Integration policies were minimal in Germany for many years. Not earlier than during the 1990s, job training and linguistic skill schemes were installed to help second generation immigrants to find employment. The OECD (1998) reports that in recent years some 1 800 young foreigners benefited from the training schemes, whereby one should keep mind that the population of foreigners was about several millions. German authorities viewed more general policy measures as more important, and for example general schooling was seen as the major way to integrate. The drop out rates of foreign children dropped substantially during the 1980s and 1990s, but nevertheless the difference with native children remains large (OECD, 2006).

In the Netherlands, integration policies began to soar during the 1980s. Until recently policies did not focus on integration, and immigrants were encouraged to preserve their own cultural identity. For instance, schools hosting children from ethnic minorities received additional funds, the children received lessons in their own language and culture during school hours, organisations of ethnic minorities received subsidies, and low skilled members of ethnic groups were an explicit target group in job creation plans. Cultural diversity was highly valued, and while immigrants should integrate their own cultural identity should be preserved at the same time. The Netherlands shared this view on integration policy with countries like the U.K. and Sweden, and it clearly contrasts with the view of the German or, for example, the French policy (see section 2.1 as well).

In recent years, the German and Dutch policy started to become more similar. In 1998, the so-called 'inburgering' programme was introduced in the Netherlands. This programme, which includes a Dutch language course, an introduction to Dutch institutions and values, and labour market orientation, is considered to be the first step towards integration. In 2007, participation is scheduled to be compulsory for new immigrants and for certain groups of old immigrants. The successful completion of the programme will then be required for those who want to obtain a permanent residence permit. For those who want to acquire Dutch nationality, a test that implies comparable requirements was introduced earlier. So while the old Dutch approach could be characterized as 'support-oriented', the new approach may be characterized as 'incentive-oriented'. The new approach draws international attention, and currently Germany is considering to introduce similar programmes.

Our study deals with data on immigrant populations up till the year 2002. This means that the vast majority of immigrants involved will not have been affected by the recent changes in integration policies. So, for our study only the old regimes are relevant. And the old regimes differed substantially as Germany expected immigrants to assimilate that was supposed to be their own responsibility, while the Netherlands installed integration policies which supported cultural diversity.

## 4 Data

The availability of survey data with information on the country of birth of the respondents and the respondents' parents is of crucial importance as we want to use the same definition of immigrants in both countries. While such data are rare in the world, both Germany and the Netherlands have such micro data for Turkish immigrants: for Germany the German Socio-Economic Panel (GSOEP) and for the Netherlands the Social Position and Use of Provisions (SPVA) survey. As the Dutch data source does not contain information on natives, which we use as a reference group, we additionally use the Dutch Labour Force Survey (DLFS).

For the selection of immigrants we use the following definitions: first generation immigrants are born outside the host country, while second generation immigrants are born in host country and have at least one parents which is born outside the host country.<sup>7</sup> In the remainder, we will use these definitions in the data sources as much as possible. Appendix A contains a description of the three data sources, and a description of the selection procedure of the natives and Turkish immigrants from these data sources.

### 4.1 Descriptive statistics

The comparison of the Turkish immigrants against natives yields many unsurprising results: the Turkish immigrants are on average younger, they have more often children, and they have a lower level of education. Such differences will be important to explain differences in the labour market position of Turkish immigrants against natives in the next section. In this section, however, we concentrate on the comparison between the two countries as these results are less well known.

The relatively low level of education of Turkish immigrants in the Netherlands, also compared to Germany, may be a reason for a less favourable labour market position of Turkish immigrants in the Netherlands. The argument is regularly used in the public debate, in particular as Germany may have attracted immigrants from more the developed areas of Turkey. The argument becomes however less obvious if one takes into account the level of education of natives: on average the Germans have a higher level of education than the Dutch. A likely explanation for this difference is the German apprenticeship system, which allows many Germans youngsters to acquire an upper secondary education. So although level of education is relatively low for Turkish immigrants in the Netherlands, this holds for Dutch natives compared to German natives as well.

<sup>7</sup> Formally, the Dutch definition of first generation 'allochtonous' includes people born outside the Netherlands which have at least one parent born outside the Netherlands. This prevents children of diplomats from being categorized as 'allochtonous'.

**Table 4.1 Descriptive statistics, Turkish immigrants and natives in Germany and the Netherlands, 2002<sup>a,b</sup>**

	Germany		Netherlands	
	Turks	Natives <sup>c</sup>	Turks	Natives
<b>Men</b>				
#observations	361	4290	1089	32557
<b>Age</b>				
17-24	0.19	0.11	0.21	0.14
25-34	0.33	0.18	0.33	0.22
35-49	0.27	0.39	0.32	0.36
50-64	0.20	0.32	0.14	0.29
<b>Children</b>				
Dummy (age 0-16) <sup>d</sup>	0.47	0.26	0.52	0.35
<b>Education<sup>e</sup></b>				
Primary	0.24	0.04	0.41	0.08
Lower secondary	0.26	0.09	0.28	0.21
Upper secondary	0.38	0.54	0.23	0.43
Tertiary	0.12	0.34	0.08	0.27
<b>Immigration</b>				
First generation <sup>f</sup>	0.83		0.82	
Nationality of host country <sup>g</sup>	0.19		0.57	
Language proficiency ('good') <sup>h</sup>	0.60		0.42	
	Germany		Netherlands	
<b>Women</b>	Turks	Natives <sup>c</sup>	Turks	Natives
#observations	343	4548	1091	32738
<b>Age</b>				
17-24	0.20	0.11	0.25	0.14
25-34	0.31	0.20	0.34	0.21
35-49	0.26	0.37	0.28	0.36
50-64	0.23	0.33	0.13	0.29
<b>Children</b>				
Dummy (age 0-16)	0.50	0.30	0.57	0.38
<b>Education</b>				
Primary	0.44	0.03	0.57	0.09
Lower secondary	0.28	0.15	0.21	0.25
Upper secondary	0.22	0.64	0.19	0.42
Tertiary	0.06	0.18	0.03	0.23
<b>Immigration</b>				
First generation	0.81		0.82	
Nationality of host country	0.16		0.50	
Language proficiency ('good')	0.44		0.36	

<sup>a</sup> weighted sample averages, using national information on gender and age to construct weights for Turkish immigrants and natives.

<sup>b</sup> in both countries the definition of a Turkish immigrant is based on the country of birth of the individual and the individual's parents.

<sup>c</sup> German natives living in West-Germany.

<sup>d</sup> dummy for children which equals 1 if the respondent has a child of age 0 to 16, and which equals 0 otherwise.

<sup>e</sup> the classification of education is based on the international ISCED 1997 codes.

<sup>f</sup> first generation is a dummy which equals 1 if the respondent is born outside the host country.

<sup>g</sup> nationality is a dummy which equals 1 if the respondent has the nationality of the host country, and which equals 0 otherwise

<sup>h</sup> language is a dummy which equals 1 if according to the respondent's own opinion his host country's language proficiency is good, and which equals 0 otherwise.

Source: GSOEP (Turks and natives in Germany), SPVA (Turks in the Netherlands), DLFS (natives in the Netherlands).

The figures on nationality and language proficiency are in line with expectations on the basis of immigration and naturalisation policies (section 3.2).<sup>8</sup> In 2002, slightly less than 20% of Turkish immigrants in Germany has German nationality while in the Netherlands this figure is slightly more than 50%. Language proficiency is measured on a subjective basis, but research on the basis of the GSOEP shows that such a variable makes sense in explaining immigrant wages (Dustmann and van Soest, 2001, 2002). Language proficiency is relatively unfavourable in the Netherlands. This is in line with the less restrictive Dutch immigration policy, allowing for more (low-skilled) family reunification and family formation immigration than Germany.

<sup>8</sup> This study will use language proficiency (section 5), but not nationality. The accompanying study Euwals *et al.* (2007) investigates the relation between labour market position and variables like language proficiency and naturalization.



## 5 Empirical strategy and results

This section investigates the differences in the labour market position of Turkish immigrants in Germany and the Netherlands. To describe the labour market performance of immigrants, we focus on three measures: the employment rate (section 5.2), the tenured job rate (section 5.3), and the job prestige score (section 5.4). First, section 5.1 discusses a method to decompose differences in the labour market position into a part attributable to the observed individual characteristics and a remaining part.

