School-To-Work Transitions of Second Generation Migrants in West Germany and the Netherlands

A thesis in partial fulfillment of the requirements of the degree of

Doctor of Philosophy in Sociology

by

Sara-I. Geerdes

Dissertation Defense: October 6, 2009

Jacobs University Bremen
Jacobs Center on Lifelong Learning and Institutional Development

Approved Thesis Committee:

PhD Advisor: Prof. Dr. Klaus Schömann
Second Committee Member: Prof. Dr. Johannes Huinink
Third Committee Member: Prof. Dr. Rolf van der Velden
Fourth Committee Member: Prof. Dr. Heike Solga
Fifth Committee Member: Prof. Dr. Klaus Boehnke
Acknowledgements

I started working on this thesis in November 2005 at Jacobs University Bremen. From January to March 2008 I had the chance to continue my research at the Research Institute for Education and the Labour Market (ROA) at Maastricht University. Afterwards I returned to Bremen to finish my dissertation.

I thank my supervisor Klaus Schömann for encouragement, continuous support and discussions. I strongly appreciate that he gave me the possibility to freely follow my research interests and attend many conferences and workshops.

I am indebted to Rolf van der Velden, Charlotte Büchner and colleagues at Statistics Netherlands for giving me the possibility to work with the Dutch CBS data and making my research stay at Maastricht possible. My work strongly profited from fruitful discussions and invaluable comments from them and other colleagues at ROA, beginning with my stay at ROA until the final stages of the empirical and institutional chapters on the Netherlands. I thank Charlotte Büchner for innumerable remote access exchanges and helping me to understand the Dutch education system.

I thank Anette Fasang and Liuben Siarov for many discussions, comments and support. They have been great colleagues and friends in and out of work. I also thank all other JCLL graduates students.

I thank my brother Hans-Florian and my father Hans-Christian for support when needed. Finally, I thank my partner Philipp Täger for being who he is and reminding me on the important things in life.
# List of abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBO/BBL</td>
<td>“Beroepsbegleidende onderwijs/leerweg”: apprenticeship system with at least 60% of workplace-based training in the Netherlands</td>
</tr>
<tr>
<td>MBO/BOL</td>
<td>“Middelbaar beroepsonderwijs”: full-time, school-based second cycle vocational education in the Netherlands (including 20-60% workplace-based training)/formerly called BOL “Beroepsopleidende leerweg”</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>GSOEP</td>
<td>German Socio-Economic Panel</td>
</tr>
<tr>
<td>HAVO</td>
<td>“hoger algemeen voorbereidend onderwijs”: upper secondary education in the Netherlands</td>
</tr>
<tr>
<td>HBO</td>
<td>“Hogescholen”: bachelor programmes at colleges of higher vocational education in the Netherlands</td>
</tr>
<tr>
<td>ILM</td>
<td>Internal labour markets</td>
</tr>
<tr>
<td>ISEI scores</td>
<td>Occupational status scores of the International Economic Index of Occupational Status</td>
</tr>
<tr>
<td>LBO</td>
<td>“Lager beroepsonderwijs”: elementary/lower vocational education in the Netherlands</td>
</tr>
<tr>
<td>MAVO</td>
<td>“Middelbaar algemeen voorbereidend onderwijs”: intermediate general education in the Netherlands</td>
</tr>
<tr>
<td>OED triangle</td>
<td>Origin-education-destination triangle</td>
</tr>
<tr>
<td>OLS</td>
<td>Ordinary least square</td>
</tr>
<tr>
<td>OLM</td>
<td>Occupationallabour markets</td>
</tr>
<tr>
<td>OMED triangle</td>
<td>Modified origin-migrant-education-destination triangle</td>
</tr>
<tr>
<td>TVC</td>
<td>Time-varying covariate</td>
</tr>
<tr>
<td>VBO</td>
<td>“Voorberekend beroepsonderwijs”: elementary/lower vocational education in the Netherlands</td>
</tr>
<tr>
<td>VWO</td>
<td>“Voorberekend wetenschappelijk onderwijs”: academically oriented secondary education in the Netherlands</td>
</tr>
<tr>
<td>WO</td>
<td>“Universiteiten”: university in the Netherlands</td>
</tr>
</tbody>
</table>
List of Figures

1.1 Graphical depiction of research questions .......................... 3

3.1 Yearly average unemployment rates (Germany and the Netherlands) .... 73

4.1 Origin-migrant-education-destination diagram .......................... 88

5.1 Smoothed hazard estimates for the duration of waiting time until first job by ethnicity ......................................................... 131
List of Tables

3.1 Immigration to Germany ............................................. 35
3.2 Highest educational qualification of second generation migrants and natives in the Netherlands .................................................. 59
3.3 Differences in PISA 2006 scores between second generation migrants and native children ..................................................... 62
3.4 Institutional similarities and differences .............................. 76
4.1 Summary of hypotheses ................................................. 110
5.1 Specification of independent variables: empirical part on Germany .... 122
5.2 GSOEP: frequencies ..................................................... 125
5.3 GSOEP descriptive statistics: waiting times ............................ 130
5.4 Cox proportional hazard model on duration of waiting time (any type of contract) including TVC ........................................ 133
5.5 Piecewise constant exponential hazard rate model: duration of waiting time 137
5.6 Cox competing risk model: duration of waiting time until first jobs with temporary or permanent contract ............................. 140
5.7 GSOEP descriptive statistics: ISEI score of first job .................... 143
5.8 Discrete-time logistic regression on entering first jobs with above/below median occupational status (marginal effects) .................. 144
5.9 Results concerning hypotheses for Germany ........................... 147
6.1 Specification of independent variables: empirical part on the Netherlands 159
6.2 VOCL/SVD/SSB: frequencies ........................................... 161
6.3 Logistic regression on employment 12 months after school: yes/no ........ 164
6.4 VOCL/SVD/SSB descriptive statistics: waiting times ....................... 166
6.5 Cox proportional hazard model on duration of waiting time until early jobs with any type of contract .................................................. 168
6.6 Cox proportional hazard model on duration of waiting time until early jobs with any type of contract and differentiation by ethnic groups ............ 170
6.7 Duration of waiting time until early jobs with permanent contracts ...... 172
6.8 OLS: Income at early career ....................................................... 174
6.9 Results concerning hypotheses for the Netherlands .......................... 177
7.1 Turkish second generation migrants in Germany: Cox model on duration of waiting time until jobs with any contract including TVCs ............ 188
7.2 Turkish second generation migrants in the Netherlands: Cox model on duration of waiting time until jobs with any contract ...................... 189
7.3 Country comparative hypothesis .................................................. 191
8.1 Summary of hypotheses ............................................................. 198
9.1 Cox proportional hazard model on duration of waiting time until first job with any type of contract ................................................. 221
9.2 Cox proportional hazard model including interactions with time ........... 222
9.3 Logit discrete-time model on duration of waiting time (until full-/part-time jobs) ................................................................. 223
Contents

1 Introduction .............................................. 1
  1.1 Terminology ........................................... 5
  1.2 Structure of thesis ...................................... 8

2 Previous research ........................................ 11
  2.1 Trends in school-to-work transitions .................... 11
  2.2 School-to-work transitions in Germany .................. 15
  2.3 School-to-work transitions in the Netherlands .......... 20
  2.4 Turks in Germany and the Netherlands .................. 22
  2.5 School-to-work transitions in other countries ........... 23
  2.6 Relevant influencing factors .............................. 25
  2.7 Contribution of the thesis to the literature .......... 30

3 Country contexts ......................................... 33
  3.1 Immigration policy and history .......................... 34
    3.1.1 German immigration history and policy .............. 34
    3.1.2 Dutch immigration history and policy ............... 39
    3.1.3 Comparison of migration histories and policies ...... 43
  3.2 The welfare state ........................................ 46
    3.2.1 The German welfare state .............................. 47
    3.2.2 The Dutch welfare state ............................... 48
  3.3 Education and training systems ........................... 50
## CONTENTS

3.3.1 The German education system ........................................ 51  
3.3.2 The Dutch education system ........................................ 56  
3.3.3 Educational performance of second generation migrants in the two countries ........................................ 62  
3.3.4 How the German and the Dutch education systems influence school-to-work transitions ........................................ 64  
3.4 Structure of the labour market ........................................ 66  
3.4.1 The German labour market ........................................ 67  
3.4.2 The Dutch labour market ........................................ 69  
3.4.3 How the German and the Dutch labour markets influence school-to-work transitions ........................................ 74  
3.5 Summary of institutional similarities and differences ........................................ 75  
3.6 Comparative logic of the thesis ........................................ 77  

4 Theory ........................................ 79  
4.1 Early life course theory ........................................ 80  
4.2 The institutional influence ........................................ 82  
  4.2.1 Segmented assimilation ........................................ 83  
  4.2.2 Institutional embeddedness ........................................ 84  
4.3 Composition factors ........................................ 87  
  4.3.1 Human capital, signaling, screening, and queuing ........................................ 88  
  4.3.2 Intergenerational transmission ........................................ 92  
  4.3.3 Social capital ........................................ 95  
4.4 Distribution factors ........................................ 100  
  4.4.1 Prejudices and discrimination ........................................ 100  
  4.4.2 Job search theory ........................................ 105  
4.5 Hypotheses ........................................ 109  
4.6 Dependent variables ........................................ 111  

5 Second generation migrants in Germany ........................................ 115
## CONTENTS

5.1 Data and sample .............................................. 115
5.2 Model specification .......................................... 121
5.3 Frequencies .................................................. 125
5.4 Results ....................................................... 129
5.5 Summary of results for Germany .......................... 146
5.6 Limitations and outlook .................................... 151

6 Second generation migrants in the Netherlands 155

6.1 Data and sample .............................................. 156
6.2 Model specification .......................................... 158
6.3 Frequencies .................................................. 160
6.4 Results ....................................................... 162
6.5 Summary of results for the Netherlands ............... 176
6.6 Limitations and outlook .................................... 184

7 Turkish second generation migrants in both countries 185

7.1 Data and sample .............................................. 186
7.2 Comparative results ......................................... 187
7.3 Summary of comparative results .......................... 191

8 Conclusions ..................................................... 195

9 Appendix .......................................................... 211

9.1 Second generation migrants in Germany ............... 211
   9.1.1 Logit discrete-time event history model ............. 215
9.2 Dutch data .................................................... 216
   9.2.1 VOCL/SVD/SSB data .................................... 217
   9.2.2 Operationalisation ..................................... 218
Chapter 1

Introduction

Like many other Western European countries West Germany\(^1\) and the Netherlands recruited a substantial number of labour migrants during the 1950s and 1960s. Moreover, migrants from former colonies came to the Netherlands. Many immigrants settled with their families in the receiving societies. The consequences of this immigration for the immigrants themselves and the receiving societies become evident within the second generation. Nowadays, 8.0% of 15-year olds in Germany and 4.7% in the Netherlands belong to the second generation (Heath, Rothon, and Kilpi, 2008).\(^2\)

It is a particularly important question for today’s societies whether second generation migrants have a chance to become integrated into the labour market or whether unequal distribution into certain labour market segments with possible long-term consequences emerges. In this context school-to-work transitions are of special importance as they may influence later labour market careers (Gangl, 2006). Ethnic inequality at school-to-work transitions is a crucial topic because of several reasons. First of all, structural integration – integration into the education system and the labour market – is widely known as one of the most important features of overall integration (Zhou, 1997). Second, if inequalities of labour market opportunities generate ethnic inequality they challenge the normative principles of European governments. Third, with increasing demographic changes ethnic inequality will be a major source of economic inefficiency. Fourth, ethnic inequality might even create social disorder and conflict (Heath, Rothon, and Kilpi, 2008). Therefore, ethnic inequality of second generation migrants in European societies is a major policy challenge

---

1\(^1\)About 2\% of migrants live in former Eastern German federal states, the “neue Bundesländer”. Due to the very low number of migrants we excluded these regions from the analyses. In the following we will speak of Germany and refer to the Western Länder only.

2\(^2\)The authors apply the same definition of second generation migrants like we do (see Section 1.1). They define second generation migrants as persons who have been born in the host country to at least one migrant parent. The numbers in their study are based on unofficial, survey-based sources because other sources are not available.
CHAPTER 1. INTRODUCTION

to social scientists, government interventions and governments.

Research on structural integration of second generation migrants was brought to the forefront since the mid-1990s. The debate, however, seems to have had a persistent blind spot for the importance of national institutional arrangements (Crul, 2004). To our knowledge very few studies analysed ethnic inequality in school-to-work transitions across countries. In the present thesis we argue that the institutional design of the education system and the labour market is much more important for structural integration than often assumed (Crul, 2004).

Germany and the Netherlands offer themselves for fruitful comparison of how institutional influences influence ethnic inequality in school-to-work transitions. First of all, school-to-work transitions in the two countries are comparable because both have extensive vocational training systems and occupational labour markets (Gangl, 2003). Second, both countries recruited labour migrants with similar social background from Turkey at the beginning of the 1960s.

In the succeeding years, however, they implemented diverging policies. The Netherlands implemented integration policies since the beginning of 1980s. In contrast, Germany denied to be an immigration country (until recently) and hardly followed planned integration policies. These policy differences might have shaped second generation migrants’ group composition more positively in the Netherlands. If this was the case, structural integration of first and second generation migrants should be more successful in the Netherlands than in Germany (e.g. Tränhardt, 2000; Euwals, Dagevos, Gijsberts, and Roodenburg, 2007a). Nevertheless, this is not the case. Despite the policies socio-economic integration of second generation migrants is and has been comparably unsuccessful in the Netherlands.\(^3\) There are substantive negative effects of second generation migrant ethnicity after controlling for education and other relevant variables – so called “ethnic penalties” – at labour market integration in both countries (Heath, 2007).\(^4\) These findings rather indicate that integration policies actually have very little influence on structural integration processes of ethnic groups across countries (cp. Crul and Vermeulen, 2003, 968). Moreover, if policies shaped group compositions uniformly, different indicators of structural integration should show similar results. The contrary has been found (Crul and Vermeulen, 2003; Heath, 2007). Thus, other factors like institutional influences have to be considered for the interpretation of the results.

This thesis consists of two empirical in-depth country analysis of Germany and the

---

\(^3\)We use the term second generation migrants as an equivalent to “second generation Allochtones”, a term that is used in official Dutch data sources (also see Section 1.1).

\(^4\)As it is impossible to control for all relevant variables we speak of “ethnic penalties” to imply that the residual effect of ethnic or immigrant group membership may also result from sources other than discriminatory treatment by employers (see Kogan, 2007).
Netherlands. Additionally, we compare the specific situation of Turkish second generation migrants in both countries. Turkish second generation migrants are of special interest as Turkish first and second generation migrants form by far the largest migrant groups in the two and many other Western European countries. Turkish second generation migrants’ school-to-work transitions affect many human beings in European societies.

We will argue that the timing and quality of school-to-work transitions are related. Consequently, we base our empirical analyses on longitudinal data and analyse both factors jointly. The substantial contributions of the present thesis is the analysis of ethnic inequality in school-to-work transitions 1) based on longitudinal data, 2) based on different indicators and 3) across national institutional designs.

To analyse ethnic inequality in school-to-work transitions, it is crucial to 1) look more closely at different indicators of ethnic inequality in school-to-work transitions in the two countries and 2) on the influencing factors. Therefore, our research questions are the following:

1) Is there ethnic inequality at different indicators of school-to-work transitions?,
2) Does ethnic inequality differ between Germany and the Netherlands?, and
3) What factors influence ethnic inequality in school-to-work transitions?

Figure 1.1: Graphical depiction of research questions

Figure 1.1 illustrates the research questions that we will try to address in both institutional settings. It depicts the research interest in how much different factors account for ethnic inequality at different indicators of school-to-work transitions. In the figure arrows point from ethnicity to four different indicators of school-to-work transitions. They refer to the first research question and the interest in the influence of ethnicity on the following four indicators: 1) access to the labour market, 2) duration of waiting time until first jobs,

5The waiting time refers to the period between leaving the education system and entering the labour market. See Sections 5 and 6 for detailed description of the operationalisation.
CHAPTER 1. INTRODUCTION

3) duration of waiting time until jobs with permanent/temporary contracts, and 4) income or occupational status of first positions. Additionally, we want to analyse how much the influence of ethnicity depends on other important influencing factors in the analyses. In the figure, the box in the upper left corner depicts these influencing factors: 1) education, 2) language competence and skills, and 3) social background. Arrows point from these factors to the influence of ethnicity on the indicators of school-to-work transitions. They reflect our interest in how much these factors account for ethnic inequality in different indicators of school-to-work transitions. While we test the influence of individual resources with education, language competences and skills, the inclusion of social backgrounds sheds light on the ways and extent to which inequalities are passed on from one generation to the next. We analyse the aspects presented in the figure in the two institutional settings in Germany and the Netherlands and compare them.

The indicators of school-to-work transitions focus on access to the labour market, duration of entering the labour market and the quality of the transition. The first stage is access to the labour market. We test this indicator in the Dutch context. Moreover, we analyse the duration of waiting time until first jobs in both country contexts. We also compare this indicators for Turkish second generation migrants across countries. Additionally, we look in both institutional contexts at the duration of waiting time until first jobs with certain type of contracts, as the time young migrants need to enter employment may influence the kind of jobs they chose (Franz, Inkmann, Pohlmeier, and Zimmermann, 1997; Kalter and Granato, 2002). If temporary contract jobs reproduce themselves or increase the risk of unemployment, they bear the risk of long-term exclusion. Lower chances of second generation migrants to enter permanent jobs would therefore further increase ethnic inequality at labour market entrance. Finally, we analyse whether second generation migrants enter worse positions. In the Netherlands, this is analysed via first incomes. In Germany, we look at the occupational status of first jobs.

The analysis takes institutional designs into account by looking at the influence of dual apprenticeship completion as a prominent institutional feature in school-to-work transitions. We focus on the institutional facet of whether school and firm-based vocational training bridge school-to-work transitions in the same way in Germany and the Netherlands.

With focusing on these four indicators the analysis provides useful insights whether policy measures targeted at human capital composition are sufficient or if additional measures supporting job search and hiring processes could be fruitful to improve school-to-work transitions of second generation migrants in Germany and the Netherlands. Moreover, the results can lead to important conclusions about institutional effects of the vocational training systems in the two countries.

To analyse school-to-work transitions of second generation migrants in the Netherlands
1.1. TERMINOLOGY

We created a longitudinal data set which has never been used to study this topic before (see Section 6 for description of the three data sets). A unique combination of three data sets allows us to study the above mentioned indicators. For Germany we will use German Socio-Economic Panel (GSOEP) data to look at the different indicators of school-to-work transition. Furthermore, we compare duration of waiting times of Turkish second generation migrants until first full- or part-time jobs across countries.

1.1 Terminology

In migration research, like in any other field, authors use different definitions for the same term or different terms are used to describe the same process. Consequently, confusing results might be drawn. The following section clarifies the meaning of terms used in the present thesis and critically discusses them.

Second generation migrants

In the present thesis the term “second generation migrants” refers to native-born children (in Germany and the Netherlands) with at least one foreign-born parent. Second generation migrants, thus, did not migrate themselves, but have a so called “migration background”. We use the parental country of origin to differentiate between ethnic groups (see Section 5 & 6 for exact description of operationalisation). Natives have been born to two native parents.

We constructed a restrictive definition regarding immigration age. We include only those persons as second generation migrants who have been born in Germany and the Netherlands respectively. This way all persons in our sample have been educated in the same education system. All second generation migrants had similar chances to learn the host country’s language. Language skills are a decisive factor for school-to-work transitions (also see Section 2). They develop long before school entrance age. Children who grow up in Germany or the Netherlands acquire host country language skills, even if this language is not or hardly used in the family. Their second (or even third) language – German or Dutch – influences familial communication through mass media, social contacts, and the symbolic order of the public space (von Bund-Länder Kommission, Goglin, Neumann, and Roth, 2003).

Our definition of second generation migrants is similar to the definition of the Dutch official term “second generation Allochtones”. Therefore, we replace Allochtones by second generation migrants and do not use the term Allochtones below. According to the Dutch official definition the term Allochtones refers to any person of whom at least one parent
was not born in the Netherlands. While first generation Allochtones themselves have been born abroad, second generation Allochtones were born in the Netherlands (Centraal Bureau voor de Statistiek, 2000).6

Second generation migrants have not been consistently defined in the literature. Different definitions of second generation migrants, however, can cause varying empirical findings regarding school-to-work transitions. For instance, persons who immigrated at an older age might have acquired worse language proficiency and, therefore, have more favourable school-to-work transitions. Definitions differ concerning immigration age, number of foreign parents and place of birth. According to most definitions, second generation migrants are native-born, but in some analysis persons who entered a country before school entrance age are also called second generation migrants (see e.g. Portes and Hao, 2004). Other authors even include persons who immigrated until the age of 16 or older in the group of second generation migrants. To permit subtle distinctions by place of birth and age at immigration 1.5 or 1.75 generations of migrants have been distinguished in the literature. 1.5 generation migrants, for instance, are persons who immigrated at an early age and have been born abroad (e.g. Aparicio, 2007). Furthermore, some analysis look at second generation migrants with two foreign-born parents only. Most authors include children with at least one foreign parent into the group of second generation migrants, though, as we do.

Ethnic groups

By using longitudinal data, we identify dominant school-to-work transition patterns for ethnic groups over time. Nevertheless, we have to keep in mind that ethnic groups are heterogeneous and not stable. We use parental country of origin to define ethnic groups of second generation migrants (see Section 5 & 6 for exact description of operationalisation). We apply this definition because parents’ countries of origin can influence their children’s knowledge of the host country’s culture, language and the labour market. Moreover, it may be accompanied by differences in physical appearance (Maani, 1994).

Being part of a “second generation” migrant group does not necessarily depict a conjunctive characteristic because ethnic groups are internally differentiated (Alba, 2005). Moreover, ethnic groups change over time when interacting with the host community and other ethnic groups. Thus, they vary across time and space in their extent of group formation, intermarriage rates, ethnic language use, and identity (Heath and Cheung, 2007). Moreover, different segments of that group may follow different paths of integration (cf.

---

6Within the Dutch official definition of Allochtones the countries of origin are divided into European, Western and non-Western. It has been criticised, that in this definition Indonesia belongs to the Western instead of Non-Western countries.
Furthermore, ethnic belonging is not necessarily bound to national or country of origin borders. According to the definition of the British House of Lords in 1983 an ethnic group is a group which can “regard itself, and be regarded by others, as a distinct community by virtue of certain characteristics. It is essential that there is (1) a long shared history, of which the group is conscious as distinguishing it from other groups, and the memory of which it keeps alive; (2) a cultural tradition of its own, including family and social customs and manners.” Similarly, Max Weber has argued that ethnic groups are people of similar appearances, outer habitus, customs, or both, or who due to memories of colonisation and migration have a subjective believe of a common origin, irrespectively of whether they are related or not (cf. Weber, 1922). Thus, the feeling of belonging to the host country’s society may form a valid distinguishing feature of ethnic groups. Ethnic groups could be classified via self-assessments (or in younger age assessment of the parents). Unfortunately, this is not possible with the data sets used for our analyses. Moreover, self-assessments of ethnic groups might not be stable. They depend on life’s contexts and circumstances.

Integration and assimilation

Integration and assimilation at large both refer to the process of adaptation of immigrants and their descendants to the host society in various stages. Various authors describe the sequences of stages differently and pose different emphases.

The term assimilation is not frequently used in the European context because it is negatively connoted as claiming a unilateral adaptation of immigrants to a unified core of characteristics of the host society. This assumption is widespread although it is not true for all theories that apply the term. The term integration, developed and introduced during the 1960s and 1970s, substituted the notion of assimilation in Europe. It describes a mutual process of adaptation from immigrants as well as the host society. It is supposed to indicate a higher degree of tolerance and respect for ethnocultural differences (Vermeulen and Penninx, 2000, 2). The term integration, however, has also been criticised as a notion that suggests unity, harmony and normative consensus. Incorporation has been proposed as an alternative.

We use the term integration because it offers a wider range of applications and can function as an umbrella term. We refer to integration in the neutral sense of immigrant incorporation without normative connotations (cp. van Nierkerk, 2007b; Vermeulen and

---

7Max Weber defines ethnic groups as follows: “Wir wollen solche Menschengruppen, welche auf Grund von Ähnlichkeiten des äußeren Habitus oder der Sitten oder beider oder von Erinnerungen an Kolonisation und Wanderung einen subjektiven Glauben an eine Abstammungsgemeinsamkeit hegen, [...]Č ethnische Gruppen nennen, ganz einerlei, ob eine Blutgemeinsamkeit objektiv vorliegt oder nicht”.
CHAPTER 1. INTRODUCTION

Penninx, 2000). We use the notion of assimilation only when applied by a particular author (e.g. see Section 4.2.1).

In our analysis, we refer to integration as to equality of treatment. Integration refers to ethnic minority participation at the labour market on the basis of parity with native groups of similar background. We analyse to what extent stemming from an ethnic group is relevant for indicators of school-to-work transitions when initial conditions are similar (Alba and Nee, 1997).

The form of societal integration we are looking at is social (in)equality. Social equality relates to the process of an increasing similarity in the distribution of ethnic groups as aggregates at the labour market, the composition of ethnic groups being equal. In this context “similarity” means the complete disappearance of between-group variances in different indicators of school-to-work transitions between ethnic groups. It is important to note, that in case of similarity social inequality may still exist. The remaining inequalities, however, are due to individual within-group variances. All ethnic-group variance disappeared (Esser, 2003). Ethnic disadvantages refer to unequal, worse distribution of school-to-work structural integration outcomes among second generation migrants compared to natives after socio-economic and other background factors have been taken into account.

1.2 Structure of thesis

The remainder of the thesis is organised as follows. Chapter 2 gives an overview of the previous research on school-to-work transitions in general and of (second generation) migrants in Germany, the Netherlands and other countries. It identifies and discusses findings on important variables for the empirical analyses. In the chapter, we highlight methodological differences of the presented studies to the present analysis.

We describe context factors for ethnic inequality in school-to-work transitions in Germany and the Netherlands in Chapter 3. The chapter contrasts immigration history and policy, welfare state regimes, the education system, and the labour market structure of both countries. Moreover, it sums up previous research of second generation migrants in Germany and the Netherlands concerning these issues. Finally, it highlights important difference and similarities in the country contexts for school-to-work transitions.

Chapter 4 places the analysis of labour market entrance processes in a theoretical framework. Life course sociology serves as a research paradigm (Shanahan, 2000; Mayer, 2005; Elder, Johnson, and Crosnoe, 2004). Based on segmented assimilation theory (Portes
1.2. STRUCTURE OF THESIS

and Zhou, 1993; Zhou, 1997) and institutional embeddedness (Kogan, 2007; Heath, 2007) we identify important institutional dimensions for country comparative research on school-to-work transitions of second generation migrants.

We distinguish between two sets of theories from which we derive hypotheses on: 1) composition and 2) distribution factors. Composition factors refer to certain characteristics of second generation migrant groups that lead to their disadvantages at school-to-work transitions. In line with human capital theory we expect that the lack of relevant resources leads to longer waiting times during school-to-work transitions (Van Tubergen, 2006; Becker and Tomes, 1986). Therefore, better educational levels and language proficiency should reduce the duration of waiting times of second generation migrants. Furthermore, Dutch employers should value school-based apprenticeships as much as firm-based apprenticeships in the Netherlands. We assume that firm-based apprenticeships decrease waiting times not as strong in the Netherlands as in Germany. In accordance with intergenerational transmission we predict that higher occupational status of fathers shorten waiting times (Becker and Tomes, 1986; Solon, 1999; Esser, 2003) as they should provide their descendants with more important information for job search. Based on social capital theory we assume larger networks due to larger ethnic group sizes shorten waiting times of second generation migrants (Coleman, 1988; Bourdieu, 1983; Portes, 1998). Moreover, we would expect to find that the higher the work participation of migrants is within a region, the shorter are their waiting times until first jobs.

The second set of theories relates to distribution factors. It includes theories from which hypotheses on these factors can be derived. We call these factors distribution factors because they lead to a specific distribution of second generation migrants into different jobs. They are supposed to explain inequality in school-to-work transitions that is only due to being a second generation migrant. Second generation migrants distribute themselves into certain jobs or are selected by employers. These mechanisms can work independent of group compositions at school-to-work transitions, but they can also occur in addition to group composition. As the first distribution mechanism, we discuss error and taste discrimination (Arrow, 1973c; Becker, 1971; Kogan, 2007; Phelps, 1972; Van Tubergen, 2006) and explain why and when employers possibly discriminate. Due to different migration histories we hypothesise that second generation migrants with labour migrant background (from Turkey or Morocco) have to wait longer in the Netherlands to enter first jobs than those with Postcolonial background (from Surinam, Netherlands Antilles and Aruba).

Second, job search theory predicts longer waiting times for second generation migrants than natives because they lack important resources (McCall, 1970; Kalter and Kogan, 2002; Kogan, 2007). Furthermore, second generation migrants are supposed to enter jobs with lower status earlier than natives as they fear discrimination. In the Netherlands, minimum
wages put a limit to decreasing status of first jobs. Thus, we expect second generation migrants to have lower chances to enter employment in the Netherlands.

Chapter 5 presents the empirical analyses of school-to-work transition on second generation migrants in Germany. In this section we describe sample construction, operationalisation and model specification based on GSOEP data for the years 1984-2007. Furthermore, the chapter presents descriptive statistics and multivariate results. In the German context, we analyse the duration of waiting time until first full-time or part-time jobs with a Cox proportional hazard model including time-varying covariates. Subsequently, we model jobs with temporary or permanent contracts as competing risks in two Cox proportional hazard models. Finally, we test access to first jobs with a discrete-time logistic regression on above/below median ISEI occupational status scores.

Chapter 6 presents the empirical analyses of school-to-work transitions of second generation migrants for the Netherlands. The analyses are based on a combination of three data sets provided by Statistics Netherlands for the period 1994-2005: 1) two school cohort surveys (VOCL’89, VOCL’93), 2) follow-up school leaver surveys (SVD) and 3) income information of the Dutch administrative data set (SSB). The chapter describes sample construction, operationalisation and model specification. The combination of the data sets offers a unique possibility to contribute to the literature as it includes rich information and has never been used to analyse school-to-work transitions of second generation migrants.\footnote{The use of the data sets was made possible through a cooperation with Charlotte Büchner and Rolf van der Velden at the Research Centre for Education and the Labour Market at Maastricht University.}

Furthermore, the chapter presents descriptive statistics and multivariate results. We calculate the following models in the Dutch context: 1) a Cox proportional hazard model on duration of waiting times until first full-time or part-time jobs, 2) a Cox proportional hazard model on the duration of waiting times until first jobs with permanent jobs, 3) a logistic regression on the chance to enter the labour market, and 4) an ordinary least square regression (OLS) on first labour market incomes. We look at income in the Dutch context to exploit the strength of the data.

Chapter 7 presents the comparative results for second generation migrants with Turkish background in Germany and the Netherlands. In two Cox proportional hazard models we compare the duration of waiting times until first full- and part-time jobs of second generation migrants with Turkish background in relation to natives.

Chapter 8 concludes by highlighting the substantive contributions of the thesis. Finally, the appendix in chapter 9 presents further background analysis and information on data formatting.
Chapter 2

Previous research

This chapter is devoted to the “state of the art” in school-to-work transition research. It starts with presenting findings on school-to-work transitions in general. Afterwards we present school-to-work transitions of second generation or young migrants in Germany, the Netherlands and other European countries.

2.1 Trends in school-to-work transitions

The passage from school to a relatively stable position in working life is usually called the school-to-work transition. During the post-war economic boom young men typically experienced smooth transitions from full-time education to full-time employment. Over the past decade, however, the transition process became less standardised. It is a highly dynamic process which varies widely between individuals. First, it takes young people longer to enter the labour market today. Second, young workers are more likely to experience intermediate voluntary or involuntary phases of unemployment, joblessness or attachment to marginal forms of employment. Third, it happens more often that individuals return to education or training and pass through successive schooling and working episodes. Fourth, many people take time out between education and work for leisure, traveling, or other experiences before being subjected to the routines and constraints of working life. Participation in education, training or labour market are not mutually exclusive for many persons (Couppié and Mansuy, 2003, 64). A person may change between different states, possibly in repeated episodes or various sequences when transiting from school-to-work. Therefore, the analysis of school-to-work transitions require longitudinal data. Fifth, declining gender differences in educational attainments reduced gender differences at labour market entrance. However, these equalizing tendencies may not exist for all groups. Ethnic minorities and the lowest qualified may face increasing difficulties at labour market entrance.
School-to-work transitions are of special importance for individuals because they shape (working) lives. First of all, phases of career and economic uncertainties at the beginning of the labour market career are generally seen as problematic for individuals’ later labour market careers. They can entail long-term consequences for individuals due to experiences of unemployment and idleness. Moreover, employers might use previous labour market careers to estimate a person’s ability when hiring. Then, phases of unemployment would form a strong disadvantage. More successful transitions from school-to-work generate lasting positive consequences (Müller and Gangl, 2003b). Second, school-to-work transitions are crucial because of the simultaneity of critical events. People frequently start a household or a family when they transit from school to work (Müller and Gangl, 2003b). Thus, how efficient human resources and talents are used and how individual qualifications and preferences are matched to job requirements is of relevance for the future course of individuals’ whole lives (Müller and Gangl, 2003b; Couppié and Mansuy, 2003).