### 5.1 The Blinder-Oaxaca decomposition for non-linear models

The Blinder-Oaxaca method (Blinder, 1973, Oaxaca, 1973) decomposes differences in an outcome variable for two different groups in a part that can be explained by differences in characteristics and a remaining part. The method is typically used to explain differences in wages between men and women, using the standard linear regression model. We use the method to explain differences in outcome variables between immigrants and natives. As some of the outcome variables are binary, however, we cannot use the standard decomposition method. In the remainder, we discuss the decomposition method for non-linear models developed by Yun (2003).

Define an outcome variable  $y_i^X$  for individual  $i$  ( $i=1, \dots, N^X$ ) of group  $X$  with  $X = I$  for immigrants and  $X = N$  for natives. Suppose the expectation of the outcome variable is a function of a linear combination of a vector of exogenous variables  $x_i^X$  through the function  $F$  which may or may not be linear:

$$E\left(y_i^X \mid x_i^X\right) = F(x_i^X \beta^X), \quad i = 1, \dots, N^X, X = I, N \quad (5.1)$$

with  $E$  the expectation operator,  $F$  a mapping of a linear combination  $x_i^X \beta^X$  into a scalar, and  $\beta^X$  a conformable vector of parameters with  $K$  elements. The difference in  $y_i^X$  at the first moment, i.e. the mean difference between immigrants and natives, can be decomposed as:

$$\overline{y^I} - \overline{y^N} \approx \left[ \overline{F(x^I \beta^I)} - \overline{F(x^I \beta^N)} \right] + \left[ \overline{F(x^I \beta^N)} - \overline{F(x^N \beta^N)} \right] \quad (5.2)$$

with  $\overline{y^X} = \sum_i y_i^X$  and  $\overline{F(x^X \beta^X)} = \sum_i F(x_i^X \beta^X)$  for  $X=I, N$ .

Note that the decomposition is not unique, and that alternative parameterisations are possible. We choose for this particular parameterisation as the natives are by far the largest group and therefore it seems logical to evaluate the importance of the exogenous variables in the second

part of the equation against the parameters  $\beta^N$ . Note that the second part of the right-hand-side represents the part of the gap that is explained by differences in the exogenous variables. The first part of the right-hand-side may be referred to as the standardized difference. It reflects the gap in the outcome variable  $y_i^X$  that is corrected for the observed exogenous variables  $x_i^X$ . In other words, this remaining difference is not attributable to the observed exogenous variables, and it can only be explained by factors and circumstances that are outside the model.

The decomposition of equation (5.2) is straightforward, but does not reveal which part of the gap in the outcome variable is explained by the different exogenous variables. In particular, for our study it will be interesting to know which part of the gap is explained by differences in age and differences in educational attainment. Yun (2003) proposes the following systematic and general method:

$$\overline{y^I} - \overline{y^N} \approx \sum_k W_{\Delta\beta}^k \left[ \overline{F(x^I \beta^I)} - \overline{F(x^I \beta^N)} \right] + \sum_k W_{\Delta X}^k \left[ \overline{F(x^I \beta^N)} - \overline{F(x^N \beta^N)} \right] \quad (5.3)$$

$$\text{with } W_{\Delta\beta}^k = \frac{\overline{X}_k^I (\beta_k^I - \beta_k^N)}{\overline{X}^I (\beta^I - \beta^N)} \text{ and } W_{\Delta X}^k = \frac{\left( \overline{X}_k^I - \overline{X}_k^N \right) \beta_k^N}{\left( \overline{X}^I - \overline{X}^N \right) \beta^N} \text{ for } k=1, \dots, K.$$

As long as the parameter estimates are available, the weights of equation (5.3) can be easily calculated using the mean values of the exogenous variables and their parameter estimates. In case the function  $F$  is a linear function and the parameters are estimated using linear regression, the method reduces to the standard Blinder-Oaxaca method. As in the remainder we consider binary outcome variables, we assume  $F$  is the standard normal cumulative distribution function so that we get the well-known Probit model. The parameters of the model are estimated by Maximum Likelihood, and equation (5.3) is applied to calculate the decomposition.

## 5.2 Employment rate

An obviously important measure for the position of immigrants on the labour market is the employment rate. On the one hand, a labour income guarantees that an immigrant contributes to the welfare state of a country in the form of paying taxes and social security contributions. On the other hand, it also guarantees that the take up of public expenditures is relatively low as there is no claim on welfare or social security benefits for unemployment and disability.<sup>9</sup> In the remainder, we define the employment rate as the fraction of persons that works 12 hours or more per week. In both countries, marginal employment plays a considerable role. In Germany,

<sup>9</sup> Unemployment is another obvious measure for the labour market position. We believe that a direct comparison of the unemployment rates between the two countries is not useful as compared to (West) Germany, the Netherlands is likely to have more hidden unemployment due to the disability scheme.

labour income below a certain level is untaxed so that many students, housewives and retirees work a few hours per week. And in the Netherlands, the official employment statistics use a threshold of 12 hours per week to exclude marginal employment.

**Table 5.1 Employment rates, Turkish immigrants and natives in Germany and the Netherlands, 2002<sup>a</sup>**

	Germany		Netherlands		Germany	Netherlands	Dif in Dif
	Turks	Natives <sup>b</sup>	Turks	Natives	Dif	Dif	
<b>Men</b>							
Total	0.65	0.78	0.58	0.82	** - 0.14	** - 0.23	**0.10
<b>Age</b>							
17-24	0.43	0.57	0.44	0.58	* - 0.14	** - 0.14	0.00
25-34	0.82	0.86	0.74	0.94	- 0.04	** - 0.20	**0.16
35-49	0.81	0.92	0.68	0.94	** - 0.11	** - 0.26	**0.15
50-64	0.34	0.64	0.21	0.69	** - 0.30	** - 0.47	**0.17
<b>Children</b>							
No	0.51	0.73	0.47	0.77	** - 0.23	** - 0.30	0.07
Yes	0.81	0.93	0.69	0.91	** - 0.12	** - 0.22	**0.10
<b>Education</b>							
Primary	0.43	0.30	0.44	0.67	*0.14	** - 0.22	**0.36
Lower secondary	0.73	0.70	0.65	0.76	0.03	** - 0.12	**0.15
Upper secondary	0.70	0.76	0.71	0.83	- 0.06	** - 0.12	0.06
Tertiary	0.71	0.89	0.75	0.88	** - 0.18	** - 0.13	- 0.04
<b>Women</b>							
Total	0.27	0.58	0.26	0.58	** - 0.31	** - 0.32	0.01
<b>Age</b>							
17-24	0.28	0.51	0.33	0.55	** - 0.22	** - 0.21	- 0.01
25-34	0.25	0.65	0.30	0.77	** - 0.41	** - 0.47	0.07
35-49	0.35	0.68	0.25	0.67	** - 0.33	** - 0.42	0.09
50-64	0.18	0.44	0.07	0.35	** - 0.25	** - 0.28	0.03
<b>Children</b>							
No	0.34	0.61	0.26	0.57	** - 0.26	** - 0.30	0.04
Yes	0.19	0.51	0.26	0.60	** - 0.31	** - 0.34	0.03
<b>Education</b>							
Primary	0.20	0.16	0.17	0.31	0.04	** - 0.14	**0.18
Lower secondary	0.28	0.44	0.32	0.41	** - 0.16	** - 0.09	- 0.07
Upper secondary	0.35	0.58	0.42	0.64	** - 0.23	** - 0.22	- 0.01
Tertiary	0.39	0.74	0.57	0.79	** - 0.35	** - 0.21	- 0.14

<sup>a</sup> Weighted sample averages. The employment rate is defined as the fraction of persons that works 12 hours or more per week as in the total population (so including the non-participants). See table 4.1 for the definitions of the variables. Differences marked with \* and \*\* are significant at a 5% and 1% significance level.

<sup>b</sup> German natives living in West-Germany.

Source: GSOEP (Turks and natives in Germany), SPVA (Turks in the Netherlands), DLFS (natives in the Netherlands).