The process of school-to-work transitions can take various forms. Its form depends on the education and training system and the labour market structure of a country (Couppié and Mansuy, 2003). The age range covered and the span of time needed between first members of a birth cohort leaving the education and training system until the peak of this cohorts labour market participation vary in school-to-work transitions across countries. According to European labour force survey data for the years 1995, 1996 and 1997 the transition process extends over a long span of sometimes more than 15 years of young people’s lives in European countries (Couppié and Mansuy, 2003). About 95% of young Europeans are still in education and training at age 15, while this is true for 10% at age 28. Some continue with education and training beyond the age of 30, but most young people enter the labour market between age 15 and 30. Some of them may gain labour market experience while they are still in the course of their studies. About 5% of the students still participate in education and training at age 30 (Couppié and Mansuy, 2003). Education and training exit rates are surprisingly smooth between age 15 to 30. The differentiation of tracks and curricula lead to a multiplication of leaving points. Mobility between tracks smoothens the rates. Repeating a year or dropping out before attaining a defined leaving point contribute to a widening of the range of ages at which young people leave the education and training system.

The timing of labour market entrance is somewhat later in the Netherlands than in Germany. About 50% of young people enter the labour market at age 20.5, while this is the case in the Netherlands at age 22.5 (Couppié and Mansuy, 2003, 66).
2.1. TRENDS IN SCHOOL-TO-WORK TRANSITIONS

Changes in school-to-work transitions

General changes affected school-to-work transition in Germany and the Netherlands. They have led to workers with low qualification being even more vulnerable at the labour market. Thus, they affect second generation migrants — a group with a comparably low levels of education (see Section 3.3) — to an overproportional extent. Educational expansion has lead to occupational upgrading. Occupational upgrading refers to the process that the higher percentage of young persons attaining higher educational levels was accompanied by an increase in job skill requirements. Consequently, educational credentials were devaluated. Today’s low skilled persons have to compete with persons with higher educational level at the labour market. Most likely employers will, however, chose the applicant with highest educational attainment if a positions has to be filled (Gangl, 2003, 289). This causes downward substitution processes. Downward substitution refers to the process of decreasing levels of occupational attainments among labour market entrants. Occupational upgrading processes have partially offset downward competition trends. Thus, there are only small net changes in occupational attainments so far. The influence of downward substitution processes and occupational upgrading processes will be more visible, however, as soon as one starts overbalancing the other (ibid.). The net decline in returns to education is rather small for the majority of educational groups because downgrading tendencies have been joint by changes in labour demand. Mostly younger workers benefited from these changes. Thus, as long as educational expansion and occupational upgrading occur parallel, there is no disadvantage for younger workers. However, if educational expansion increases while the upgrading does not, this would lead to declining returns to education. Nevertheless, workers with the lowest qualifications are already affected by this development (Gangl, 2003, 290). Thus, persons with migration background are likely to be affected to an overproportional extent.

More flexible labour markets increasingly emerge because of economic, technological, cultural, and demographic trends (Schmid, 2002; Bijwaard and Veenman, 2008). A development mostly held responsible for increasing flexibilisation at labour markets is globalisation. Globalisation refers to the following interrelated structural shifts: 1) internationalisation of markets, 2) rapid intensification of competition, 3) accelerated diffusion of knowledge, and 4) rising importance of markets. The consequential restructuring of firms and the stronger bargaining power of capital compared with labour has caused a rise in employment flexibility in all OECD countries. Employment flexibility refers to the diffusion of temporary contracts, part-time work, and semi-independent forms of employment (Blossfeld, Buchholz, Bukodi, Ebralidze, Kurz, Relikowski, and Schmelzer, 2005).

1We use the term temporary contracts to refer to work contracts that cover a limited duration like fixed-term contracts. We do not include temporary workers ("Leih-/Zeitarbeiter"), but employees with
There are advantages and disadvantages related to flexible forms of employment at the beginning of the labour market career. On the one hand, if beginning your career with phases of unemployment increases the risk of later labour market problems, it seems justified to get young workers to enter the labour market at any conditions, i.e. with flexibilising the labour market for them. This may help them to avoid later unemployment (see for review Scherer, 2004, 170). Moreover, some forms of flexibilisation can facilitate labour market entrance of young persons. Flexibilising labour usage and employment contracts lead to a closer relation between market entrants’ current productivity and job rewards in terms of pay and other conditions (see Blossfeld, Buchholz, Bukodi, Ebralidze, Kurz, Relikowski, and Schmezer, 2005; Buchholz and Kurz, 2005). Special forms of combined work-training contracts can foster the labour market integration younger workers even in tightly regulated labour markets (Gangl, 2003, 287). Furthermore, increasing flexibility in terms of part-time work helped to increase labour market participation rates of women (see Section 3.4).

On the other hand, flexible forms of employment are problematic for young workers because 1) these jobs are risky and 2) young workers are likely to be most affected by flexible forms of employment. First, flexible forms of employment bear the risk of unemployment because they are used for the coverage of demand changes, cost reduction and the shift of employment risks. Flexibility is needed when activities include unstable and fluctuating conditions of demand by consumers or intermediate companies. The business cycle is an important factor in firm’s hiring flexible workers. When there is an upswing of the economy and economic activity is increasing, organizations hesitate to employ new staff on a permanent basis immediately, but hire temporary workers and short term contractors instead (Remery, Doorne-Huiskes, and Schippers, 2002). When the economy is declining and activity rates drop, flexible workers will be the first workers to be released. Furthermore, temporary positions could be problematic because they are not accompanied with the same chances to participate in training (Arulampalam and Booth, 1998; Wilkens and Leber, 2003). Temporary contracts can often be found in low-skill labour market segments. In that case the jobs might be accompanied by lower mobility chances.

\footnote{We use the term fixed-term contracts in the present thesis when applied by a certain author.}

\footnote{Hence the need for flexible labour is substantially smaller in manufacturing than in the service industry. Moreover, the amount to which flexible workers are employed depends on the degree of specialisation of the activities involved. Hiring flexible workers is more easy when firms activities afford less specialised knowledge and skills. If specialised knowledge and skills are not required and training periods are short, employing additional workers on a short-term basis, is easy for a company.}

\footnote{Temporary contracts are also be widespread at the upper end of the labour market hierarchy (see Scherer, 2004, 372). This argument is, however, not relevant in our context as we analyse persons without tertiary levels of education.}
that labour market entrants are especially vulnerable because the beginning of their career is crucial for their later labour market career. Flexible forms could negatively affect later labour market careers if they increase the risk of later unemployment.

Second, companies often chose younger workers as the ones with whom they can promptly adapt their own workforce to changing demands. This is the case because firms want to keep a certain amount of experienced workers. They might even have invested in the workers’ specific skills by funding their training. Moreover, older workers are often well protected by dismissal laws. Consequently, employers are reluctant to fire permanent – often older – personnel because of relatively high hiring and firing costs and their training investments (Remery, Doorne-Huiskes, and Schippers, 2002). Consequently, labour market entrants and younger workers often have to deal with the economic and temporal uncertainty of flexible forms of employment (cf. Blossfeld, Buchholz, Bukodi, Ebralidze, Kurz, Relikowski, and Schmelzer, 2005).

To sum up, the important point is whether flexible forms of employment like fixed-term contracts decrease or increase the risk of subsequent unemployment and whether they serve as a bridge or a trap for later labour market careers (Buchholz and Kurz, 2005). The answer to this question is not the focus of this thesis. However, we argued above that there are good reasons to believe that flexible forms of employment at the beginning of labour market careers bear a risk. Disadvantages of flexible forms of first employments could outweigh their advantages. Thus, the chance to find first jobs with a permanent contract is one important indicator for the chances of young workers to integrate into the labour market. It would be a source of ethnic inequality if second generation migrants were more likely to enter these kind of employment after they transmitted form school-to-work. Below we will try to answer whether second generation migrants are more likely to end up in flexible forms of employment after their school-to-work transition.

2.2 Previous research on school-to-work transitions in Germany

Young people in Germany experience relatively smooth transitions. Completing dual apprenticeships serves as a bridge to employment in the sense that it shortens waiting times. Generally, one month after leaving school 65 to 74% of West Germans and 53 to 70% of migrants found a first job. Another five month later 30 to 50% of those who had not found a job after one month are employed. Women have longer waiting times than men in Germany. Even if they found a first job, labour market entrants are not automatically labour market insiders. Stability of employment is strongly negatively correlated with the
duration of job search. A disadvantaged situation at labour market entrance negatively affects chances in the early career: the quicker a person found a job, the lower is the person’s unemployment risk afterwards (Buchholz and Kurz, 2008, 23).

Labour market chances worsened for cohorts after 1989. Since the mid-1980s the number of fixed-term contracts and the probability of labour market entrants to receive one increased. A combination of part-time employment with low income security and fixed-term contracts with low temporal security is frequent in Germany. Although fixed-term contracts are widespread at both sides of the occupational and educational hierarchy, they are increasingly connected to a high risk of unemployment for those who enter the labour market after 1993. The importance of educational certificates in school-to-work transitions increased over time, while completion of upper and lower secondary education has been devaluated. The public sector offered extraordinary protection against unemployment for those who entered the labour market between 1990-93 only because it experienced a short phase of expansion during that period after the final cutbacks since the mid-1980s and before growth stagnated again later (Buchholz and Kurz, 2008).

As compared to Italy and Great Britain bad matches between education and first jobs requirements are low in Germany.\(^4\) Less than 10% of those entering the labour market end up as over-qualified workers. The waiting-period until entering the first job does not seem to be correlated with the risk of inadequate positions in general. However, the authors do not look specifically at vulnerable groups at the labour market like second generation migrants.

Longer waiting times until jobs might pay off in terms of better mobility chances at the German labour market. Fixed-term contracts and shorter employment spells in general help young people to enter the German labour market. In spite of the fact that fixed-term contracts coincide with lower upward mobility chances compared to permanent contracts and that they may be accompanied by higher career instability, fixed-term contracts play an important role as entry portals to the German labour market. In contrast, too low placement in the labour market instead has negative consequences like less prosperous career chances and higher unemployment risks. Entering the labour market via ‘under-qualified’ less prestigious job positions is a major disadvantage with consequences that can only balance out over a long period of time (Scherer, 2004). The empirical findings confirm that apprenticeships prevent people from entering educationally inappropriate positions (Scherer, 2004).

\(^4\)Based on GSOEP data for 1983-1998 Scherer looks at the determinants structuring labour market entry via under-qualified jobs.
2.2. SCHOOL-TO-WORK TRANSITIONS IN GERMANY

Results for first and second generation migrants

Ethnic inequality persists for the large group of first and second generation migrants at the German labour market, who completed school in Germany. Empirically few results speak in favour of discrimination as an explanation for labour market positions but rather different endowment with human capital (Granato and Kalter, 2001, 499). When looking at Italian, Yugoslavian, Turkish and Spanish second generation migrants, the results show strongest disadvantages for those second generation migrants with Turkish, Yugoslavian and Italian background (Granato and Kalter, 2001).5

Other results seem to confirm this. Young (first and second generation) migrants have a higher risk of unemployment after completing school in Germany (Buchholz and Kurz, 2005).6 Compared to West German natives, migrants who enter the labour market earlier needed more time to find a job. Their disadvantages can, however, be traced back to differences in educational levels. Moreover, patterns of inequality changed since the 1990s: there are no ethnic penalties for migrants in the labour market entrance cohorts 1990-1993 and 1994-01. Longer waiting times for young (first and second generation) migrants are also not accompanied by a higher probability to enter employment with a fixed-term contract. Young migrants’ difficulties of finding a first job and their increasing risk of unemployment are due to their on the average lower qualifications (Buchholz and Kurz, 2005, 23).

While foreign youths who completed apprenticeships do not have lower chances to find a job than natives with the same certificate, the jobs they find are of lower quality. Young foreigners take low quality jobs as a short-run gain and quick escape from non-employment or are less choosy. Furthermore, the occupational status of parents and the type of vocational training determine their labour market outcomes. Moreover, the probability of long time unemployment at school-to-work transitions is much higher for non-Germans than for Germans (Franz, Inkmann, Pohlmeier, and Zimmermann, 1997).7

Labour market integration of (first and second generation) migrants is driven by personal networks. Young immigrants, immigrants with fewer years of formal education, and immigrants without Germans in their inner circle of friends heavily rely on networks in order to find their jobs. Contacts seem to be a functional equivalent for formal degrees and training (Drever and Hoffmeister, 2008). Moreover, country comparative research found that the impact of social resources differed across societies. Males used personal contacts more frequently for finding a job in Germany than in the Netherlands. Applying directly

---

5The results on chances to obtain (qualified) worker/employee positions and are based on 1996 Micro-census data.
6The analysis of school-to-work transitions in the period 1984-2002 is based on GSOEP data.
7The study is based on GSOEP data and does not distinguish between first and second generation migrants.
to an employer has been found to be more common among male labour market entrants as they do not possess many job-related contacts. The use of informal means did, however, not lead to higher occupational status per se (De Graaf and Flap, 1988, 466).\(^8\)

**Results for second generation migrants**

Nearly all groups of second generation migrants are disadvantaged at the German labour market. Second generation migrants improve their positions in contrast to their parents but they are worse off than natives (see Kalter, Granato, and Kristen, 2007; Kalter and Granato, 2007; Granato and Kalter, 2001).\(^9\)

Especially second generation migrants with Turkish background underperform at the labour market. Net of education almost no labour market disadvantages are visible in recent years for the Italians, Greeks, Iberians, and Ex-Yugoslavians (Kalter, 2006). The Turkish second generation, however, has poorer job opportunities at school-to-work transitions even after education and social origin are controlled for (Kalter, 2006; Seibert and Solga, 2005). Turkish background negatively affects entrance into qualified labour market positions and the chance to enter employment. The result might be due to the ethnic signal value of vocational training certificates or to statistical discrimination (Seibert and Solga, 2005). More differentiated parallel processes might also occur: the disadvantages might be due to lower language proficiency, less host country specific knowledge, and differences in job search behaviour because of different composition of friend networks (Kalter, 2006). Based on longitudinal data ethnic penalties for Turkish second generation migrants could largely be explained by the ethnic composition of friendship networks and spoken German language proficiency. Ethnic networks with less German friends, which are usually supposed to generate ethnic capital, do actually influence the attainment of job positions negatively. However, because of lack of data on employers and recruitment the question prevails what the reasons for differences in labour market positions between groups of different ethnic origin are.

Occupational positions of Turkish second generation migrants are poorest, Ex-Yugoslavian hold intermediate positions and natives come off best at the German labour market (Worbs, 2003).\(^10\) Turkish and Italian second generation migrants constantly show the highest un-

---

\(^8\)The influence of contacts for getting a job is debatable, though. The real effect of social capital on labour market outcomes could have been overestimated in these studies, though. Nonrandom acquisition of friendship ties could lead individuals to choose people as friends who are similar to them. Consequently, there would be a correlation between friends' income and occupational status even if there was no influence of social capital on labour market outcomes (Mouw, 2003).

\(^9\)In some of the studies the second generation is defined as non-Germans born in Germany or immigrated at age 6 or younger.

\(^10\)Worbs uses the EFFNATIS field study and microcensus data to analyse the position of Turkish and
2.2. SCHOOL-TO-WORK TRANSITIONS IN GERMANY

Employment rates of all immigrant groups from the former recruitment countries. These disadvantages are explained by the lack of education, social and cultural capital of their parents and discrimination. Moreover, the high importance of school degrees for access to the vocational training system and the labour market does make labour market access more difficult for second generation migrants. The results confirm that the main problem for second generation migrants are insufficient educational qualifications. The study, however, shows intergenerational progress: the second generation is ahead of the in-between generation (those who came to Germany at an early age) with regard to unemployment rates. In spite of their obvious disadvantages in the education system, second generation migrants considerably progress in the vocational training system in Germany (Worbs, 2003).

Results of studies that analyse the whole labour market career and not only school-to-work transitions differ somewhat from the findings presented above. When looking at all age groups it shows that except for the Iberian all second generation labour migrant groups face a higher risk of unemployment (Kalter and Granato, 2007). Again, higher unemployment risks can largely be explained by lower educational qualifications. When including education, most second generation labour migrant ethnic disadvantages disappear. The exception being Greek and Turkish men and Turkish women. As the only group of second generation migrants, Turkish men have lower returns to their education in Germany when looking at unemployment risk. With regard to occupational attainment ethnic penalties persist only for Turkish and Greek male second generation migrants. Moreover, only Turkish second generation migrants yield lower returns to education than natives. The lack of relevant resources like educational credentials, but also host country specific resources like language proficiency or access to helpful networks largely account for these ethnic disadvantages. Future research should address these mechanisms and analyse processes of intergenerational transmission more (Kalter and Granato, 2007).

An analysis of the duration of job search of Turkish second generation migrants at the age of 20-55 in Germany showed that predominantly unemployed Turkish second generation migrants need more time to enter employment. After they found a job, their employment stability did not differ from those of natives (Uhlendorf and Zimmermann, 2006). The study did not look at labour market entrants only. Therefore, the present work will give

---

Ex-Yugoslavian second generation migrants within the German education and vocational training system and the labour market. EFFNATIS was conducted in Nuremberg in 1999, including young migrants at the age of 16-25 and 287 Turkish (287 persons) and Ex-Yugoslavian (283 persons) background and 215 natives (Worbs, 2003). The result is based on microcensus data for 1993 and 1996 and respondents at the age of 18-59. The data relies on nationality as a criterion to identify immigrants and their descendants. The second generation includes persons, who either have been born in Germany or immigrated before the age of six.

The study is based on GSOEP data and took observable and unobservable characteristics into account.
further insight on whether the findings on durations of waiting times can be confirmed at the beginning of labour market careers.

Persons who completed vocational training seem to have similar chances of finding a job as compared to native-born Germans. Employment patterns of 25-55 year old, male second generation migrants converge with those of native-born Germans of a corresponding age.\(^\text{13}\) Arguably, structural assimilation occurs (only) for the second generation immigrants. Ethnic Germans, former so called guest workers and third-country immigrants who arrived after 1973 have longer unemployment durations and more frequent unemployment spells than native born persons even after controlling for educational level and age (Kleemann, Matuschek, and Kogan, 2003).

At transition from apprenticeship to the labour market good economic performance of a region, the smaller size of a locality (e.g. not an agglomerated region) and larger cultural diversity within a region enhance the probability to find employment in the primary labour market for non-Germans and natives (Haas and Damelang, 2007).\(^\text{14}\)

### 2.3 Previous research on school-to-work transitions in the Netherlands

In the following we will present previous findings on first and second generation migrants. The following section present findings with regard to second generation migrants only.

Duration analysis examining the transition from unemployment to work focusing on the four largest first generation immigrant groups in the Netherlands (Turkish, Moroccan, Surinamese, and Antillean) and natives show that Turkish and Moroccan immigrants leave unemployment slower than native Dutch. Higher transitional risks for the Turks and Moroccans (especially for Turks) are mainly attributable to the fact that the observed characteristics in terms of endowment with human capital and demographic features such as age, marital status, and gender turn out to be unfavorable for them (Bijwaard and Veenman, 2008).\(^\text{15}\)

First and second generation migrants face multi-faceted disadvantages at labour market entrance in the Netherlands. The unemployment rate of immigrants and their children was well below those of the native born for more than two decades (OECD, 2008b). Com-

\(^{13}\)The findings are based on GSOEP data for 1995-2000.

\(^{14}\)The findings are based on German Integrated Employment Biographies (IEBS) data.

\(^{15}\)The study is based on the nationwide survey “Social Position and Use of Public Utilities by Migrants” (SPVA) for the years 1998 and 2002 and includes the four largest immigrant groups in the Netherlands (Turkish, Moroccan, Surinamese, and Antillean) and natives at the age of 15-65.
pared to natives they have lower chances to get into employment, into jobs with permanent contracts, into qualified jobs, and into jobs which require skills that correspond to their attained skills (Traag, Valk, Velden, Vries, and Wolbers, 2004). Furthermore, first and second generation migrants with Turkish and Moroccan origin leave unemployment slower than native Dutch (Bijwaard and Veenman, 2008). Disadvantages at labour market entrance with respect to unemployment, occupation and wages seem to especially prevail for these two groups of second generation migrants (Kee, 1995; Heath, 2007).

There were findings that children of immigrants with Moroccan background have a similar employment probability as the Native Dutch and tend to be in relatively high-skilled occupations, while those with Surinamese, Antillean and Turkish background have a lower employment probability after controlling for education and level of parental education (De Vries and Wolbers, 2004). However, the authors look jointly at first and second generation migrants. Therefore, the results might also be due to comparatively more favourable group composition characteristics of young first generation Moroccan immigrants.

Results for second generation migrants

According to some authors second generation Moroccan and Turkish migrants in the Netherlands replicate socioeconomic position of their parents: they hold worst paid jobs, suffer the highest unemployment rates and live in the poorest neighbourhoods (Crul, 2000).  

Others find few differences in the early labour market careers of natives and second generation immigrants in the Netherlands. When family background, personal characteristics, work experience, and neighbourhood conditions are controlled for ethnicity does not have a strong influence. However, whether parents have a job or not influences children’s probability to be employed (van Ours and Veenman, 2004). The probability of having a job, however, is lower for male Turkish, Moroccan and Surinamese second generation migrants. The authors explain this effect by self-exclusion of foreign women and discrimination in the sense of prejudices against Muslims in general and negative stereotyping of their work performance. Moreover, Turkish, Moroccan, and Surinamese men might have higher reservation wages because of the possibility to take on black-paid jobs. Furthermore, they explain the low participation rate of Surinamese men by their hustle culture in small (and sometimes illegitimate) trades (van Ours and Veenman, 2004).

It has also been argued that second generation Carribbeans do not improve their labour

\[ \text{The author interviewed 86 male and female Moroccan and Turkish pupils ages 16-24 and students in Amsterdam in the period between 1994 and 1997 about their educational and labour market careers.} \]

\[ \text{Second generation migrants include persons who immigrated until age 6 in this study. The findings are based on cross-sectional data for 1998.} \]
market positions over time. While at first second generation migrants seemed to integrate smoothly, later developments showed a reversal in this trend. Due to pre-migration backgrounds and migration histories of the late first-generation cohorts integration of their descendants follows a complex, less linear process. The main reason is the lower educational level and social status of late first generation Surinamese (see Section 3.1). Economic and social contexts might additionally influence this result. The same trend holds for the Antilleans, although it sets in a bit later (van Niekerk, 2007b).

Chances of labour market participation are lower and the risk of unemployment higher for second generation males in the Netherlands when looking at the whole labour market career. The patterns for women are less clear, but their risk of unemployment is also higher. Surinamese and Antillean women, however, seem slightly better off than Turkish and Moroccan. The salariat remains a closed occupational class for second generation migrants, but the chances of access into the other occupations are the same for them and natives. Some second generation migrants have higher incomes than comparable natives. These results on income and occupational class are new and top up previous research which largely focuses on the "migrant problem" as low education and bad entrance into the labour market. The authors conclude that second generation migrants survive a more severe selection at the entrance to the labour market than natives. They argue that the positive effect of a more severe selection balances the negative effect of social closure at the labour market. This would apply especially to women as they are an even more selected group at the entrance to the labour market. The special situation of Surinamese and Antillean women has to do with cultural factors as unstable relationships (Tesser and Dronkers, 2007).18

2.4 Turks in Germany and the Netherlands

Ethnic penalties exist for Turkish second generation migrants both with respect to unemployment and to the salariat in Germany and the Netherlands. In a European comparison, ethnic penalties seem largest for Turkish second generation migrants in Belgium and somewhat smaller but still very substantial in Germany and the Netherlands (Heath and Cheung, 2007, 658).

Nevertheless, unemployment among Turkish second generation migrants is three to four times lower in Germany as compared to the Netherlands. Labour market entrance of

---

18 Tesser and Dronkers analyse participation in the labour force, unemployment, occupational class and income for first and second generation migrants and natives aged 18-59 based on the Dutch SPVA data. As older second generation migrants at any step of their career are included, the results are not necessarily comparable to those for younger labour market entrants.
2.5. SCHOOL-TO-WORK TRANSITIONS IN OTHER COUNTRIES

Turkish second generation migrants is more polarised in the Netherlands than in Germany. While a substantial group of Turkish second generation migrants reaches white-collar or professional positions, many qualified and unqualified workers are suffering serious unemployment as a result of their difficult transition to the Dutch labour market (Crul and Vermeulen, 2003)

Moreover, the Turks perform less well with regard to employment rates and tenured job rates in the Netherlands, while the Turkish immigrants in Germany perform relatively unfavourable in terms of the occupational status score. Thus, the Turks in Germany seem to reach lower positions, but manage to enter the labour market. In contrast, the Turks have more difficulties to enter the labour market and reach permanent jobs in the Netherlands (Euwals, Dagevos, Gijsberts, and Roodenburg, 2007a). Educational level group composition and social security arrangements are supposed to explain lower employment rates of Turkish migrants in the Netherlands than in Germany (see Section 3.5).19

Second generation migrants yield higher returns to educational attainment and language proficiency in the Netherlands than in Germany (Euwals, Dagevos, Gijsberts, and Roodenburg, 2007b). In contrast to second generation women in Germany, Turkish second generation men and women can improve their labour market situation through better educational levels in the Netherlands (Euwals, Dagevos, Gijsberts, and Roodenburg, 2007b).

2.5 Previous research on school-to-work transitions in other countries

In this section we provide an overview of school-to-work transitions of second generation migrants in other countries. The aim of the section is to give further insight on the factors influencing school-to-work transitions.

Nielsen et al. analyse school-to-work transitions of second generation immigrants as compared to natives in Denmark. They find that more education enable migrants to find jobs faster. Moreover, the economic situation is important: those who leave the educational system in a period where unemployment is high need more time to find a job. Additionally, a young second generation migrant women, who is married to another immigrant, experiences longer waiting times until the first job in Denmark than a women in an interethnic marriage. Concerning intergenerational transmission they find that higher parental income levels increase the probability to get a first job. Moreover, higher educational levels and labour market experience of parents decrease the duration of waiting times in their data.

19 Based on 2002 GSOEP and SPVA data Euwals et al. analyse Turkish (first, second and 1.5 generation) migrants across all age groups in Germany and the Netherlands.
Thus, parents’ labour market experience may come along with norms and attitudes which make alternatives to being on public income support more important. The economic position of the parents, however, is no driving factor for school-to-work transitions. Higher parental income does not make children search longer for a job. Arguably, children with more wealthy parents are not more critical before the first job offer is accepted or “buy” more leisure time, although they could afford to (Nielsen, Rosholt, Smith, and Husted, 2003).

Intergenerational transmission is analysed on the basis of Swedish data by comparing labour market results for groups with different ethnic background, parent composition and first generation migrants. The authors find that second generation migrants from Southern European countries and non-Europeans have a higher probability of being unemployed in Sweden (Rooth and Ekberg, 2003; Behrenz, Hammarstedt, and Månsson, 2007). While some studies also find that second generation migrants have lower earnings than native Swedes (Rooth and Ekberg, 2003), other results who take selection effects into account do not confirm this (Behrenz, Hammarstedt, and Månsson, 2007). Moreover, they find that host country specific human capital – measured as having one native parent – positively affects labour market outcomes of second generation migrants (Rooth and Ekberg, 2003).

Findings show overall convergence of natives and immigrants’ earnings in Sweden, but large differences according to immigration period and ethnicity exist. Generally, the intergenerational earnings mobility among immigrants is lower as compared to natives, but there are strong differences between different groups of immigrants by ethnicity. The authors conclude that certain groups of immigrants are more successful in transmitting human capital between generations (Hammarstedt and Palme, 2006).

British literature on choices after post-compulsory education of persons from ethnic minorities speaks of the “discouraged worker” effect. The effect relates to the notion that aggregate local labour market factors like local unemployment rates influence the decision of staying in education. This way the decision to stay in education is no longer explained by ability, but by push and pull factors. Push factors are lower current opportunities and maybe awareness of racism, whereas pull factors include that ethnic minorities might believe they can gain most from education. Although these factors are valid for non-white and whites, they are more important for non-whites (Leslie and Drinkwater, 1998).

Young non-EU immigrants and natives experience quicker transitions from education to the labour market in Belgium than in Spain. The risk of entering any job is much

---

20 Hammarstedt and Palme analyse earnings mobility of second generation migrants based on data from Statistics Sweden.

21 Kalter and Kogan attempt to disentangle mechanisms leading to ethnic inequalities at labour market entry using longitudinal information of the EULFS 2000 ad hoc module in Belgium and Spain.
lower immediately after leaving school and tends to slightly increase in the following years, particularly for blue-collar jobs. In both countries, non-EU and EU immigrants face clear disadvantages with respect to higher status jobs. In Belgium, ethnic inequalities concerning higher status jobs are to a large degree a matter of inferior educational qualifications. After introducing education and parental education into the models, the negative effect of ethnicity diminishes but does not disappear. The authors conclude that discrimination prevails. Discrimination is, however, particularly marked in Spain as education and social origin do not account for ethnic inequalities. Moreover, there is a widening gap between non-EU nationals and natives after leaving education in Spain. The authors explain it by a self-selection effect. Minority youth might give up their search for higher status jobs earlier than natives (Kalter and Kogan, 2002).

2.6 Relevant influencing factors

From the literature we identify other relevant factors for ethnic inequality in school-to-work transitions. The following section present previous findings concerning these factors and sums up the expected effects.

Gender

One of the strong social dividing lines at labour market entry is gender (Gangl, 2000; Alon, Donahoe, and Tienda, 2001). Gendered school-to-work transitions especially apply to second generation migrant women. Parental attitudes towards girls’ schooling have been ambivalent among migrants. Labour migrant parents often grew up in rural areas where education for girls was not considered important or even considered as threatening the life style. Migrant women come to a country as dependents rather than by own choice, and human capital acquisition may depend on their husband. Parents might “carry over” this culture to their daughters. Traditional gender role expectations and the practice of early marriage (and first child arrival soon afterwards) make educational attainment and, therewith also labour market careers, of Turkish second generation girls difficult. Incentives to early marriages might be short-term payoffs for the family because they improve the family income and status in the community. Furthermore, selection is likely to take place based on performance: those with school difficulties or behaviour problems may be pushed by their parents to get married or find a job respectively (see Crul and Schneider, 2005).
CHAPTER 2. PREVIOUS RESEARCH

Social background

Early family experiences have an impact on employment careers of youth (Freeman and Wise, 1982, 12). Family experiences cannot be measured on the whole, but family characteristics like parental education, parental occupational status, and household income form a good approximation (see Section 4.3.2 for theoretical discussion of intergenerational transmission). In the traditional family model the mother’s education and the father’s occupational status are crucial for school-to-work transitions. The educational level of the mother is supposed to be a proxy for the cultural message that is transmitted in a household (cp. van Niekerk, 2000, 198). The mother’s education is especially important since mother’s are traditionally expected to spend much time with the children and their education. Moreover, mothers with higher educational level at school age of the child are more likely to be and stay attached to the labour market. Thus, higher educational levels of mothers are also a predictor for the child’s knowledge about the labour market and language proficiency. The occupational status of the father reflects his educational level. It is an additional indicator for personal contacts and occupational networks, which might benefit offsprings’ job search.

First generation migrant parents often have low level or no education. Consequently, they may simply have scant knowledge about the receiving societies’ education system (also see Section 4.3.1). This constrains parents’ ability to support schoolwork of their children, especially for eldest children in the family. Moreover, parents might not feel confident enough to disregard school track recommendations (Crul, 2000).

Early work experience

Early work experience might help individuals to start and successfully complete job search phases before schooling ends. Phases of unemployment while looking for a job are more likely for the young who lack labour market experience or specific qualifications, which are often required for a particular job. Moreover, labour market entrants have to compete with experienced workers (Couppié and Mansuy, 2003). Early work experiences shape the decision of how long to stay in school, when to start the first job, and which job to take. Timing, amount, type and volatility of early work experiences are important factors for school-to-work transition patterns (see Hotz and Tienda, 2002; Alon, Donahoe, and Tienda, 2001).

Work experience can have positive and negative effects. On the one hand, early working experience can have a discouraging effect. If jobs neither involve responsibilities nor lead to skill development or pupils simply work too much early work experience may have detrimental effects on school performance (see Alon, Donahoe, and Tienda, 2001; Schoenhals,
2.6. RELEVANT INFLUENCING FACTORS

Tienda, and Schneider, 1998). Second generation migrants from low income families might have to withdraw from education at an early stage to start working and support their families. In this case they might not take on jobs which are rewarded on the labour market later. Thus, they might be more likely to make negative experiences through dead-end and/or low-paying jobs. Then they may feel discouraged to continue schooling because of their early work experience. Finally, positive effects of early work experience can always be due to prior individual differences with regard to education, academic ability and motivation (Freeman and Wise, 1982, 12).

On the other hand, early work experience might facilitate school-to-work entrances when it is accompanied by personality development, virtue and character formation (see for review Schoenhals, Tienda, and Schneider, 1998). Working while being in the education system may reflect an underlying commitment and ability to perform well in the labour market (Freeman and Wise, 1982, 12). As a consequence no work experience while being enrolled in the education system may result in lost preparation for future work. Employers seem to reward early work experience (cp. Hotz, Xiu, Tienda, and Ahituv, 2002; Freeman and Wise, 1982). Furthermore, it is not necessarily the case that staying in education is rewarded. Longer years of schooling might not improve school-to-work transitions for those who stay in education longer simply to escape unemployment (cp. Hotz and Tienda, 2002, 196). Although work experience is not as important for employers in the Netherlands like in Germany (see Section 3), work experience should have positive effects in both countries.