In both countries Turkish immigrants are less often employed than natives (Table 5.1). For men, the Dutch employment gap is larger than the German gap with 23%-points versus 14%-points. The difference between the gaps is highly statistically significant, as the last column of the table

shows. Turkish men in Germany nevertheless have a employment rate of about 65%, but it is still clearly below the rate for German men. Turkish women are much less often employed than native women as the gap in the employment rate is about 31%-points in both countries. The difference in the gap is statistically insignificant.

The gap in the employment rate for men is particularly large for elderly and for men without children. Remarkably, lowly educated Turkish men do rather well in Germany: at the primary level of education Turkish men outperform native German men with an employment rate of 43% against 30%. Although this is a relatively good outcome for the Turkish immigrants, the substantially larger number of Turks with such a low level of education (table 4.1) may hint at an underinvestment in human capital which is clearly not an advantage on the longer run. At the highest level of education, Turkish men do clearly worse than native men. For almost all groups Turkish women have clearly lower employment rates than native women. Again we find the remarkable result for lowest education level, where Turkish women do about equally well as German women with 20% against 16%.

**Table 5.2 Difference in employment rate, Turkish immigrants versus natives, 2002**

	Men		Women	
	Germany	Netherlands	Germany	Netherlands
<b>Observed difference<sup>a</sup></b>	- 0.136	- 0.232	- 0.308	- 0.319
<b>Standardized difference<sup>b</sup></b>	- 0.059	- 0.205	- 0.072	- 0.200
<b>Explained difference<sup>c</sup></b>	- 0.077	- 0.027	- 0.236	- 0.119
By age	0.007	0.019	0.008	0.043
By children	0.023	0.019	- 0.054	- 0.030
By education	- 0.107	- 0.064	- 0.190	- 0.132
<b>Difference specific groups<sup>d</sup></b>				
Age 17-24, primary, no children	0.007	- 0.073	0.105	- 0.157
Age 25-34, lower sec, children	0.016	- 0.169	- 0.166	- 0.207
Age 25-35, tertiary, children	- 0.116	- 0.129	- 0.356	- 0.258
Age 55-64, primary, no children	- 0.066	- 0.355	- 0.111	- 0.143
<b>Test on equality of parameters<sup>e</sup></b>				
$H_0 : \beta^T = \beta^N$	**0.039	**0.000	**0.031	**0.000
$H_0 : \beta^{T,GER} - \beta^{N,GER} = \beta^{T,NL} - \beta^{N,NL}$		**0.001		**0.050

<sup>a</sup> Observed difference in employment rate (fraction of persons that works 12 hours or more per week), see columns 6 and 7 of table 5.1

<sup>b</sup> Difference in employment rate remaining after correction for exogenous variables included in the model (see section 5.1). Appendix B presents the underlying estimation results.

<sup>c</sup> Difference in employment rate explained by exogenous variables included in the model. The explained difference can be subdivided in the parts explained by age, children and education. See table 4.1 for the definition of the exogenous variables.

<sup>d</sup> Difference in employment rate explained by differences in the effect of the exogenous variables. We illustrate this by four prototypes of persons, i.e. keeping the exogenous variables constant for a given type. The first prototype has age between 17 and 24, has a primary education level, and has no children.

<sup>e</sup> Wald test on equality of parameters, p-values reported.

Source: GSOEP (Turks and natives in Germany), SPVA (Turks in the Netherlands), DLFS (natives in the Netherlands).

For both men and women a substantial part of the employment gap in Germany is explained by the observed individual characteristics, while for the Netherlands this is true to a lesser extent (upper panel of table 5.2). For Germany, about half of the male gap is explained (7.7%-points of 13.6%-points) and about three-quarter of the female gap (23.6%-points of 30.8%-points). For the Netherlands only a minor part of the male gap is explained (2.7%-points of 23.2%-points) and about one-third of the female gap (11.9%-points of 31.9%-points). In both countries, educational attainment is the major individual characteristic to explain a substantial part of the gap. Nevertheless, educational attainment clearly does not explain the entire gap: the standardized difference remains large, and it remains particularly large for the Netherlands. Note that the test on the equality of the parameters of the probit model is rejected for both countries: the probability of being employed statistically differs between Turks and natives in both countries.

To illustrate the effect of the observed individual characteristics we predict the probability of employment for four types of individuals. We choose four recognizable prototypes: (i) one young, lowly educated individual without children, (ii) one middle aged, lower secondary educated individual with children, (iii) one middle aged, tertiary educated individual with children, and (iv) one older, lowly educated individual without children (remember, children between age 0 and 16). As for the four prototypes of persons the observed individual characteristics are kept constant, differences in employment probabilities are the result of differences in the effect of the observed individual characteristics, i.e. the parameters of the regression model.<sup>10</sup>

For almost all types of individuals, the gap in the employment rate between Turkish immigrants and natives is smaller for Germany than for the Netherlands (lower panel of table 5.2). Like in the table with the employment rates (table 5.1), we see that for the young and lowly educated the Turkish immigrants are even doing better than their native counterparts. The gap is particularly large in both countries for the higher educated women, and in the Netherlands for the older, lowly educated men.

Immigrants who are well integrated in the host country may be doing better on the labour market than those who are not integrated. The difference in the employment rates between Turkish immigrants and natives may therefore be largely explained by the fact that part of the immigrants are not well integrated (table 5.2 does not correct for measures of integration). As integration of immigrants has many different aspects and a correct measurement of the extent of integration would need a multi-dimensional analysis, the inclusion of a fully correct concept of integration into the analysis is beyond the scope of this paper. Instead, we take a shortcut and concentrate on an aspect which is likely to be the most important one for the labour market:

<sup>10</sup> And – of course – of the error terms of the regression model, which have expectation zero.

language proficiency. We redo the analysis of table 5.2 for those who claim that their language proficiency is host country's language is good. Although the measure is not perfect, we claim that the employment gap should become smaller (compared to table 5.2) and that a larger part of the gap is explained by the observed individual characteristics (as language proficiency is not among the unobserved individual characteristics anymore). Note furthermore that immigration and integration variables like language proficiency and years of residence could not used in the decomposition analysis as they are not defined for the natives. Of course, we believe such variables to be important for the labour market position of immigrants and we address this in an accompanying study (Euwals *et al.*, 2007).

**Table 5.3**      **Difference in employment rate, Turks with good language proficiency versus natives, 2002<sup>a</sup>**

	Men		Women	
	Germany	Netherlands	Germany	Netherlands
<b>Observed difference</b>	- 0.070	- 0.190	- 0.231	- 0.202
<b>Standardized difference<sup>b</sup></b>	- 0.025	- 0.113	- 0.090	- 0.156
<b>Explained difference<sup>b</sup></b>	- 0.045	- 0.077	- 0.141	- 0.046
By age	0.015	- 0.035	0.036	0.049
By children	0.017	- 0.001	- 0.057	- 0.017
By education	- 0.077	- 0.041	- 0.120	- 0.078
<b>Difference specific groups<sup>b</sup></b>				
Age 17-24, primary, no children	- 0.037	- 0.122	0.304	- 0.188
Age 25-34, lower sec, children	0.082	- 0.091	- 0.150	- 0.127
Age 25-35, tertiary, children	- 0.160	- 0.126	- 0.187	- 0.256
Age 55-64, primary, no children	-.	-.	-.	-.
<b>Test on equality of parameters<sup>b</sup></b>				
$H_0 : \beta^T = \beta^N$	0.243	**0.002	0.175	**0.005
$H_0 : \beta^{T,GER} - \beta^{N,GER} = \beta^{T,NL} - \beta^{N,NL}$		0.170		0.269

<sup>a</sup> Turkish immigrants that claim to have a good language proficiency in the host country's language (table 4.1).

<sup>b</sup> See footnotes b, c, d and e of table 5.2 for definitions. Appendix B presents the underlying estimation results.

Source: GSOEP (Turks and natives in Germany), SPVA (Turks in the Netherlands), DLFS (natives in the Netherlands).