Language proficiency

Achieving a certain level of acculturation is a precondition for educational and labour market success. Structural integration usually presumes a certain spoken and written knowledge of the language of the country of residence. A certain level of written language competences is also necessary for formal application procedures. One could argue that in contrast to the first generation, language deficits are not necessarily a major obstacle for second generation migrants as they grew up and received their complete schooling in the host country (cf. Esser, 2006). Nevertheless, second generation migrants lag behind the native population concerning reading skills (see Section 3.3.3). Moreover, for many second generation migrants the language spoken at home differs from the language of instruction in schools or used in the job. Thus, the possibility that language difficulties may have an effect cannot be ruled out (Heath, Rothon, and Kilpi, 2008, 222).

Different factors determine language proficiency of second generation migrants. Parental language knowledge transmits to children. As duration of residence in the host country is responsible for language attainment (Dustmann, 1994b), parental years of residence in the
country influence second generation migrants’ language proficiency (Bleakley and Chin, 2008). Moreover, language attainment has been found to depend on usage of ethnic press and spouse’s origin language (Chiswick and Miller, 2002). Due to these factors language proficiency varies among second generation migrants. Consequently, findings that relate the level of immigrants’ language proficiency to their educational or labour market outcomes are to a certain degree also true for second generation migrants. We will argue in the following that not the level of both, home and host country language proficiency, are meaningful for first labour market outcomes, but that mainly the country of residence’s language matters.

It has been highly debated whether both the language used at home and language of instruction serve children of immigrants best in schools and at the labour market. The “interdependence hypothesis” defends that students will only be able to become proficient in a second language if they already have a good command of their first language (Cummins, 1979). In this cognitive perspective mother tongue proficiency is assumed to directly support second language attainment, cognitive competences and educational performance. The assumption that first-language proficiency is a crucial prerequisite for second-language acquisition is still widespread, although few persons maintain the strict version of the hypothesis (see for review Christensen and Stanat, 2007; von Bund-Länder Kommission, Goglin, Neumann, and Roth, 2003; Cummins, 2003). Some authors defend the importance of parental origin language knowledge on a cultural level: through knowledge of parental origin language(s) children with migration background acquire communicative skills. Consequently, familial control, ethnic identities and self-perception increase, which in turn are able to improve educational performance (see for review Esser, 2006a). Moreover, bilingualism might in some cases even benefit individuals’ labour market career in a globalised world (Christensen and Stanat, 2007; von Bund-Länder Kommission, Goglin, Neumann, and Roth, 2003). This might, however, only be the case if the first language knowledge is of advantage in addition to knowledge of the host country language. That is if the language has a special regional or global value (Esser, 2006a, 532/3). This might happen if the first language offers a productivity surplus or in certain jobs segments like translation and transnational entrepreneurship. Apart from predicting labour market success, being able to speak the language of their parents might be a worthwhile goal for the second generation. Bilingualism may help to preserve and intensify social ties with members of the immigrant community and parents’ home country residents. To sum up, empirical evidence for the cognitive or cultural hypotheses is not clear-cut and they are subject of considerable controversy.

It is widely accepted, though, that country of residence language proficiency is of particular importance for educational and labour market success. While knowledge of the
2.6. RELEVANT INFLUENCING FACTORS

Parental origin country at least does not hamper performance in schools or of the host country language (von Bund-Länder Kommission, Goglin, Neumann, and Roth, 2003, 56), the lack of competence in speaking, writing or reading the language of the country of residence hinders children of immigrants to perform well in school (Prenzel, Baumert, Blum, Lehmann, Leutner, Neubrand, Pekrum, Rost, and Schiefele, 2005). Moreover, language deficits have a negative effect on acquired competencies in subject specific areas. It has been concluded, therefore, that only the command of the language of the country of residence is a predictor for educational or labour market success (Esser, 2006a; Kalter, 2006). Moreover, it might be the case that only those can profit from language proficiency of the country of origin who have a good command of the language of the host country.

Immigrants in West Germany, who are more proficient in the second language in speaking and especially writing obtain higher earnings. For female and male workers writing fluency is more important than spoken fluency for labour market outcomes (Dustmann, 1994b). In the United Kingdom the positive correlation of language fluency and earning has been found to be influenced by the extent to which others in the respondents living areas spoke the same non-English language. Those who spoke English well could gain higher earnings, when they lived in an linguistically concentrated area (Chiswick and Miller, 2002).

An important problem when looking at language proficiency and labour market outcomes is endogenous language choice. Those who are fluent have been found to be favourably selected for higher earnings in a certain labour market sector. Like other forms of human capital language skills are, in part, acquired in response to an expected increment in earnings (Chiswick and Miller, 2002, 49). Besides, being employed offers immigrants the chance to improve their language proficiency (Euwals, Dagevos, Gijsberts, and Roodenburg, 2007b). Thus, it may not always be true that language proficiency only has a causal impact on labour market outcomes. Instead, reversed causality may play a role as well. Still, there is good reason to assume a causal impact of language proficiency on labour market outcomes. Studies which accounting for endogeneity and measurement error confirm a large influence of language proficiency on earnings in the U.K.. Moreover, according to the findings language proficiency positively affects employment probabilities (e.g. Dustmann and Fabbri, 2003, 714).

Unemployment rates

According to the discouraged worker effect aggregate local labour market factors influence individual decisions to stay in education or enter the labour market. The decision is therefore no longer explained by ability exclusively, but by labour market entrance push
and pull factors. Push factors include mechanisms that make second generation migrants leave the education system. Lower current opportunities and awareness of racism could be possible push factors. In contrast, pull factors refer to factors which make second generation migrants stay in the education system. This might be the case, for instance, if they believe that they can gain most from education. Consequently, it is important to control for regional labour markets in the analysis.

Moreover, an important source of contextual variation in outcomes relates to (local) labour market conditions (Müller and Gangl, 2003b, 6). While employers cannot afford to discriminate when labour markets are tight, discrimination may be more widespread when there is tough competition in the labour market (Crul, 2007). If labour markets tighten, the relative position of those entering the labour market can be expected to deteriorate disproportionately. The reason is that their labour market status is still volatile and largely unprotected by employer investments, formal employment protection legislation, or union coverage. As a consequence young workers are likely to feel the effects of current job shortages to a disproportionate degree. Resulting transition patterns will show an increase in the incidence of spells of unemployment or employment in temporary or marginal forms of employment (Müller and Gangl, 2003b, 8). The aggregate unemployment rate of a country is positively correlated to unemployment risks of labour market entrants (Gangl, 2000, 16).

A system that makes more job opportunities available to native youth is supposed to also smoothen the way for migrant youth (Crul and Vermeulen, 2003, 982). Therefore, the overall employment situation in the countries of comparison are important contextual factors when looking at school-to-work transitions.

Furthermore, there is the argument that the actual rate of unemployment is hypercyclically related to ethnic penalties with regard to unemployment (see also Section 4.4.1). That is, unemployment of second generation migrants increases more rapidly in times of economic downturn than natives’ unemployment rates. Empirical findings for the assumption that unemployment rates are related to ethnic penalties are mixed in general. This mechanism was, however, found to be true for Germany and the Netherlands to a certain extent (Heath, 2007).

2.7 Contribution of the thesis to the literature

The previous chapter has shown that previous studies analysed single aspects of ethnic inequality in school-to-work transitions. Most studies did not address second generation migrants specifically but young first and second generation migrants. Analysis are often based on cross-sectional data. Systematic assessment of the impact of second generation ethnicity on different indicators of school-to-work transitions based on longitudinal data
is missing in previous research so far. Previous research explicitly mentions migrants’ human capital composition as the most important factor for higher unemployment and worse positioning at school-to-work transitions (e.g. in collaboration with Christoph Hilbert, Brizinsky-Fay, Schömann, and Geerdes, 2007). Fewer studies look at skills of second generation migrants. Moreover, the mechanisms that transmit negative skill-wise selection of first generation labour migrants to second generation migrants in school-to-work transitions are not clearcut. Few studies explicitly relate to institutional influences in school-to-work transitions by conducting cross-country analyses.

The contribution of this thesis to the literature is, first, the analyses of ethnic inequality in school-to-work transitions specifically for second generation migrants. Second, we look at different ethnic groups of second generation migrants and compare their situation. Third, we analyse different indicators of school-to-work transitions to see whether the same effects show. Fourth, the analyses are based on longitudinal data. Fifth, we analyse these school-to-work transition in two countries. This way the present thesis includes the institutional perspective and combines it with research on ethnic inequality in school-to-work transitions.
Chapter 3

Country contexts in Germany and the Netherlands

Institutions structuring life courses shape the process of school-to-work transitions. While education and production regimes distribute risks to certain groups within a country, welfare states determine degree and scope to which some groups face specific uncertainties within a country. Moreover, institutional conditions of school-to-work transition vary substantially over time and between countries. Instead of single policies the interplay of national institutional arrangements matter for school-to-work transitions of second generation migrants (cp. Crul and Vermeulen, 2003, 977). Therefore, we need to understand in what way aims, resources and mechanisms interact with contextual conditions of school-to-work transitions guiding decisions of individual actors. This chapter describes relevant welfare and life course institutions and contrasts institutional differences between Germany and the Netherlands.

In the individual sections, we will pay special attention to whether and why young people’s increasingly transit from school into flexible forms of employment. We are concerned with whether this might apply to second generation migrants to an overproportional extent. National institutions and historically grown social structures are important in this context. They filter the extent to which young persons are affected by the consequences of labour market flexibility (Blossfeld, Buchholz, Bukodi, Ebralidze, Kurz, Relikowski, and Schmelzer, 2005, 9). Moreover, the way young people enter the labour market, the kind of labour market segmentation and typical mobility patterns within the market matter in that context (Scherer, 2004).

The chapter begins by sketching the immigration history and policy and proceeds by describing the school-to-work transition relevant welfare state arrangements, education system design and labour market institutions separately for each country. At the end of each section, we compare differences and similarities. We sum up the differences between
country context at the end of the chapter.

3.1 Immigration policy and history

Until the second half of the twentieth century, most countries in Western Europe were countries of net emigration (except for France). From the 1940s and 1950s on, reconstruction and labour shortages led to substantial migration from Southern European countries like Italy, Spain, Greece and Portugal. After the 1960s, migration programmes were extended to so called guest workers from Turkey, Morocco and Yugoslavia. These migrants are the parents of todays’ second generation. We will go into detail on their skill-wise composition, labour market integration and history as these factors are crucial for understanding second generation migrants’ school-to-work transitions (see intergenerational transmission, Section 4.3.2). First generation migrants’ immigration history and policy conditions shape how second generation migrant groups are composed (Euwals, Dagevos, Gijsberts, and Roodenburg, 2007a).

A large part of the labour migration was induced through formal so called guest worker programmes based on intergovernmental agreements. Within these programmes, less-skilled workers were hired for industrial wage-labour jobs. Initially, a “rotation principle” was supposed to distribute labour migrants on a temporary basis. Their migration was (wrongly) thought to be reversible and temporary. In addition, however, migration outside labour migrant programmes took place during this phase (e.g. in the Netherlands). The oil shock of 1973 drastically reduced labour migration in Europe, but it continued through family reunions. Later waves of immigrants with other motives, like refugees, followed. Within the development of the European Union, especially the establishment of the European single market and free flow of labour in 1993 produced large migration flows within Europe. These migrant groups partly deviate from the (skill) composition of the previous labour migrant groups (Heath, Rothon, and Kilpi, 2008), but they have been to recent to influence our analyses.

The following sections describe the specific migration history and policy reactions of Germany and the Netherlands. They shall give an understanding of the second generations’ parents skillwise composition in the two countries.

3.1.1 German immigration history and policy

Just after World War II Germany saw mainly migration of ethnic Germans, displaced persons and internal East and West migration. From mid-1950s on, immigration to Germany was characterised by labour migration. Germany’s quick economic growth, the “economic
3.1. IMMIGRATION POLICY AND HISTORY

Table 3.1: Immigration to Germany

<table>
<thead>
<tr>
<th>Period</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961-1973</td>
<td>Recruitment of guest workers</td>
</tr>
<tr>
<td>1973-1988/89</td>
<td>Stop of recruitment, consolidation of foreign resident population in West Germany through family reunion</td>
</tr>
<tr>
<td>1988-1991</td>
<td>Immigration of ethnic Germans, asylum seekers, war refugees, “new” work migrants; second high phase of internal migration between East and West Germany</td>
</tr>
<tr>
<td>1992-2000</td>
<td>Asylum compromise, immigration of ethnic Germans and asylum seekers is restricted</td>
</tr>
<tr>
<td>since 2000</td>
<td>New citizenship law, introduction of GreenCard, immigration law</td>
</tr>
</tbody>
</table>

miracle”, during the 1950s led to a growing shortage of labour in lower and less qualified sectors of the economy (Kalter and Granato, 2007, 274). To fill these shortages, the government signed agreements with several European and North African countries for the recruitment of labour migrants. First of all, the government signed agreements with Italy (1955) and both, Greece and Spain (1960). The erection of the German wall on August 13, 1961 limited internal migration to West Germany and led to increased recruitment. Recruitment agreements with Turkey (1961), Morocco (1963), Portugal (1964), Tunisia (1965), and Ex-Yugoslavia (1968) followed. While the inflow from Morocco and Tunisia was never significant, the early years of recruitment were dominated by Italian, Spanish and Greek labour migrants. Turkish migrants and migrants from Ex-Yugoslavia became dominant migrant groups after 1967 (Kalter and Granato, 2007, 274). In 1973, four million foreign born people lived in Germany.

Labour migrants had been recruited for low and unskilled jobs mainly in the raw material industry and mining. Thus, their average level of education was low (Granato and Kalter, 2001; Rudolph, 1996). Severe ethnic stratification – “Unterschichtung” – emerged as labour migrants were integrated into the German labour market below the lowest classes and concentrated in sectors and positions at the lowest levels of occupational hierarchies.

Labour migrants were initially recruited on a temporary “stay-and-return” migration basis within the “rotation model” (Kalter and Granato, 2007). All groups involved in the recruitment process (employers, unions, the German and the Turkish states, and initially labour migrants themselves) misjudged the immigration situation and thought that immigrants would return to their home countries (Worbs, 2003). First, this was not the case, because the planned rotation system turned out as impractical for employers. Employers began to extend labour contracts, which were initially thought to last 1-2 years. Consequently, the labour migrants started to center their life in Germany. Second, substantive family reunion emerged. Overall unemployment, however, increased after the 1973 OPEC oil embargo and negatively affected the labour demand. Consequently, the German govern-
ment terminated the recruiting of labour migrants. The government intended to diminish the percentage of foreign population, but this did not happen. After a short decline, the percentage of migrants increased due to family reunion because spouses and children were allowed to come (Hanesch and Maschke, 2000). Family reunion significantly changed the demographic composition of migrants. The share of women as well as of persons aged below 20 and above 50 increased.

At the same time, educational expansion resulted in an increase of educational inequalities between migrants and natives in Germany. The percentage of natives with secondary education certificates increased faster than of foreign nationals (Kalter and Granato, 2002). At the beginning of the 1980s, family reunion decreased while migrant unemployment continuously rose. Therefore, the German government tried to promote “return migration” with financial incentives. The impact was rather small (Kalter and Granato, 2007, 276).

In Germany (like in most European immigration countries) 1980s educational policies did not adapt to the changing realities. Coherent policy responses concerning the education of immigrant pupils were slow (Crul and Vermeulen, 2003, 976). Only in 1964 the coordinating body on the federal level (Kultusministerkonferenz) enforced that labour migrants’ children school attend the regular school system. If necessary, the second generation should receive preparatory or parallel German language training. Moreover, they should be offered training in their mother tongue on a voluntary basis after regular classes. In general, skills of immigrants and their offspring were hardly mentioned during discussions about educational opportunities in the 1960s (von Below, 2003, 10).

Economic sectors with many migrant workers suffered particularly from severe structural change. Jobs were cut down in the heavy metal industry and other typical low-skill blue-collar occupations of first generation migrants. Restructuring and increasing knowledge intensity in the context of globalisation made most of these employments disappear in Germany. Due to their low skill level, occupational alternatives were rare for labour migrants. Increasing occupation in the service sector could not compensate the losses in employment and unemployment further increased among migrants (Seifert, 2001). As a consequence, the occupational and social networks of the parental generation barely serve as a follow-up chance for the second generation (Bade and Bommes, 2004, cf.). At the same time, the percentage of second generation migrants increased. In 1996 about 20% of employed labour migrant country nationals had been born in Germany or migrated to Germany before school entrance age (Granato and Kalter, 2001).