The employment gap for Turkish immigrants with a good language proficiency remains large, and in particular so for the Netherlands. For German men, the observed gap almost halved from 13.6%-points (table 5.2) to 7.0%-points (table 5.3), while for all other groups the gap decreases to a lesser extent. Again a major part of the gap is explained by educational attainment. Nevertheless, the importance of educational attainment remains limited for the Netherlands, and the standardized difference remains large. The test on the equality of the parameters is rejected for the Netherlands. For Germany there is no statistically significant difference in terms of employment probabilities between integrated Turks and natives. For both countries the gap has not become smaller for the third prototype, i.e. the middle aged persons with tertiary education. So language proficiency does not explain the employment gap for the highly educated.

Another important issue on integration is the educational attainment and labour market position of second generation immigrants. They are still quite young on average, and the question is how they perform relative to native youth. Although our data allows us to distinguish between generations, we do not issue such results as the number of observations on second generation immigrants is small: about 18% of our sample is of the second generation (table 4.1). One may increase the number of observations by adding first generation immigrants which entered the host country before age 6. The argument would be that they had their full education in the host country. The number of observations would become about 28%, which would still give a rather small number of observations for the German data.<sup>11</sup>

**Table 5.4 Tenured job rates, Turkish immigrants and natives in Germany and the Netherlands, 2002<sup>a</sup>**

	Germany		Netherlands		Germany	Netherlands	Dif in Dif
	Turks	Natives <sup>b</sup>	Turks	Natives	Dif	Dif	
<b>Total</b>	0.86	0.91	0.76	0.91	** - 0.05	** - 0.15	**0.10
Men	0.87	0.92	0.80	0.93	* - 0.04	** - 0.14	**0.09
Women	0.84	0.90	0.69	0.89	- 0.06	- 0.19	**0.13
<b>Age</b>							
17-24	0.53	0.55	0.51	0.71	- 0.03	** - 0.20	*0.17
25-34	0.90	0.88	0.81	0.94	0.02	** - 0.14	**0.16
35-49	0.92	0.96	0.88	0.95	- 0.04	** - 0.07	0.03
50-64	1.00	0.98	0.91	0.94	0.02	- 0.03	0.05
<b>Children</b>							
Men, no children	0.80	0.89	0.71	0.92	** - 0.10	** - 0.21	*0.11
Men, children	0.93	0.97	0.85	0.95	* - 0.04	** - 0.10	0.05
Women, no children	0.79	0.89	0.65	0.88	* - 0.10	** - 0.24	*0.14
Women, children	0.91	0.94	0.73	0.89	- 0.03	** - 0.16	*0.13
<b>Education</b>							
Primary	0.94	0.86	0.75	0.91	0.07	** - 0.16	**0.24
Lower secondary	0.73	0.74	0.78	0.87	- 0.01	** - 0.09	0.08
Upper Secondary	0.91	0.93	0.74	0.91	- 0.02	** - 0.17	**0.15
Tertiary	0.91	0.93	0.85	0.94	- 0.02	* - 0.09	0.07

<sup>a</sup> Weighted sample averages. The tenured job rate is defined as the fraction of persons that has a tenured job among those that work more than zero hours per week. See table 4.1 for the definitions of the variables. Differences marked with \* and \*\* are significant at a 5% and 1% significance level.

<sup>b</sup> German natives living in West-Germany.

Source: GSOEP (Turks and natives in Germany), SPVA (Turks in the Netherlands), DLFS (natives in the Netherlands).

<sup>11</sup> Results are available upon request with the authors. The results are similar to the results in the paper as the group of second generation and young first generation (those who entered the host country before age 6) largely coincides with the group of those who claim that their language proficiency of the host country's language is good.

**Table 5.5 Difference in tenured job rate, Turkish immigrants versus natives, 2002<sup>a</sup>**

	All Turkish immigrants		Turks with a good language proficiency <sup>c</sup>	
	Germany	Netherlands	Germany	Netherlands
<b>Observed difference</b>	- 0.048	- 0.149	- 0.102	- 0.184
<b>Standardized difference</b>	- 0.004	- 0.121	- 0.019	- 0.118
<b>Explained difference<sup>b</sup></b>	- 0.044	- 0.028	- 0.083	- 0.066
By age	- 0.065	- 0.024	- 0.097	- 0.058
By children and gender	0.025	0.012	0.019	0.006
By education	- 0.004	- 0.015	- 0.005	- 0.014
<b>Difference specific groups<sup>b</sup></b>				
<b>Men</b>				
Age 17-24, primary, no children	- 0.104	- 0.290	- 0.372	- 0.390
Age 25-34, lower sec, children	- 0.011	- 0.085	- 0.070	- 0.043
Age 25-35, tertiary, children	- 0.031	- 0.087	- 0.029	- 0.026
Age 55-64, primary, no children	0.058	0.008	-.	-.
<b>Women</b>				
Age 17-24, primary, no children	- 0.158	- 0.223	- 0.457	- 0.322
Age 25-34, lower sec, children	0.072	- 0.079	0.200	- 0.021
Age 25-35, tertiary, children	0.031	- 0.099	0.149	- 0.011
Age 55-64, primary, no children	0.057	0.036	-.	-.
<b>Test on equality of parameters<sup>b</sup></b>				
$H_0 : \beta^T = \beta^N$	0.951	**0.000	0.792	**0.000
$H_0 : \beta^{T,GER} - \beta^{N,GER} = \beta^{T,NL} - \beta^{N,NL}$		0.341		0.756

<sup>a</sup> The tenured job rate is defined as the fraction of persons has a tenured job among those that work more than zero hours per week.

<sup>b</sup> See footnotes b and c of tables 5.2 for definitions. We allow the effect of children to vary by gender (see Appendix B).

<sup>c</sup> Turkish immigrants that claim to have a good language proficiency in the host country's language.

Source: GSOEP (Turks and natives in Germany), SPVA (Turks in the Netherlands), DLFS (natives in the Netherlands).

### 5.3 Tenured job rate

The incidence of having a tenured job is an important aspect of the labour market position. In both Germany and the Netherlands, the difference in employment protection between tenured and temporary employment is large. This difference is however slightly larger in the Netherlands (OECD, 2004). On the one hand, in the Netherlands employment protection of tenured employment is more strict due to longer notification periods and higher dismissal compensations. And on the other hand, the Dutch system offers slightly less employment protection for temporary jobs.

In both countries, the employed Turks are less likely to have a tenured job position (Table 5.4). The gap of 15%-points is substantially larger in the Netherlands, although the gap of 5%-point in Germany is statistically significant as well. The gap in the Netherlands is particularly large for the young. For both countries, the gap is large for both men and women without children.

While for Germany the gap in the tenured employment rate is largely explained by the observed individual characteristics, this is hardly the case for the Netherlands (Table 5.5). For Germany the characteristics explain the gap almost entirely (4.4%-points of 4.8%-points), while for the Netherlands the explained part gap is small (2.8%-points of 14.9%-points). In both countries, employment Turks have a lower tenured job rate because they are young on average. The standardized gap is about zero for Germany and is large for the Netherlands. The test on the equality of the parameters in the probit model confirms this result, as there is no significant difference in the probability of having a tenured job between employed Turks and natives in Germany. For the Netherlands, the test on the equality of the parameters is strongly rejected.

The gap in the tenured employment rate is larger for the integrated Turks (columns 3 and 4 of Table 5.5) than for the complete group (columns 1 and 2 of Table 5.5). The integrated Turks are however young on average, and we already observed that in particular young workers are likely to have a temporary job. The standardized gap of the Dutch integrated is hardly smaller than the gap of the complete group. This hints at the fact that (self-perceived) language proficiency does not explain the gap in the tenured employment rate between Turkish and natives workers in the Netherlands. For Germany, the standardized gap of the complete group was already almost equal to zero, so redoing the decomposition for the integrated is actually not necessary. The standardized gap for the integrated remains close to zero.

#### **5.4 Job prestige score**

The ISEI job prestige score is based on the average level of education and the average level of earnings in an occupation. The score ranks worker occupations into a scale which varies from 10 (low) to 90 (high). It is comparable to the Treiman job prestige score (Ganzeboom and Treiman, 2003). The results from the two scores are similar so that we only present the results for the ISEI job prestige score. Preferably, we would use the wage as a measure for success in an employment career, but unfortunately the wage is not available in all datasets we use.