At the beginning of the 1990s, new groups of migrants other than former labour migrants and family reunion of labour migrants came to Germany: refugees and asylum seekers, ethnic Germans and “new” work migrants from EU-member states. Furthermore, since the late 1980s the immigration of high skilled workers in international groups began in
the course of globalisation, although immigration was only possible under strict conditions (Kolb, 2005, 19). However, children of these groups of immigrants are not yet old enough to be included in our analysis.

In the year 2000, the German government reformed its citizenship law and installed the Green Card which enabled high skilled work immigration from non-European countries. Henceforth, German immigration policy turned to being driven by economic principles (Kolb, 2005). The Immigration Act of 2005 further facilitated (labour market) access of high skilled migrants. It also eased access to German citizenship and created naturalisation by birth (*ius soli*) (Bundesministerium des Innern, 2005; Diefenbach, 2002b). Double citizenship is allowed on a temporal basis in Germany. Children with a foreign nationality have to decide for either the German or their foreign nationality between the ages 18 and 23.\(^1\)

At the end of the year 2000, approximately 4.1 million second generation migrants (persons who have been born in Germany and were at an age below 35) lived in Germany. They consisted of about 1,322,500 Turkish, 617,700 Ex-Yugoslavian, 314,300 Italian, 184,600 Greek, 71,900 Portuguese, and 55,600 Spanish nationals. Naturalised persons or those who immigrated at an early age are not included in these numbers. It has been estimated that at least another 100,000 second generation migrants were German citizens in the year 2000 (Worbs, 2003).\(^2\)

**German immigration policy**

In Germany, migrants were not regarded as part of the national community and had a weak basis of claiming cultural group rights. Germany recognizes religious schools and give public funding, but they cannot claim full equality with public schools like in the Netherlands (Duyvené de Wit and Koopmans, 2005, 58). Despite the long lasting official denial of the immigration situation, Germany employed some integration policies (other than temporary measures of accommodation) since the 1970s. It did, however, not follow a specific, planned integration policy (Heckmann, Penn, Schnapper, Penninx, Westin, Gomez, Kyntäjä, Wimmer, and Dinkel, 2001). The main characteristic of the German mode of integration has been to open the core institutions to immigrants (labour market, self-employment, education and training system, housing) (Worbs, 2003). Immigrants were included in the general welfare state and social policy system. The fact that Germany did

\(^1\)(For more detailed information about immigration policy see Diefenbach, 2002b; Granato and Kalter, 2001; Hanesch and Maschke, 2000; Kolb, 2005; Rist, 1978; Rudolph, 1996).

\(^2\)Official statistics properly distinguish second generation migrants since 2004. Beforehand, the number could only be roughly estimated. Moreover, German naturalization statistics do not record the place or the country of birth of successful applicants.
not accept immigrants as citizens, but included them in almost all policy measures has been argued to have produced counteracting effects on overall integration. For instance, the ambivalence of welfare state integration without citizenship might have led to a lack of identificational integration of migrants (Heckmann, Penn, Schnapper, Penninx, Westin, Gomez, Kyntäjä, Wimmer, and Dinkel, 2001).

The Turks in Germany

Between 1961 and 1973, Germany recruited about 740,000 Turkish labour migrants. About half had lived in larger Turkish cities shortly before the emigration. Two thirds of them, however, actually originated from rural areas. Like other labour migrants they were usually recruited for semi-skilled or unskilled jobs in the heavy industry or construction sectors. At the end of 2002, 7.34 million foreigners lived in Germany. The largest group, about 2.47 million, form those with Turkish background. 26.1% (1.91 million) of them had the Turkish nationality and approximately another 564,800 were naturalised former Turkish citizens. 90% of the Turkish nationals hold a comparatively secure legal status. About two thirds are younger than 35. As most other immigrants, they predominantly settled in industrial conurbations and large cities such as Berlin, Frankfurt, Hamburg, and Munich. About 70% of the Turkish immigrants live in four of the sixteen federal states: North Rhine-Westphalia, Baden-Württemberg, Bavaria, and Hesse. The Turkish community in Germany largely reflects the ethnic and religious variety in the country of origin (Worbs, 2003).

The majority of Turkish first and second generation migrants is included in ethnically homogenous social networks and show little identification with the immigration country. The second generation, however, goes clearly towards more interethnic contacts and a broader spectrum of self-perceptions and identifications (Worbs, 2003, 1016).

Legal conditions for labour migrants from Turkey were different from those from Greece, Italy and Spain. The criterion for free movement within the European Union (EU) is the citizenship of a member state. In the treaty of Maastricht (1992), a European citizenship was created, which granted all citizens the right to work and live in other member states. Simultaneously, it excludes persons with any other nationality. While the European migrants had the right of free movement, Turkish migrants had an insecure residence status.
3.1. IMMIGRATION POLICY AND HISTORY

3.1.2 Dutch immigration history and policy

In the Netherlands, recruitment of labour migrants started at the end of the 1950s when the post-war reconstruction of the Dutch industry was finished and domestic labour supply was insufficient for further expansion. In a first wave industries attracted semi-skilled and skilled workers from Spain, Italy, and Greece. The workers were recruited to alleviate the labour shortages in the booming economy and they mostly settled temporarily. Half of those who stayed married interethnically and therefore are not visible as a group anymore. In a second wave, during the early and mid-1960s, largely unskilled workers came from Morocco and the Turkish countryside with few or no educational qualifications. The educational level of Moroccans was even more rudimentary than that of Turkish migrants. Both groups were employed in semi- or unskilled jobs in the industrial sector. During the 1960s immigrants initially worked in manufacturing, later also in horticulture.

The economic crisis of the 1980s induced the end of labour-intensive forms of industrial production, which had been prevalent in the foregoing decades. Afterwards, technology-driven forms of industrial production appeared to have a future in the service-dominated economy. This restructuring changed the labour market situation of labour migrants drastically. There was a mismatch between demand and supply, as migrants lacked qualifications that were demanded in the rapidly expanding service sector. Consequently, many minority workers lost their jobs (Tesser and Dronkers, 2007). Nevertheless, migration continued mainly through family formation and marriage migration (OECD, 2008c). Return migration to Italy and Spain largely exceeded the returns to Turkey and Morocco. Migration of Turkish and Moroccan workers increased due to family reunion and the immigration of spouses and children.

Second generation migrants constitute about 10% of the Dutch population today (OECD, 2008c). They form a much larger share in the Netherlands than in other European OECD countries and the second generation is now as large as that of first generation migrants themselves (OECD, 2008b).

Differences between Caribbean immigrants and labour migrants from Turkey and Morocco in the Netherlands

In the empirical analysis below we will contrast descendants of Caribbean immigrants (from Surinam, Aruba and the Dutch Antilles) and labour migrants (from Turkey and Morocco). The composition of these two groups is determined by important differences that are likely to affect their descendants’ school-to-work transitions. Despite in-group differences, we will argue that inter group differences are larger for first generation immigrants from the Caribbean and Turkey and Morocco. This section will first give an overview of the in-group
differences and then describe inter group differences.

Immigrants from Turkey and Morocco arrived quite simultaneously in the Netherlands. They share similar migration histories, socio-economic characteristics and religious beliefs. The integration of the two groups is now considered most problematic among all immigrant groups in the Netherlands. Nevertheless, they are two heterogeneous groups and partly developed in different directions. Although the educational level of first generation Moroccan parents was even lower than that of the Turkish parents, the Moroccan community is seen as more diverse than the Turkish community, with more conflict and debate and less community spirit (Crul and Vermeulen, 2003). Social integration and secularization advance more rapidly among persons with Moroccan origin than among their Turkish counterparts. This seems to be related to lack of media from Moroccan first generation migrant’ origin regions in the Netherlands. The Turkish community in the Netherlands tends to stick to traditional family values, while change is characteristic to the Moroccan (Crul and Doornmik, 2003).

Caribbean immigrants already started entering the Netherlands immediately after World War II. Migration from these regions happened from colonial times onwards, but it accelerated due to historical circumstances. Caribbean immigrants in the Netherlands come from Surinam (Dutch Guyana) and the Dutch Antilles, which consist of the two Windward Islands (Saba, Saint Eustatius and half French Saint Martin) and the Leeward Islands (Curaçao, Aruba and Bonaire). Initially, Antillean and Surinamese natives and Dutch elites sent their children to the Netherlands for schooling or to study. After the 1960s, however, more and more working class people came to the Netherlands. In the 1970s and 1980s, lower classes from Antillean and Surinamese Caribbean regions increasingly migrated (van Niekerk, 2007b). The same trend holds for the Antilleans, although it set in a bit later. In our data, parents of both, Postcolonial and labour migrants, belong to the lower qualified second wave of immigration and the social origin of second generation migrant groups is comparable in terms of parental skills.

While migration from Antilles still continues, migration from Surinam had its peak in the 1970s and decreased sharply in the 1980s (van Niekerk, 2007b; OECD, 2008c). The Antilles form an autonomous region of the kingdom of the Netherlands. Its inhabitants have full right of access and abode in the Netherlands. As Dutch is one of the official languages, Antilleans face less problems with learning the Dutch language (van Niekerk, 2007b). Today, there are about 130,000 persons with Antillean background in the Netherlands. 38% of them are second generation migrants. In contrast, 332,000 persons with Surinamese background live in the Netherlands, of which 43% are second generation. The Antilles are more dispersed throughout the country, while the Surinamese are largely concentrated in the Western urbanised part of the country “De Randstad”.

Differences between Caribbean immigrants and labour migrants are more pronounced than within the groups. Second generation migrants with Turkish and Moroccan background originate from far more disadvantaged socio-economic circumstances. In contrast to Postcolonial immigrants, they did not share common elements of history and language with the Dutch (Crul and Doomernik, 2003, 1041). Caribbean immigrants had a stronger legal status from the beginning, as they could easily become Dutch citizens, unlike Turks and Moroccans. Altogether, most of the Carribean immigrants in the Netherlands are Dutch citizens. Compared to other immigrant groups, they have the advantage of being somewhat more acquainted with the Dutch language and culture.

The post-colonial status has made the Dutch perceive Carribeans immigrants as being more ‘like the Dutch’ than the labour migrants. Generally, the Muslim immigrants (like Turks and Moroccans) attract far more negative public attention today than Carribeans. In spite of group differences, the social position of Caribbean groups in Dutch society can be characterised as relatively favourable in comparison with Moroccans or Turks. This can partly be attributed to their Postcolonial status (van Niekerk, 2007b).

The rate of intermarriage is an indicator of social integration. It is much higher among Caribbean (especially female) second generation migrants than among Turkish or Moroccan second generation migrants in the Netherlands. The Caribbean social networks or communities are in general relatively open, they have more social relations with native Dutch or persons outside their own group than the Turkish or Moroccans. Second generation Carribeans also have more Dutch friends than first generation Carribeans (van Niekerk, 2007b, see).

While most Turkish and Moroccan women are married to a man from the same ethnic group, Surinamese and Antillean women are more likely to marry native Dutch men (43 and 61 % of the marriages, respectively, in the period between 1997-2001) (Bevelander and Groeneveld, 2006, 788). Moreover, Surinamese and Antillean women in the Netherlands are quite often single mothers (ibid.). Arguably, ethnic cohesion adversely affects educational success of female students. In the Indo-Surinamese community the opinion prevails, that education leads to high social status of the family (van Niekerk, 2007a). In contrast, the Turkish community in the Netherlands places less value on the schooling of their daughters and rather expect them to marry early. It is, however, unclear how far these opinions still influence decisions of today’s second generation. Traditional gender roles are changing within migrant communities (Crul and Doomernik, 2003).

---

\(^3\)The only exception being negative media reports on young, recently arrived Antilleans (van Niekerk, 2007b).
Immigration policy in the Netherlands

Dutch minority policies developed in a context of historical legacy of the pillarization and the consociational model for conflict regulation (Duyvené de Wit and Koopmans, 2005). In the Netherlands, conflicts have traditionally been settled by pacification and compromise. The principle of so-called consociational democracy led to equal access to state resources for all groups (including newcomers) and to the idea of a Dutch multicultural society (Heckmann, Penn, Schnapper, Penninx, Westin, Gomez, Kyntäjä, Wimmer, and Dinkel, 2001, 12), which has heavily criticized for not facilitating socio-economic integration of ethnic minorities (see below). Furthermore, Dutch society was traditionally based on denominational pluralism. The Netherlands achieved emancipation of traditional Dutch native minorities through a framework of religious pillarization. Although pillarization was relegated during the 1970s and social segregation along denominational lines does not exist anymore, the system is still embedded in many Dutch legal and institutional structures. The school system and mass media that are crucial for the transmitting identities still reflect the pillarized legacy and are structured along the lines of cultural, political or religious difference. Every denomination can found a school and receive funding from the government. Pupils have the right to attend religious classes in public schools. Moreover, public broadcasting organizations have to devote at least 20% of its programme to minority publics. This encourages immigrant groups to organize their communities around their religious needs (Crul and Doomernik, 2003; Duyvené de Wit and Koopmans, 2005). In addition, pillarization also still applies in conflict regulation models and affects other political areas not related to a cultural or political dimension. This is the case as minority organizations are financed by the Dutch national government. These organizations are set up along the lines of the official "ethnic minority groups" and their leaders are incorporated in advisory boards (Duyvené de Wit and Koopmans, 2005).

The Dutch Scientific Council on minority policies was asked in 1978 to formulate a proposal for a general policy for immigrant minorities, which then led to a provisional White Paper in 1981 and the minority paper (Minderhedennota) in 1983 (Vermeulen and Penninx, 2000; Tränhardt, 2000, 20). Step by step, the Dutch government agreed on a planned policy of voting rights for foreigners, anti-discrimination laws, security of residence after five years, and easy naturalization. Although not without difficulties and contradictions, the reforms were based on elite consensus (Tränhardt, 2000). One of the aims of the minority policies was to better integrate newcomers by creating a stronger legal basis. The government implemented a more secure residence status, and an opportunity for naturalization.

4 This happened in the context of a debate about a total revision of the Dutch constitution, the unexpected high immigration from Surinam before and after the country’s independence and the uncertainty how to deal with labour migrants after the recruitment stop.
to further facilitate integration (Crul and Doomernik, 2003). It is possible for citizens of non EU-countries to naturalize after three to five years of legal residence if they are sufficiently integrated and have some command of the Dutch language and sufficient economic resources. Retention of another citizenship was additionally allowed, but has recently been limited. Anti-discrimination legislation addresses both racial and sexual discrimination in the Netherlands (Tesser and Dronkers, 2007).

It has been suggested that the strong emphasis on, and facilitation of, cultural difference has been detrimental to integration in the Netherlands (Duyvené de Wit and Koopmans, 2005). Some authors hold the Dutch policy responsible for counter-productive results in the economic and social field (Tränhardt, 2000) and ethnic fragmentation (De Zwart and Poppelaars, 2007). The Dutch policy is supposed to have led to a lack of economic success because it stresses the difference between minorities and the majority. Group specific political institutions and government support for underachievers targeted at migrants lead to the idea that ethnic minorities are not full members of the Dutch society. While migrants are tolerated they will not be accepted into key positions or as equals. This policy is likely to have created stereotypes that could be exploited by politicians (Tränhardt, 2000). In recent years public upheaval increased with regard to family reunion migration, asylum seekers, religious values of some ethnic minorities, and Islamic schools within Dutch society. This resulted in the rise of right-wing populist parties as coalition members in local and national government (Tesser and Dronkers, 2007, 366).

Throughout the last years, the Dutch policy developed quite differently. Since the 1990s, governments in the Netherlands induced policy changes that aimed at making immigration policy more restrictive and more selective towards (skilled) migrant workers. For instance, the ‘citizenship courses’ introduced in 1998 and the Dutch nationality law of 2003 made naturalization of ethnic minority members more difficult. While throughout many years the Dutch government focused on affirmative action, the focus shifted more towards “civic integration policy” during the 1990s (OECD, 2008b). It emphasizes immigrants’ duties more strongly. Immigrants have to pass an integration exam, learn the Dutch language and get to know Dutch society. These policies were supposed to improve integration into the educational system and the labour market.

### 3.1.3 Comparison of migration histories and policies

Both Germany and the Netherlands recruited Turkish labour migrants during the 1950s and 1960s. The Turks are the largest group of immigrants in both countries. Their integration is regarded as problematic as first generation migrants were skill-wise negatively selected in both countries. Germany’s other large groups of immigrants are also labour migrants (Ex-Yugoslavian, Spanish, Greek, and Italian). The other large groups of immi-
grants in the Netherlands are descendants of Moroccan labour migrants and of Postcolonial migrants (Surinamese, Netherlands Antilleans and Arubians). Generally, the integration of Postcolonial immigrants in the Netherlands is perceived as better than of other groups. The fact that Postcolonial migrants have a longer immigration history to the Netherlands than labour migrants contributes to this. Furthermore, interethnic marriages between Postcolonial migrants and natives are more frequent than among other immigrant groups and natives. Netherlands Antilleans have a better Dutch language proficiency than (most) other migrants as Dutch is one of the official languages in the Dutch Antilles.

During the 1980s and 1990s naturalisation, family formation and family reunification had been easier in the Netherlands than in Germany. Integration policies improved quality of life and identification with the host country. Access to the Netherlands was easier than access to Germany. Skill-wise different immigrants therefore came to the Netherlands than to Germany. The restrictive German policies seem to have shaped the skill composition of first generation migrants in a more favourable way for school-to-work transitions. Moreover, the Dutch integration policies emphasised the difference of ethnic minorities from natives and may have produced counter-integrative effects.

Favourable policies and regulations for immigrants in the Netherlands are described in the following. First, Dutch integration policies existed since the beginning of the 1980s. The focus was, however, not on integration but, as described above, on immigrants’ preservation of their own cultural identity. Therefore, schools received additional funds for ethnic minority children. Children with migration background received lessons in their own language and culture during school hours. Moreover, ethnic minority organisations received subsidies and low skilled members of ethnic groups were an explicit target group in job creation plans. Germany implemented job training only in 1990. Linguistic skills schemes were installed to help second generation immigrants in finding employment. General policy measures, not specifically targeted at migrants, dominated in Germany. Especially schooling was thought to be the main integration pathway. As described above, policies became recently more similar in the countries (Enwals, Dagevos, Gijsberts, and Roojenburg, 2007a).

Second, it has always been easier to become a citizen in the Netherlands than in Germany. Naturalisation requirements are supposed to induce several mechanisms contributing to different labour market outcomes like identification with the host country. Until recently German nationality was hard to acquire for persons without German ancestors. The legal possibility only existed for first and second generation migrants from July 1993 onwards and under the condition of 15(8) years of residency. After 2000, the required residency duration was decreased to eight years for first generation migrants. Second generation migrants
could opt for German nationality at reaching maturity (at age 18). Double citizenships were not allowed. In contrast, becoming a Dutch citizen has always been comparably easy. Minimum durations of residence were 3 to 5 years. Second generation migrants with two non-Dutch parents can opt for Dutch citizenship at reaching maturity under the condition that they spent their whole life in the Netherlands. Double citizenships were allowed between 1992 and 1997, which led to a peak of naturalisation rates during that time (Euwals, Dagevos, Gijsberts, and Roodeburg, 2007a).

The factors that have shaped immigrants group composition more favourably for school-to-work transitions in Germany are the following. First, the Netherlands never employed active remigration policies, which Germany in contrast implemented during 1983/4. This policy considerably decreased the number of Turks living in Germany at that time (Euwals, Dagevos, Gijsberts, and Roodeburg, 2007a).

Second, staying in the country was easier for immigrants in the Netherlands than in Germany. This served as an incentive for immigrants to come to the Netherlands. Both countries had different requirements for permanent residency. Immigrants in Germany could apply for a permanent residency permit after eight years of stay and were required to be economically independent. In contrast, the term was five years in the Netherlands and requirements with respect to economic self-reliance were in practice more lenient (Euwals, Dagevos, Gijsberts, and Roodeburg, 2007a).

Third, the immigrants’ level of education might have been higher in Germany than in the Netherlands due to family reunification and formation policies. In Germany, employment and income conditions were imposed, while Dutch policy was more liberal. Consequently, the skill composition changed in Germany. In later waves of immigration, more asylum seekers came to Germany and increased the immigrants groups’ level of education. Only recently, Germany and the Netherlands revised their policies so that they became more similar – less restrictive in Germany and more restrictive in the Netherlands (Euwals, Dagevos, Gijsberts, and Roodeburg, 2007a). The Dutch law has been revised in 1998 and 2003 and naturalisation requires a naturalization test now. In contrast, access to citizenship has become more liberal in Germany with the new citizenship legislation in 2000 (Duyvené de Wit and Koopmans, 2005). However, consequences of these recent changes will be hardly visible in our data.

Fourth, in the Netherlands, the economic crisis of the 1980s and the deactivation of social security arrangements existing at that time might have influenced the composition of Turkish second generation migrants in a special way. While employment rates were extremely high among first generation labour immigrants of the 1960s and early 1970s, the oil crisis hit the Netherlands more severely than Germany. The Netherlands experienced massive redundancies and unemployment rates grew rapidly from 6% in 1979 to 12% in
1982. Around that time, the disability scheme served as an alternative to the less generous unemployment scheme. Therefore, the inflow into the disability scheme (especially of low skilled workers) was high (cf. Becker, 2000). Consequently, many Turkish labour migrants were outside the labour market for the rest of their lives. Today, first generation migrants remain less active at the labour market. This still influences the labour market situation of their children significantly, as we will argue later.

During the 1990s large differences remained between Germany and the Netherlands with regard to integration into the political sphere (Duyvené de Wit and Koopmans, 2005). These differences can affect behaviour on the labour market more towards short-term gains in Germany. The Dutch integration regime is defined as individually civic and collectively pluralist. The Netherlands granted naturalisation based on territorial birth. Dutch citizenship rights acknowledge a variety of cultural patterns and extend to the recognition of ethnic, cultural and religious groups. In contrast, citizenship could be acquired through descent and right of citizenship are limited to individual citizens. In the public sphere, citizens have to assimilate. Thus, the German model has been characterized as individually ethnic and collectively monist. Consequently, ethnic minorities’ political claims are more publicly visible in the Netherlands than in Germany. In the 1990s, ethnic minorities perceived their their settlement positions as unsecure in Germany, while they have been more confident towards their legitimate presence in the Netherlands (Duyvené de Wit and Koopmans, 2005).

3.2 The welfare state

The following section gives an overview of relevant German and Dutch welfare states features for school-to-work transitions. Welfare states determine degree and scope to which some groups face specific uncertainties within a country because they differ by the priorities they give to certain policies concerning labour markets, gender, and social equality (Blossfeld, Buchholz, Bukodi, Ebralidze, Kurz, Relikowski, and Schmelzer, 2005, 16). On the one hand, welfare states might help second generation migrant overcoming economic hardship arising from the migration of their parents and support their school-to-work transitions. This could be achieved by offering economic benefits or language support programmes through more generous social security schemes.

On the other hand, the same social security arrangements might have created ethnic niches for first generation migrants. Thereby, the arrangements might discourage contact with the indigenous surroundings (either in- or outside the labour market) for second generation migrants. In that case they may rather hinder structural integration and school-
to-work transitions (cp. Tesser and Dronkers, 2007, 370). The section begins with an overview of the German and Dutch welfare states and proceeds by contrasting the relevant differences for second generation migrants’ school-to-work transitions.

### 3.2.1 The German welfare state

Germany can be seen as one of the archetype countries of the conservative-corporatist welfare model in the Esping-Andersen typology (Esping-Andersen, 1990, 2000). These welfare regimes typically focus on providing economic security for labour market outsiders, for instance through a generous unemployment insurance system (before the Hartz IV reforms in Germany), rather than on active, employment-sustaining measures. The welfare state is transfer-oriented and protects the living standard of those who are out of the labour market.\(^5\) Welfare state provisions and care services are far less developed than in social-democratic welfare states.

The German welfare state is decommodifying: it is transfer-oriented and focuses strongly on buffering employment insecurities by mitigating the effects on the not-employed population. It aims less at creating jobs and bringing people into employment (Esping-Andersen, 1990). Active labour market policy expenditures are comparatively low and unemployment is of longer duration in Germany (Buchholz and Kurz, 2008). The social security system is closely linked to individuals employment history and was developed upon the idea of standard employment relationships like continuous and life-long full-time employment. The level of unemployment benefits depends on service years and paid contributions – a feature which also highlights the emphasis on labour market insiders over outsiders (Buchholz and Kurz, 2008, 5).

### Gender effects of the German welfare state

Employment rates for women are lower in Germany than for men. This is the consequence of another characteristic of conservative welfare states: the concept of a traditional gender

---

\(^5\) The Hartz reforms I-IV – named after the chairman heading the reform package commission – were implemented during the years 2003-2005 and fundamentally changed the institutional and legal framework that determined the rights and duties of the unemployed and, most importantly, the benefit system. They restricted the possibility of living standard obtainment as those who become unemployed and are entitled to receive a percentage of their last income for 12 month (ALG I) and afterwards all entitled receive the same amount of benefits. Furthermore, the reforms included modifications of active and passive labour market policies and protection was reduced in some segments of the labour market (for details see Jacobi and Klüwer, 2006). The reforms cut financial security in case of long-term unemployment, which was later improved slightly again. Therefore, they targeted labour market outsiders and not insiders (Buchholz and Kurz, 2008).
contract. Fiscal policies (e.g. “Ehegattensplitting”) tend to support the ‘male-breadwinner model’ (Blossfeld, Buchholz, Bukodi, Ebralidze, Kurz, Relikowski, and Schmelzer, 2005). There is a tendency that female partners do the unpaid reproductive and care work at home and male partners are employed. Therefore, men’s integration into the German social security system is directly secured via paid work, while a women’s social security is supposed to derive indirectly from the employment status of the father or the husband as the head of the household. Mothers and wives tend to stay at home or work part-time. In this framework discontinuous careers, part-time work, flexible work arrangements, and less secure employment relationships are attractive or at least tolerable to married women. Employers hire women for less secure positions and keep secure, full-time employment for men. Men have high incentives to work in secure, well-paid full time positions (Kurz, 2002).

Moreover, most schools are still half-day school in Germany which complicates full-time occupation of both parents.\(^6\) This structure is an additional incentive for the male breadwinner model as it makes the existence of an inactive parent, mostly the housewife—mother, necessary (Gottschall, 2002). Bad infrastructure of care services, the small public sector and other incentives contribute to this.

### 3.2.2 The Dutch welfare state

The Dutch government consults social partners in all major socio-economic policy areas.\(^7\) Therefore, Esping-Anderson classified the Dutch welfare state as corporatist (Esping-Andersen, 1990).\(^8\) Despite this strong corporatist character, the Dutch welfare state is considered as a 'hybrid' between Esping-Andersens conservative/corporatist and social-democratic welfare regimes. The reasons are that 1) the Dutch social security system contains Bismarckian-type social insurances for workers as well as universal, so-called people’s insurances covering all citizens and 2) its insurance and assistance benefits are comprehensive and relatively generous like in social-democratic type countries. With the substantial introduction of liberal elements, the hybrid character of the Dutch welfare state further increased in the past two decades. The overall level of inequality was comparatively low in the Netherlands. Compared to other European countries social spending was high in the Netherlands and the biggest share of social transfers goes to households in

\(^6\)Only recently it has been decided to increase the number of all-day schools.

\(^7\)This consultation is highly institutionalised and prescribed in the social policy making process. The harmonious relation between labour and capital are prominent explanations of the Dutch employment increase. Only some areas of welfare are mostly left to collective labour agreement between the social partners in sectors of industry (Becker, 2000).

\(^8\)It has also been called ‘bargained corporatism’ because of the strong influence of unions (see Section 3.4).
lower-income deciles (Becker, 2000). Social support and social protection arrangements, however, recently shifted: from inclusive solidarity towards exclusive selectivity, from collective responsibility towards individual responsibility and, in general, towards a more liberal welfare policy. The degree of social spending decreased significantly and the overall level of citizens’ social protection has declined. Some groups can compensate these losses in protection. On the one hand, collective bargaining compensated losses, but only for small parts of the working population. Generally, higher paid workers, with permanent jobs and long work histories profit most from these ‘repairs’. On the other hand, the loss of collective social protection is compensated at the household level. Through increased labour market participation of Dutch women and the accompanying increase in double income households misfortunes of one partner can be compensated by the other partner’s means. Importantly, people with weaker or no ties to the market for paid labour - including (among others) young workers and workers on flexible contracts - lost most of their social protection (Oorschot, 2006).

Since the reform of the early 1990s, there is a higher emphasis on putting people (back) into work. Beneficiaries have to be activated to participate in the labour market. Social assistance recipients are forced to accept a job and individuals need to be actively seeking work to become eligible for unemployment assistance. As income protection is limited to workers with more regular and longer lasting labour market ties, entitlement to wage-related benefits is especially difficult for young people and people with flexible labour contracts (Oorschot, 2006). The Dutch set-up of employment services is a market-based system focusing on rapid insertion of benefit recipients. The approach is based on mutual obligations and consists of an interaction between activation and benefits. As it may take more time to get (second generation) migrants into the labour market, this system tends to disfavour them (OECD, 2008b).

9For instance, many companies and industrial sectors agreed to undo the consequences of limited wage-related disability benefit duration for various age cohorts (Oorschot, 2006).

In 1994 a new coalition came into power that focused on reforming the social assistance eligibility rules, the privatization of social security and slightly changed the national health care insurance system. It has been a long key policy goal in the Netherlands to provide young people with the education and skills needed in the labour market and to prevent early drop-outs. Several programmes and initiatives were put into force. In 2006, the government tightened eligibility criteria to unemployment insurance benefits and they have to be built up exclusively through work experience. Unemployment benefits are conditional on having worked at least 6 month and are granted only during 3 month for recent workers with less than 4 years of work experience. Individuals can receive them longer only if they worked in 4 out of the 5 previous years, which rarely applies to young workers. They have to rely on social assistance instead. Young people older than 18 can receive social assistance from their municipality. In most municipalities young people who apply for social benefits are first sent back to a training programme organised by local providers when they are thought to lack basic qualifications. Otherwise they are asked to enter a Work-First process. Recently the government decided that school drop-outs under 28 will have to complete upper secondary education before receiving any income support starting from 2009 (OECD, 2008a).
Gender effects of the Dutch welfare state

The cultural changes of the 1960s and 1970s redefined the role of women and, as a time lagged consequence, labour market participation of women increased. This trend was accompanied by employment decline. At the same time, facilities for public child care, day care facilities, and adequate parental leave schemes are still poorly developed. Thus, part-time work is often the only way for married women to combine housework and (a certain degree of) economic independence. Therefore, the “1.5 breadwinner model” replaces the single breadwinner model in the Netherlands (Bevelander and Groeneweld, 2006, 790). Moreover, the tax system in the Netherlands includes joint-taxation elements, which encourage the partner with lower earnings to reduce working hours or leave employment (Bevelander and Groeneweld, 2006; OECD, 2008c).

3.3 Education and training systems

It is necessary to divide between factors influencing school-to-work transitions that depend on educational structures and those that rather depend on the modus operandi of the labour market (Couppié and Mansuy, 2003, 85). The aim of this section is to describe the Dutch and German education systems and contrast similarities and differences and their influence on school-to-work transitions.

In the context of school-to-work transitions, school and training systems are especially important because they are decisive for the nature of educational resources offered by market entrants. Their structure channels, constraints or enables sufficient individual acquisition of qualifications, which determine parts of cross-country differences (Gangl, 2000, 2003). Besides, education and training systems influence the timing of the transition through the existence of various possible tracks, the country specific definition of degree courses, and the multiplicity of leaving points (Couppié and Mansuy, 2003, 85). We begin with describing the German and the Dutch education system. Afterwards, we compare the systems with regard to their influence on school-to-work transitions of second

---

12This is the case although the tax system is in principle neutral to marriage and taxes every member of a household separately, independently of the income of other household members. For instance, non-working partners in single-earner couples can transfer their general tax credit of about 2000 Euro to the primary earner. On the one hand, this element takes the family as the consumption unit into account, applies the progressivity of the tax system to family incomes, and scores high on equity. On the other hand, it discourages the labour market participation of the secondary earner and is considered as inefficient (OECD, 2008c). Only after 2009 the government therefore decided to phase out the transferability of the tax credit that completes the individualisation of the tax system. However, exceptions have been installed for mothers with children younger than six years and those born before 1972 (OECD, 2008c).
3.3. EDUCATION AND TRAINING SYSTEMS

generation migrants.

3.3.1 The German education system

The German education system is highly standardised and stratified and exceedingly early selecting (Allmendinger, 1989).\textsuperscript{13} The system has often been criticised for being socially selective and creating stratum and gender specific long-term disparities (Gottschall, 2002).\textsuperscript{14}

Pupils enter schools at age six in Germany. The selection into the three different educational strands occurs earlier in Germany than in other countries. After four years of local schooling, at age nine or ten, pupils enter one of three possible secondary education tracks.\textsuperscript{15} The decision what type of secondary school is to be attended by a child is based on parents’ wishes and recommendations given by the primary school teacher. Pupils are selected to tracks of four, six or nine years of additional schooling: 1) Hauptschule (lower secondary school), 2) Realschule (middle secondary school), or 3) Gymnasium or Fachoberschule (general upper secondary school). Most newly arrived migrants enter the “Hauptschule” in Germany (Crul and Schneider, 2005). The second phase of secondary education is largely segmented, which makes it much harder to revise an earlier educational decision in this system (Müller, Steinmann, and Schneider, 1997). In principle, it is possible to correct the decision for a school track later and change between the different tracks. This is, however, quite rare and unusual (Buchholz and Kurz, 2008).