In both countries employed Turkish have a significantly lower score on the ISEI job prestige index than natives (Table 5.6). The gap is somewhat larger in Germany, and the difference in the gap between both countries is weakly statistically significant. The young Turks do reasonably well as their job prestige score is only slightly lower than for the young natives, and in the Netherlands there is actually no statistically significant difference. Also for the workers with a lower secondary level of education there is no statistically significant difference. For the higher education levels the difference turns out to be rather large and statistically significant. At the tertiary level of education the gap of 16.5 points in Germany is larger than the gap of 10.2 points in the Netherlands. The question is whether correction for the observed individual characteristics will make the gap disappear.

For both countries a substantial part of the gap in the job prestige score is explained by the observed individual characteristics (Table 5.7). But contrary to the results on the employment and tenured job rate, the standardized gap is now smaller in the Netherlands. For Germany, the characteristics explain about half of the gap (6.5 points of 13 points), while for the Netherlands about one-third is explained (7.4 points of 11.2 points). In both countries, educational attainment is the major individual characteristic to explain part of the gap. But again like for the gap in the employment and tenured job rate, educational attainment clearly cannot explain the entire gap: the standardized gap remains large in both countries, and in particular in Germany. Note that the test on the equality of the parameters of the linear regression model strongly rejects the null hypothesis of equality for both countries. The score on the job prestige index is therefore statistically different between Turkish immigrants and natives in both countries.

**Table 5.6 Job prestige score, Turkish immigrants and natives in Germany and the Netherlands, 2002<sup>a</sup>**

	Germany		Netherlands		Germany	Netherlands	Dif in Dif
	Turks	Natives <sup>b</sup>	Turks	Natives	Dif	Dif	
<b>Total</b>	34.0	47.0	37.8	49.0	**– 13.0	**– 11.2	*– 1.8
Men	34.5	48.3	37.0	49.1	**– 13.8	**– 12.1	– 1.7
Women	33.0	45.5	39.6	48.9	**– 12.6	**– 9.3	– 3.3
<b>Age</b>							
17-24	34.7	40.4	39.7	41.0	**– 5.6	– 1.2	**– 4.4
25-34	36.4	48.0	38.1	50.7	**– 11.6	**– 12.6	1.0
35-49	32.4	47.5	36.6	50.6	**– 15.0	**– 13.9	– 1.1
50-64	30.3	47.7	34.6	49.5	**– 17.4	**– 14.9	– 2.5
<b>Children</b>							
Men, no children	35.9	47.8	39.1	48.6	**– 11.9	**– 9.5	– 2.4
Men, children	33.5	49.4	35.7	49.9	**– 15.9	**– 14.3	– 1.6
Women, no children	34.4	46.0	42.9	48.7	**– 11.6	**– 5.8	**– 5.9
Women, children	31.1	44.3	37.0	49.2	**– 13.2	**– 12.2	– 1.1
<b>Education</b>							
Primary	28.5	34.0	32.5	36.3	**– 5.5	**– 3.8	– 1.7
Lower secondary	33.3	34.6	37.5	38.9	– 1.3	– 1.4	0.2
Upper Secondary	34.7	42.7	40.1	46.4	**– 8.0	**– 6.3	– 1.7
Tertiary	43.3	59.8	53.2	63.3	**– 16.5	**– 10.2	*– 6.3

<sup>a</sup> Weighted sample averages. Job prestige score (ISEI) for those that work more than zero hours per week. The ISEI job prestige score classifies jobs on a scale from 10 (low) to 90 (high) on the basis of the average education level and income of those working in a job (Ganzeboom and Treiman, 2003). See table 4.1 for the definitions of the variables. Differences marked with \* and \*\* are significant at a 5% and 1% significance level.

<sup>b</sup> German natives living in West-Germany.

Source: GSOEP (Turks and natives in Germany), SPVA (Turks in the Netherlands), DLFS (natives in the Netherlands)

As the gap in the job prestige score cannot be fully explained by the observed individual characteristics, the question: for which types of individuals differs the expected score between Turkish immigrants and natives? The differences for the specific groups show that the gap is relatively small for most groups. But for the group of highly educated the gap is large. This may be related to integration and language proficiency: for many jobs of the lowly educated

language proficiency may be of limited importance, but for the jobs of the highly educated integration and language proficiency may matter a lot. The results confirm this argument: the gap in becomes smaller for those with a (self-perceived) good language proficiency, while the standardized gap even becomes almost zero in the Netherlands. Nevertheless, the test on the equality of the parameters shows that the effect of the individual characteristics remains statistically different between the Turkish immigrants and natives. This is mainly caused by a different return to education, as for Turkish immigrants this return is clearly lower.

**Table 5.7** Difference in job prestige score, Turkish immigrants versus natives, 2002<sup>a</sup>

	All Turkish immigrants		Turks with a good language proficiency <sup>c</sup>	
	Germany	Netherlands	Germany	Netherlands
<b>Observed difference</b>	- 13.0	- 11.2	- 10.8	- 6.2
<b>Standardized difference</b>	- 6.5	- 3.8	- 4.3	0.8
<b>Explained difference<sup>b</sup></b>				
By age	0.2	- 0.7	0.2	- 1.5
By children and gender	- 0.2	0.1	- 0.2	0.0
By education	- 6.4	- 6.9	- 6.5	- 5.6
<b>Difference specific groups<sup>b</sup></b>				
<b>Men</b>				
Age 17-24, primary, no children	- 2.7	2.1	1.6	3.7
Age 25-34, lower sec, children	- 1.4	- 4.3	2.2	- 2.4
Age 25-35, tertiary, children	- 14.8	- 12.2	- 10.0	- 5.8
Age 55-64, primary, no children	- 4.7	- 3.5	-.	-.
<b>Women</b>				
Age 17-24, primary, no children	- 3.1	6.0	2.0	7.6
Age 25-34, lower sec, children	- 1.6	- 1.4	5.4	3.3
Age 25-35, tertiary, children	- 15.1	- 9.3	- 6.7	- 0.1
Age 55-64, primary, no children	- 5.2	0.4	-.	-.
<b>Test on equality of parameters<sup>b</sup></b>				
$H_0 : \beta^T = \beta^N$	**0.000	**0.000	**0.000	**0.000
$H_0 : \beta^{T,GER} - \beta^{N,GER} = \beta^{T,NL} - \beta^{N,NL}$		**0.030		**0.001

<sup>a</sup> Job prestige score (ISEI) for those that work more than zero hours per week. The ISEI job prestige score classifies jobs on a scale from 10 (low) to 90 (high) on the basis of the average education level and income of those working in a job (Ganzeboom and Treiman, 2003).

<sup>b</sup> See footnotes b and c of tables 5.2 for definitions. We allow the effect of children to vary by gender (see Appendix B).

<sup>c</sup> Turkish immigrants that claim to have a good language proficiency in the host country's language.

Source: GSOEP (Turks and natives in Germany), SPVA (Turks in the Netherlands), DLFS (natives in the Netherlands).



## 6 Discussion and conclusions

This study compares the labour market position of Turkish immigrants, including both first and second generation, in Germany and the Netherlands. By comparing immigrants from the same country of origin, so with a similar social and cultural background, in two different host countries we learn about the importance of immigration and integration policies for the labour market position of immigrants. The comparison of Turkish immigrants is interesting as they are the largest immigrant group in both countries. Moreover, both countries have high quality micro data for this group: for Germany the German Socio-Economic Panel and for the Netherlands the Dutch Social Position and Use of Provision Survey. And although the countries have labour market institutions that are similar in many aspects, the immigration and integration policies are different.

In this study, we compare employment rates, tenured job rates and ISEI job prestige scores, which is a measure for the relative job position on a scale from 10(low) to 90(high), between Turkish immigrants and natives. We use the Blinder-Oaxaca decomposition method to disentangle the difference in labour market position in two parts: one part explained by differences in the observed individual characteristics, and one remaining part. We find that the labour market position of Turkish immigrants is unfavourable relative to natives. But in the comparison between the two countries we find contrasting results: while the Turkish immigrants in the Netherlands perform relatively unfavourable in terms of employment rates and tenured job rates, the Turkish immigrants in Germany perform relatively unfavourable in terms of the job prestige score.

What conclusions can we draw as to the factors explaining the results obtained? First of all, educational attainment and educational policy are important. Educational attainment explains an important part of the observed gap between Turkish immigrants and natives for both the employment rate and the job prestige score. So an improvement in the educational attainment will have a positive impact on the labour market performance of immigrants. Nevertheless, since even after improvement of the educational attainment the gap in the labour market position would remain large – i.e. the standardized gap would remain large – it is clear that education cannot be the whole story. Secondly, part of the low employment rates of Turkish men in the Netherlands is likely to be explained by the combination of the economic crisis of the 1980s and the deactivating social security arrangements that existed at that time. The first generation labour immigrants of the 1960s and early 1970s had an employment rate of almost 100%. After the second oil crisis, the Netherlands were hit by an economic crisis that was more severe than in Germany. The Netherlands experienced massive redundancies and the unemployment rate grew rapidly from 6% in 1979 to 12% in 1982. Around that period the inflow in the disability scheme, which served as an alternative to the less generous

unemployment scheme, was high and in particular many low skilled workers entered the scheme. This way, many of the Turkish guest workers were outside of the labour market for the rest of their lives. Thirdly, immigration and remigration policies are likely to have been important as well. Germany was much more strict in family reunification and family formation immigration policy, and Germany even implemented a remigration policy in the beginning of the 1980s. The gap in the employment rate is smaller for Germany, and even becomes small after correction for the observed individual characteristics. This is consistent with a more successful selection (composition) of immigrants in Germany compared to the Netherlands, which may indeed be the result of differences in immigration and remigration policies. Eventually, the lack of information and networks within firms is likely to be important at the upper end of the labour market. And discrimination may play a role as well. Our results show that in particular employed Turks with an upper secondary or tertiary education are outperformed by their employed native counterparts in terms of the standardized job prestige score. This even holds for employed Turks which claim to have a good language proficiency in the host's country language. Of course the measure for language proficiency is not perfect, but nevertheless the predicted gap for higher educated remains large so that other factors are likely to be important. For the lowly educated the standardized gap is small, and some groups of the low-skilled employed Turks even outperform their employed native counterparts. The results therefore provide some evidence for a glass ceiling for immigrants, whereby it remains unclear whether this is due to the lack of a good network within firms or due to discrimination.

Although international comparisons are notoriously difficult, the variation in immigration and integration policies between countries seems the only source of identification for the effect of such policies. That is to say, (natural) experiments seem difficult to implement and to exploit in immigration economics. As the international dimension is therefore important, harmonization of the definition of immigrants between countries would be very valuable. For the moment, international comparisons will have to rely on survey data as currently there is no tendency to harmonize the national statistics. Researchers on the effects of immigration and integration policies therefore will need persistence: the construction of good survey data, which may need to be longitudinal as integration processes are slow, is tedious and time consuming. This is a tremendous task, but it may be necessary to answer the many important questions.

## Appendix A: Three data sources

### **The German Socio-Economic Panel**

The GSOEP is an ongoing panel survey with a yearly re-interview design, starting from the first year 1984 onwards. An important characteristic is the oversampling of foreigners: in 1984 the panel survey contained a sample of individuals in private households headed by someone with Turkish, Greek, Yugoslavian, Spanish or Italian citizenship, while in 1994/1995 an additional sample was added with individuals in private households in the former West Germany containing an individual who immigrated in the years from 1984 through 1994/1995 (excluding former East-Germans). Furthermore, the other parts of the panel survey contain some Turkish immigrants as well, although their number is small due to the small inclusion probability. As the yearly interview new household members are interviewed as well, the panel survey is refreshed automatically due to offspring and marriages. Furthermore, children leaving their parental home stay in the panel survey as well. The panel survey addresses themes like standard demographics, labour market and income position, education and subjective measures of life satisfaction and cultural attitudes. Furthermore, the sample of foreigners additionally addresses typical immigration themes like year and reason of immigration and language proficiency. The interviews were conducted in German or in the respondent's native language.<sup>12</sup>

Turks are the major immigrant group in Germany, and accordingly they are the largest foreigner group in the GSOEP. In the panel survey, they are identified on the basis of country of birth, the parents' country of birth and nationality. We use the information on nationality as well, as the information on the parents' country of birth is not always complete. We use weighting to correct for the potentially lower number of second generation immigrants (due to the partly incomplete information). All members of the household older than 16 years are interviewed. Our sample of Turkish immigrants contains observations on about 700 respondents.

As we want to compare the labour market position of Turkish immigrants and natives we additionally need survey information on natives. We select German natives living in West-Germany as Turkish immigrants moved to this part of the country and still live there. We subtract a sample of natives from the panel survey, and it contains observations on about 9 000 respondents.

### **The Dutch Social Position and Use of Provisions Survey**

The SPVA survey is the most important source of information on the position of ethnic minorities in the Netherlands. The survey is conducted every four years, starting from 1988 on

<sup>12</sup> See Haisken-DeNew and Frick (2005) for more information on the GSOEP.

and the last one being in 2002. The surveys provide information on the position of ethnic minorities on many socio-economic as well as social-cultural domains of integration. Among the themes addressed are the labour market and income position, education, language proficiency and cultural attitudes. On some of these topics, like language proficiency, the SPVA is the only source of information available in the Netherlands.

The SPVA contains information on the four largest minority groups in the Netherlands: Turks, Moroccans, Surinamese and Antilleans. The designated respondent is the head of the household (mostly male), who is interviewed through an extensive questionnaire. A selection of questions, including the ones we use, is also posed to the respondents spouse and offspring of 12 years and older. The interviews were conducted by interviewers from the own ethnic group if necessary, among Turks by bilingual interviewers. For each ethnic group the sample size is about 1 000 households. We only include Turkish immigrants, and we are left with observations on about 2 200 respondents.

#### **The Dutch Labour Force Survey**

As we need survey information on Dutch natives to create a comparison group for the Turkish immigrants, we additionally use the DLFS. The survey is a stratified sample from the population of Dutch inhabitants, excluding those living in institutions. It contains detailed demographic and employment information, and information on the country of birth of the respondents and the respondents' parents. Employees provide information on their jobs (but not on salary) while non-employed provide information on their job search activities. For this study, we subtract a sample of natives which contains observations of about 65 000 respondents.

## Appendix B: Estimation results

This appendix reports the estimation results underlying the decomposition analysis of table 5.2 (employment rate of all Turkish immigrants), table 5.3 (employment rate of Turkish immigrants with good language proficiency), table 5.5 (tenured job rate) and table 5.7 (job prestige score).

**Tabel B.1 Estimation results for employment rates, Turkish immigrants and natives, 2002<sup>a</sup>**

	Men		Netherlands	
	Germany Turks	Natives <sup>b</sup>	Turks	Natives
<b>Constant</b>	**− 0.72	**− 0.74	**− 0.49	**− 0.29
<b>Age</b>				
25-34	**0.89	**0.49	**0.63	**1.29
35-49	**0.87	**0.71	**0.53	**1.25
50-64	− 0.09	**− 0.28	**− 0.47	**0.33
<b>Children</b>				
Dummy (age 0-16)	*0.43	**0.39	*0.24	**0.33
<b>Education</b>				
Lower secondary	**0.75	**1.12	**0.40	**0.33
Upper secondary	*0.53	**1.17	**0.51	**0.49
Tertiary	0.44	**1.70	**0.63	**0.60
	Women		Netherlands	
	Germany Turks	Natives <sup>b</sup>	Turks	Natives
<b>Constant</b>	*− 0.59	**− 0.95	**− 0.80	**− 0.34
<b>Age</b>				
25-34	0.37	**0.36	0.04	**0.62
35-49	0.67	**0.59	0.00	**0.46
50-64	*− 0.31	**− 0.50	**− 0.76	**− 0.52
<b>Children</b>				
Dummy (age 0-16)	**− 0.87	**− 0.85	− 0.08	**− 0.44
<b>Education</b>				
Lower secondary	0.12	**1.01	**0.39	**0.23
Upper secondary	0.33	**1.32	**0.63	**0.69
Tertiary	0.44	**1.73	**1.01	**1.08

<sup>a</sup> Weighted probit regressions, estimation results underlying table 5.2. The employment rate is defined as the fraction of persons that works 12 hours or more per week as in the total population (so including the non-participants). See table 4.1 for the definitions of the variables. Reference group: age 17-24, no children, primary education. Estimation results marked with \* and \*\* are significant at a 5% and 1% significance level.

<sup>b</sup> German natives living in West-Germany.

Source: GSOEP (Turks and natives in Germany), SPVA (Turks in the Netherlands), DLFS (natives in the Netherlands).

**Table B.2 Estimation results for employment rates, Turks with good language proficiency and natives, 2002<sup>a</sup>**

	Men		Netherlands	
	Germany Turks	Natives <sup>b</sup>	Turks	Natives
<b>Constant</b>	**− 0.87	**− 0.74	**− 0.63	**− 0.29
<b>Age</b>				
25-34	**1.24	**0.49	**0.97	**1.29
35-49	**1.15	**0.71	**0.99	**1.25
50-64	0.24	**− 0.28	− 0.18	**0.33
<b>Children</b>				
Dummy (age 0-16)	0.40	**0.39	0.21	**0.33
<b>Education</b>				
Lower secondary	**1.23	**1.12	**0.54	**0.33
Upper secondary	0.60	**1.17	**0.63	**0.49
Tertiary	0.10	**1.70	0.47	**0.60
	Women		Netherlands	
	Germany Turks	Natives <sup>b</sup>	Turks	Natives
<b>Constant</b>	− 0.06	**− 0.95	**− 0.91	**− 0.34
<b>Age</b>				
25-34	− 0.01	**0.36	0.16	**0.62
35-49	0.27	**0.59	0.37	**0.46
50-64	− 0.30	**− 0.50	− 1.54	**− 0.52
<b>Children</b>				
Dummy (age 0-16)	*− 0.59	**− 0.85	− 0.11	**− 0.44
<b>Education</b>				
Lower secondary	− 0.25	**1.01	**0.60	**0.23
Upper secondary	− 0.08	**1.32	**0.83	**0.69
Tertiary	0.47	**1.73	**1.03	**1.08

<sup>a</sup> Weighted probit regressions, estimation results underlying table 5.3. The employment rate is defined as the fraction of persons that works 12 hours or more per week as in the total population (so including the non-participants). See table 4.1 for the definitions of the variables. Reference group: age 17-24, no children, primary education. Estimation results marked with \* and \*\* are significant at a 5% and 1% significance level.

<sup>b</sup> German natives living in West-Germany.

Source: GSOEP (Turks and natives in Germany), SPVA (Turks in the Netherlands), DLFS (natives in the Netherlands).

**Table B.3 Estimation results for tenured job rates, Turkish immigrants and natives, 2002<sup>a</sup>**

	All Turks		Netherlands	
	Germany Turks	Natives <sup>b</sup>	Turks	Natives
<b>Constant</b>	0.20	*0.47	- 0.19	**0.56
<b>Woman</b>	- 0.13	0.00	- 0.02	*- 0.21
<b>Age</b>				
25-34	**1.07	**0.96	**0.86	**1.03
35-49	**1.24	**1.53	**1.19	**1.10
50-64	*3.20	**1.83	**1.43	**1.01
<b>Children</b>				
Dummy (age 0-16)	0.09	**0.39	0.11	**0.16
Dummy (age 0-16)*woman	0.07	** - 0.37	- 0.27	** - 0.33
<b>Education</b>				
Lower secondary	- 0.31	** - 0.74	0.36	- 0.04
Upper secondary	0.25	- 0.16	0.20	**0.15
Tertiary	- 0.18	* - 0.48	0.43	**0.19
	Turks with good language proficiency			
	Germany		Netherlands	
	Turks	Natives <sup>b</sup>	Turks	Natives
<b>Constant</b>	- 0.50	**0.47	- 0.46	*0.56
<b>Woman</b>	- 0.26	0.00	- 0.02	*- 0.21
<b>Age</b>				
25-34	*0.88	**0.96	**0.88	**1.03
35-49	1.33	**1.53	**1.35	**1.10
50-64	3.68	**1.83	2.95	**1.01
<b>Children</b>				
Dummy (age 0-16)	0.22	**0.39	0.32	**0.16
Dummy (age 0-16)*woman	1.23	** - 0.37	- 0.27	** - 0.33
<b>Education</b>				
Lower secondary	0.22	** - 0.74	**0.61	- 0.04
Upper secondary	0.98	- 0.16	0.44	**0.15
Tertiary	0.58	* - 0.48	*0.88	**0.19

<sup>a</sup> Weighted probit regressions, estimation results underlying table 5.5. The tenured job rate is defined as the fraction of persons that has a tenured job among those that work more than zero hours per week. See table 4.1 for the definitions of the variables. Reference group: age 17-24, no children, primary education. Estimation results marked with \* and \*\* are significant at a 5% and 1% significance level.

<sup>b</sup> German natives living in West-Germany.

Source: GSOEP (Turks and natives in Germany), SPVA (Turks in the Netherlands), DLFS (natives in the Netherlands).

**Table B.4 Estimation results for job prestige scores, Turkish immigrants and natives, 2002<sup>a</sup>**

	All Turks		Netherlands	
	Germany	Natives <sup>b</sup>	Turks	Natives
<b>Constant</b>	**31.4	**34.1	**33.2	**31.1
<b>Woman</b>	0.2	0.6	**4.0	**0.1
<b>Age</b>				
25-34	3.2	0.5	0.2	**4.4
35-49	-0.2	-0.4	0.3	**5.6
50-64	** -4.3	-0.2	-1.1	**5.8
<b>Children</b>				
Dummy (age 0-16)	-4.1	-0.6	** -2.6	*0.8
Dummy (age 0-16)*woman	-1.2	-1.3	-1.6	* -0.6
<b>Education</b>				
Lower secondary	2.7	0.6	*4.6	*3.4
Upper secondary	**4.4	**8.7	**7.1	**10.6
Tertiary	**14.6	**26.0	**20.3	**27.0
	Turks with good language proficiency			
	Germany	Natives <sup>b</sup>	Netherlands	
	Turks		Turks	Natives
<b>Constant</b>	**35.7	**34.1	**34.8	**31.1
<b>Woman</b>	1.1	**0.6	**4.1	**0.1
<b>Age</b>				
25-34	3.1	**0.5	0.5	**4.4
35-49	-3.3	** -0.4	1.0	**5.6
50-64	** -6.8	** -0.2	-1.3	**5.8
<b>Children</b>				
Dummy (age 0-16)	-0.6	** -0.6	-1.5	**0.8
Dummy (age 0-16)*woman	1.4	** -1.3	1.2	** -0.6
<b>Education</b>				
Lower secondary	-1.4	**0.6	**3.5	**3.4
Upper secondary	-0.7	**8.7	**8.8	**10.6
Tertiary	**11.9	**26.0	**23.7	**27.0

<sup>a</sup> Weighted OLS regressions, estimation results underlying table 5.7. Job prestige rate (ISEI) for those that work more than zero hours per week. The ISEI job prestige score classifies jobs on a scale from 10 (low) to 90 (high) on the basis of the average education level and income of those working in a job (Ganzeboom and Treiman, 2003). See table 4.1 for the definitions of the variables. Reference group: age 17-24, no children, primary education. Estimation results marked with \* and \*\* are significant at a 5% and 1% significance level.

<sup>b</sup> German natives living in West-Germany.

Source: GSOEP (Turks and natives in Germany), SPVA (Turks in the Netherlands), DLFS (natives in the Netherlands).

## Literature

Antecol, H. D. Cobb-Clark and S. Trejo, 2003, Immigration Policy and the Skills of Immigrants to Australia, Canada, and the United States, *Journal of Human Resources*, Vol. 38(1), 192-218.

Barth E., B. Bratsberg and O. Raaum, 2004, Identifying Earnings Assimilation of Immigrants und Changing Macroeconomic Conditions, *Scandinavian Journal of Economics*, Vol. 106, No. 1, pp. 1 - 22.

Bell, B., 1997, The Performance of Immigrants in the United Kingdom: Evidence from the GHS, *Economic Journal*, Vol. 107(441), pp. 333-344.

Bevelander, P. and J. Veenman, 2006, Naturalisation and Socioeconomic Integration: The Case of the Netherlands, IZA DP No. 2153.

Bird, E., H. Kayser, J. Frick and G. Wagner, 1999, The Immigrant welfare Effect: Take-Up or Eligibility? *International Migration Review*, Vol. 35, pp. 726-748.

Blinder, A. , 1973, Wage Discrimination: Reduced Form and Structural Estimates, *Journal of Human Resources*, Vol. 8, pp. 436-455 .

Boeri, T., 2006, Migration Policy and the Welfare State, paper presented at the conference Reinventing the Welfare State, The Hague, April 27-28.

Borjas, G., 1985, Assimilation, Changes in Cohort Quality and the Earnings of Immigrants, *Journal of Labor Economics*, Vol. 3(4), pp. 463-489.

Borjas, G., 1987, Self-Selection and the Earnings of Immigrants, *American Economic Review*, Vol. 77(4), pp. 531-551.

Borjas, G., 1995, Assimilation, Changes in Cohort Quality Revisited: What Happened to Immigrant Earnings in the 1980s, *Journal of Labor Economics*, Vol. 13(2), pp. 201-245.

Borjas, G. 1999, Immigration and Welfare Magnets, *Journal of Labor Economics*, Vol. 17(4), pp. 607-637.

Borjas, G. and Hilton, L., 1996, Immigration and the Welfare State: Immigrant Participation in Means-Tested Entitlement Programs, *The Quarterly Journal of Economics*, Vol. 111(2), pp. 575-604.

Büchel, F. and J. Frick, 2005, Immigrant's Economic Performance Across Europe – Does Immigration Policy Matter, *Population Research and Policy Review*, Vol. 24(2), pp. 175-212.

Büchel, F. and Frick, J., 2004, Immigrants in the UK and in West Germany – Relative Income Positions, Income Portfolio, and Redistribution Effects, *Journal of Population Economics*, Vol. 17(3), pp. 553-581.

Chiswick, B., 1978, The Effect of americanization on the Earnings of foreign-born Men, *Journal of Political Economy*, Vol. 86(5), pp. 897-921.

Chiswick, B., 1999, Are immigrants favourably selected? *American Economic Review*, Vol. 89(2), pp. 181-185.

Chiswick, B., Y. L. Lee and P. Miller, 2005, Immigrant Earnings: A Longitudinal Analysis, *Review of Income and Wealth*, Vol. 51(4), pp. 485-503.

Dagevos, J., R. Euwals, M. Gijsberts and H. Roodenburg, 2006, Turken in Nederland en Duitsland: de arbeidsmarktpositie vergeleken, SCP and CPB, SCP Publication, 2006/23.

Diehl, C. and M. Blohm, 2003, Rights or Identity? Naturalization Processes among Labor Migrants in Germany, *International Migration Review*, Vol. 37(1), pp. 133-162.

Dustmann, C., 1993, Earnings Adjustment of Temporary Migrants, *Journal of Population Economics*, Vol. 6, pp. 153-168.

Dustmann, C., 1999, Temporary Migration, Human Capital and Language Proficiency, *Scandinavian Journal of Economics*, Vol. 101, pp. 297-314.

Dustmann, C., 2000, Temporary Migration and Economic Assimilation, *Swedish Economic Policy Review*, Vol. 7, pp. 213-244.

Dustmann, C. and A. van Soest, 2001, Language Proficiency and Earnings: Estimation with Misclassified Language Indicators, *The Review of Economics and Statistics*, Vol. 83(4), pp. 663-674.

Dustmann, C. and A. van Soest, 2002, Language and the Earnings of Immigrants, *Industrial and Labour Relations Review*, Vol. 55(3), pp. 473-492.

Edin P., R. Lalonde, O. Aslund, 2000, Emigration of Immigrants and Measures of Immigrant Assimilation: Evidence From Sweden , *Swedish Economic Policy Review*, Vol. 7, pp. 163-204.

Entzinger, H., A. Fermin and S. Kjellstrand, 2005, *Study on Immigration, Integration and Social Cohesion*, Focus Consultancy Ltd., Erasmus University Rotterdam, report commissioned by the European Commission, DG Employment and Social Affairs.

Euwals, R., J. Dagevos, M. Gijsberts, H. Roodenburg, 2007, The Labour Market Position of Turkish Immigrants in Germany and the Netherlands: Reason for Immigration, Naturalisation and Language Proficiency, CPB Discussion Paper, forthcoming.

Ganzeboom, H. and D. Treiman, 2003, Three Internationally Standardised Measures for Comparative Research on Occupational Status. In: J. Hoffmeyer-Zlotnik & C. Wolf (Eds.), *Advances in Cross-National Comparison. A European Working Book for Demographic and Socio-Economic Variables*. New York, Kluwer Academic Press, pp. 159-193.

Haisken-DeNew, J. and J. Frick, 2005, Desktop Companion to the German Socio-Economic Panel - Version 8, DIW, Berlin.

Hansen, J. and M. Lofstrom, 2003, Immigrant Assimilation and Welfare: Do Immigrants Assimilate Into or Out-of Welfare? *Journal of Human Resources*, Vol. 38(1), pp. 74-98.

Heitmueller, A., 2005, Unemployment Benefits, Risk Aversion and Migration Incentives, *Journal of Population Economics*, vol 18(1), pp. 93-112.

Husted, L., H. Skyt Nielsen, M. Rosholm and N. Smith, 2001, Employment and Wage Assimilation of Male First Generation Immigrants in Denmark, *International Journal of Manpower*, Vol. 22, pp. 39-71.

Kaushal, N., 2005, New Immigrants' Location Choices: Magnets without Welfare, *Journal of Labor Economics*, Vol. 23(1), pp. 59-80.

Kogan, I., 2003, Ex-Yugoslavs in the Austrian and Swedish labour markets: the significance of the period of migration and the effect of citizenship acquisition, *Journal of Ethnic and Migration Studies*, Vol. 29, pp. 595-622.

Lewin-Epstein, N., Semyonov, M., Kogan, I. and Wanner, R., 2003, Institutional Structure and Immigrant Integration: A Comparative Study of Immigrants' Labor Market Attainment in Canada and Israel, *International Migration Review*, Vol. 37, pp. 389-420.

- Model, S., Fisher, G. and Silberman, R., 1999, Black Caribbeans in comparative perspective. *Journal of Ethnic and Migration Studies*, Vol. 25, pp. 187-212.
- Oaxaca, R., 1973, Male-Female Wage Differentials in Urban Labor Markets, *International Economic Review*, Vol. 14, pp. 693-709.
- OECD, various years, Trends in International Migration - Annual Report, OECD.
- Pedersen, P., M. Pytlikova, N. Smith, 2004, Selection or Network Effects? Migration Flows into 27 OECD countries, IZA DP No. 1104.
- Riphahn, R., 2003, Cohort Effects in the Educational Attainment of Second Generation Immigrants in Germany: An Analysis of Census Data, *Journal of Population Economics*, Vol. 16(4), pp. 711-737.
- Riphahn, R., 2004, Immigrant Participation in Social Assistance Programs: Evidence from German Guestworkers, *Applied Economics Quarterly*, Vol. 50(4), pp. 329-362.
- Roodenburg, H., R. Euwals and H. ter Rele, 2003, Immigration and the Dutch Economy, CPB Special Publication, Vol. 47.
- Schultz-Nielsen, M. and A. Constant, 2004, Employment Trends of Immigrants and Natives, in: *Migrants, Work, and the Welfare State*, T. Tranæs and K. F. Zimmermann (eds.), University Press of Southern Denmark, Odense, pp. 119-146.
- Tubergen, F. van, Maas, I. and Flap, H., 2004, The Economic Incorporation of Immigrants in 18 Western Societies: Origin, Destination, and Community Effects, *American Sociological Review*, Vol. 69, pp. 704-727.
- van Ours, J. and J. Veenman, 2003, The Educational Attainment of Second Generation Immigrants in the Netherlands, *Journal of Population Economics*, Vol. 16(4), pp. 739-753.
- Yun, M., Decomposing Differences in the First Moment, *Economics Letters*, Vol. 82(2), pp. 273-278.
- Zavodny, M., 1999, Determinants of Recent Immigrants' Locational Choices, *International Migration Review*, Vol. 33(4), pp. 1014-1030.