The tripartite structure of schooling in Germany dates back to the German empire when education was divided in education for the masses and higher education preparing for governmental bureaucracy. Until the end of the Weimar republic the education system

\begin{itemize}
\item[13] Standardization denotes the extent to which the quality of education meets the same standards throughout a country and stratification relates to the number and type of transitions to the next educational level (Allmendinger, 1989). Both characteristics relate to the match between educational and occupational sector, and following up- and downward mobility (Blossfeld, Buchholz, Bukodi, Ebralidze, Kurz, Relikowski, and Schmelzer, 2005).
\item[14] In Germany, children from lower classes improved their chances in middle educational levels over the last decades. Their chances, however, for higher secondary and tertiary degrees became relatively worse (Baumert, Klieme, Neubrand, Prenzel, Schiefele, Schneider, Stanat, Tillman, and Weiss, 2001). Like in many other Western industrialised societies, educational expansion during the 1960s and 1970s shaped the German education system. Educational expansion changed the skill composition of the workforce in Western European countries. Decreasing education costs enabled more persons to complete higher educational levels. The largest effects of the educational expansion can be found in the increased percentage of persons completing the tertiary level. Long-term changes of educational expansion are visible in the skill structure of employment and in the qualificational structure of labour supply (Gangl, 2003, 2000).
\item[15] Educational expansion aimed at the integration of girls, children with lower social background, and children from rural areas into upper secondary and tertiary education. Girls caught up with boys in educational performance and today girls are even slightly overrepresented in upper secondary schools.
\end{itemize}

In 2 out of 16 regions it is after six years (Berlin and Brandenburg).
CHAPTER 3. COUNTRY CONTEXTS

was transformed into a quasi corporatist structured tripartite system with binding school leaving certificates and authorised access. After World War II ‘breeding’ (Erziehung) and ‘education’ (Bildung) traditionally were different things in Germany. Breeding happened in the family and education in school. The reason was to prevent education from inclusion in social live like in Nazism or in the socialist model (Gottschall, 2002).

General schooling is followed by vocational training in the dual apprenticeship system or by attendance of technical college or university. The German apprenticeships are vocational trainings, which take place in both the workplace, financed by the firm, and school, financed by the Länder. It lasts from two to three years, usually from age 15/16-18/19 and is organised for about 350 professions. It is open to all lower secondary school leavers irrespective of their results. The “dual apprenticeship” includes working as an apprentice in a firm three to four days a week. Apprentices spend one or two days in vocational schools (“Berufsschulen”), where subjects are closely related to the apprentice’s vocation. Except for young men, who unless exempted, enter military service\(^{16}\), about 60% of young people enter apprenticeships (Buchholz and Kurz, 2005, 2008, 3).

For a series of professions, especially in the social and health sector, another possible path of secondary education are full-time vocational schools (“Berufsfachschule, -oberschule, Fachoberschule”). In these schools pupils can complete a basic school degree (“Hauptschule”). Young people who cannot find a place in this regular system are often trained in publicly financed preparatory or substitute training measures: a year of occupational preparation (“Berufsvorbereitungsjahr”) or an elementary vocational year (“Berufsggrundbildungsjahr”). In that case, they are not registered as unemployed. These training measures are an example for new forms of occupational education, which have lately been introduced (Müller, Steinmann, and Schneider, 1997, 194). Graduating from these tracks is not seen as increasing labour market chances afterwards. The tracks have been created for disadvantaged youth in general. They are of special importance, however, for migrant children (Worbs, 2003, 1026).

It is particularly difficult to change to a university without completing grammar schools (“Gymnasium”). Tertiary education in Germany is subdivided into more scientific universities (“Universitäten”) and occupation oriented colleges/universities of applied sciences (“Fachhochschulen”) (Müller, Steinmann, and Schneider, 1997, 195).

\(^{16}\)For a more detailed description of regulations and policy changes concerning military service see Riphahn (2002).
Second language support

In contrast to the Netherlands, Germany did not offer consistent programmes for second language training. Some federal states opted for intensive second language programmes, while others provided extra classes in which migrants were instructed in their mother tongue. Methods for learning German that deviated from traditional approaches were still rare in the 1990s (Crul and Vermeulen, 2003, 980). Germany offered only a very limited number of language support programs at the secondary level. A large proportion of (first and second generation) migrant students were in immersion programmes without any language support during the 1980s and 1990s. Migrant students were immersed in the language of instruction within mainstream classrooms without specific language support (Christensen and Stanat, 2007). Due to the lack of language support classes more (first and second generation) migrants attend lower level schools (often elementary schools) than did in their countries of origin. This system also hampered second generation migrants’ success at schools. Only recently, Germany introduced language support classes.

Previous research: educational performance of second generation migrants in Germany

Kindergarten participation, which is supposed to increase educational performance in Germany, is lower among second generation migrant children than among natives in Germany. Moreover, difficulties concerning the educational integration of persons with migration background and lower social background persist. Also gender differences with regard to choice of university subjects and vocational training fields prevail (see Buchholz and Kurz, 2005, 2008). According to the country comparative study PISA overall performance of the German education system is relatively worse than in other OECD countries. The influence of social backgrounds and differences in the transmission of social origin on school attainment between the Länder (federal states) is especially strong in Germany (Prenzel, Baumert, Blum, Lehmann, Leutner, Neubrand, Pekrun, Rost, and Schiefele, 2005).

Various analyses have shown that second generation migrants are disadvantaged within the German education system. On the average, second generation migrants receive lower educational certificates, are underrepresented in middle or higher educational levels and leave school more frequently without a certificate as compared to natives (cp. Diefenbach, 2003/04, 2004; Esser, 2001; Granato, 2003; Kalter and Granato, 2002; Kristen, 2003; Kris-

\[17\] A general problem for measuring educational performance of second generation migrants is the lack of statistical material and literature. If studies focus on young foreigners, they often exclude naturalised persons and mix those who received their complete schooling in the Germany school system with those who migrated at an early age, educational results are likely to be negatively biased (see Worbs, 2003). We try to focus in this section on findings for second generation migrants only.
Native and second generation migrant females tend to perform better in the education system than males, but their participation rates in vocational training and the labour market are lower. Especially Turkish pupils perform comparatively worse than natives (Worbs, 2003). In Germany, the gender divide for female Turkish second generation migrants sets in after Hauptschule. Turkish women are pushed out of the dual apprenticeship system because they cannot enter an appropriate apprenticeship position or they do not complete their apprenticeship (Crul and Schneider, 2005).

Young Germans acquire vocational education degrees with regard to academic vocational education in technical colleges and universities much more often than second generation migrants. Second generation migrants tend more towards apprenticeships (Seifert, 1995). Those pupils who completed their whole school career in Germany and who acquired the German citizenship achieve higher levels of education (Worbs, 2003, 1016).

Based on self-assessments of German language competence, some studies show a high level of proficiency in German of the second generation with regard to oral communication (see for review Worbs, 2003, 1024). According to PISA results, however, second generation migrants exhibit lower reading scores compared to natives (see the following section). This has been interpreted as differences in language proficiencies. The differences between second generation migrants and natives might be more pronounced in written language proficiency than spoken language competence.

Apprenticeships

For some years, and especially when most of the baby-boom generation came out of school in the mid-1980s, the apprenticeship system did not offer enough places. Especially second generation migrants had difficulties in entering the apprenticeship system, even in years where age-groups with lower birth rates completed school. Young persons with foreign nationality (including both first and second generation migrants) hold less apprenticeships and enter apprenticeships which are less attractive to natives (Granato and Werner, 1999; Granato, 2003a; Bethscheider, Granato, Kath, and Settelmeyer, 2002; von Below, 2003; Schube, 2003). This is crucial, as apprenticeships are the most important path for persons with secondary education certificates, a group in which second generation migrants are overrepresented.

Furthermore, a comparison of the large scale school-based training systems of Germany
3.3. EDUCATION AND TRAINING SYSTEMS

and Sweden challenged the idea that apprenticeships eliminate job search at labour market entry. Their empirical findings show no differences in firm and industrial mobility of workers in the German apprenticeship system or school-based vocational training (Korpi and Mertens, 2003). Importantly, the effect of apprenticeships for second generation migrants might not be as positive. There is evidence that Turkish youths benefit less from apprenticeships in Germany than native-borns (Crul, 2007).

**Reasons for worse attainment**

The reasons for the worse educational attainment of second generation migrant pupils as compared to natives are multi-faceted. Lower educational qualification of all second generation migrants are, for instance, caused by regional segregation and a lack of social capital (Kleemann, Matuschek, and Kogan, 2003). Additionally, one can distinguish three large streams of argumentations. First, many explanations focus on social origin. This refers to the parents and their lower levels of education, information deficits, and fewer resources (in terms of time and money) that can be invested in their children’s education. Moreover, parental return orientations might be are detrimental to the children’s school career. In line with this argument, half-day school attendance disfavours second generation migrants to an over proportional extent. With half-day attendance pupils have fewer contact hours with teachers than in other countries which would balance the effect of parental resources at home. Moreover, pupils receive more homework in Germany, for which second generation migrant children have less support. Resources for help are scant in migrant families due to lower educational levels and language proficiency of parents (Crul, 2007). Moreover, migrant children may lack information on other training opportunities and tracks. They might, therefore, lack the better educational level starting position of natives to compete for more promising apprenticeships.

Second, it has been argued that teachers’ and/or institutional discrimination may have an impact (also see Section 4.4.1). With regard to institutional discrimination, for instance, it has been argued that education systems of nation states do not acknowledge or support multilingualism and cultural pluralism of its pupils (Gogolin, 1994). Both types of discrimination are, however, hard to test in non-experimental work. Furthermore, female migrant children have to overcome special gender specific obstacles. The increased number of migrants holding white-collar positions is mainly a female phenomenon. Therefore, it is likely that gender differences will disappear during the next few years or even develop to a male disadvantage (Worbs, 2003).

Third, institutional features of the German education system cause lagging educational success of migrant children because they do not systematically promote children from socially disadvantaged families (Worbs, 2003). In this context, the duration of school, the
early selecting and tripartite system, the small amount of all-day schools and the system
of childcare are discussed (Allmendinger and Leibfried, 2003). The relevance of the dual
apprenticeship system seems problematic because second generation migrants are con-
centrated in certain positions.

3.3.2 The Dutch education system

The Dutch education system is known as being (vertically and horizontally) highly stratified
and standardised (Shavit and Müller, 1998).

Primary school starts at age 4 or 5 in the Netherlands, one to two years earlier than in Germany.
As the state does not have the monopoly on education, there are many private schools in the Netherlands.
Selection into educational tracks occurs also comparatively early, at age 12, in the Dutch education
system, but two years later than in Germany. School tracking of pupils is based on a
comprehensive test of scholastic performance and performance motivation and on teacher
advice. The test is provided by the Central Institute of Test Development (CITO). Teachers
base their advice on pupil’s performance during primary education and the CITO test
results. CITO test results are not compulsory or binding, but deviations from the test
results are rare in practice and about 85% of schools use it (OECD, 2008b, 55).

After primary education, pupils can choose between four types of secondary education
that differ in length and level: 1) lower vocational education VBO (“voorbereidend middel-
baar beroepsonderwijs”) and afterwards (short) second cycle vocational education (K)MBO
(“(korte) middelbaar beroepsonderwijs”) or apprenticeships BBO/BOL, 2) upper secondary
education HAVO (“hoger algemeen voorbereidend onderwijs”), and 3) academically oriented
secondary education VWO (“voorbereidend wetenschappelijk onderwijs”).

The first type of secondary education, VMBO/VBO (VMBO has previously been called
VBO, “voorbereidend beroepsonderwijs”), is a track of lower education. It includes three

---

19 Due to nationally agreed curricula the content of study programmes is (still) quite similar across
schools. Though, Dutch schools differ in educational outcomes such as the average school performance of
their students as well as some socio-economic outcomes (van der Velden and Wolbers, 2007). Especially
the performance of children from low socio-economic backgrounds is negatively influenced.

20 In European comparison this represents a medium level as for instance pupils in Belgium and France
start school with age two or three.

21 In the Netherlands there is a difference between public/private funding and public/private management
of school boards. Although almost all schools are publicly funded, approximately 83% of them are privately
governed (Teelken, 1999). The publicly funded, but privately governed schools are called private schools.
There are many types of private schools, for instance Roman Catholic, Protestant, Islamic, Rudolf-Steiner
and private non-denominational schools to name only some. Like in Germany there is free school choice
for parents.
dierent sub-tracks, which have recently been integrated.\textsuperscript{22} VMBO consists of the following three tracks: 1) a lower special school track of individualised vocational education named IVBO (“individueel voorbereidend beroepsonderwijs”), 2) a lower vocational education/elementary track with the names LBO (“lager beroepsonderwijs”), and 3) a general vocational track called MAVO (“middelbaar algemeen voorbereidend onderwijs”).

VMBO is often considered as a marginal stream within the education system. Many pupils with learning problems and those who were unsuccessful at other streams follow VBO. The educational climate in VMBO is considered to be quite bad. However, most newly arrived immigrant children attend VMBO in the Netherlands (Crul and Schneider, 2005). The first type of VMBO, IVBO, is included at some VMBO schools as a separate department for individualised education to teach students who need extra help at their own speed (Teelken, 1999). The second type of VMBO, LBO, is a lower vocational education track, similar to German elementary or special schools (“Hauptschule” or “Sonderschule”). The third type of VMBO, MAVO, is an intermediate general education track which can be compared to intermediate education (“Realschule”) in Germany.

Students who earned a certificate in one of the VMBO tracks are allowed to enter school-based vocational programmes in (short) second cycle vocational education (K)MBO or the BBO/BOL apprenticeships (see below for further description of the upper secondary vocational education system). MBO diplomas are seen as a precondition for a productive start at the labour market (Crul and Doomernik, 2003, 1046). Nevertheless, the percentage of pupils that drop out of school and do not receive a lower secondary education diploma (VMBO) is comparably high in the Netherlands (Crul, 2007; Crul and Schneider, 2005).

The second type of secondary education, HAVO, is the second highest track of secondary education and might be comparable to the German “Fachhochschulreife”. It gives access to bachelor programmes at colleges of higher vocational education (HBO, “hogescholen”). VWO is the highest of the three tracks of secondary education and prepares for universities. People who accomplished VWO can study in master programmes at universities (WO, “universiteiten”). None of the three tracks of secondary education is considered as a proper final level of education. Nevertheless, some students leave education already after completing one of these tracks, or even without completing them.

\textsuperscript{22} We describe them in detail because they were not subsumed when the Dutch data was surveyed and we distinguish between them in the empirical analysis.
The Dutch upper secondary vocational education system

The Netherlands mainly exhibit occupationally specific training in vocational schools (Müller and Gangl, 2003a, 12), but the Dutch upper secondary vocational education system is twofold. First, there is the full-time, school-based instruction BOL (“beroepsopleidende leerweg”), which includes 20-60% workplace-based training. This track is now subsumed under MBO and we will use the term MBO in the empirical part below. Second, there is the old apprenticeship system BBL (“beroebbsbegleidende leerweg”), the day release or block pathway, at which at least 60% of training takes place at the workplace. BBL apprenticeships were called BBO (“beroebbsbegleidende onderwijs”) earlier. We will use the latter term in the empirical part below.

Although the number of students in BBL/BBO increased since the 1950s, MBO/BOL is more important in the Netherlands. School-based MBO/BOL is the dominant form of apprenticeship and absorbs about two thirds of secondary vocational education students (cf. OECD, 2008a). The state is strongly involved in terms of regulation and financing. Although the “school-based pathway” is supposed to have a higher status, the “day-release pathway”, BBL/BBO, is also respected. Arguably, employers do not discriminate between the pathways in hiring graduates. This is especially the case as the introduction of the required 20-60% workplace training in BOL increased MBO graduates’ practical skills (Anderson and Hassel, 2008).

The role of employers in the Dutch training system is not as strong as in Germany. Dutch employers and unions run the apprenticeship system and negotiate apprentices’ wages in collective agreements. Apprenticeship wages are at least as high as the (youth) minimum wage. Dutch employers pay more than German employers for apprenticeships. However, as two thirds of MBO students follow the school-based program, BOL, firms overall financially contribute less than in Germany. Besides, firms can receive financial assistance from the state (apprentice wages are tax deductible) and from sectoral training funds (Anderson and Hassel, 2008).

Second language support

Pupils with migration background take part in intensive immersion programs with a preparatory phase in the Netherlands before they enter mainstream classes. The preparatory phase focuses on language development and helps students to understand the receiving country’s culture and its school system (Christensen and Stanat, 2007).
3.3. EDUCATION AND TRAINING SYSTEMS

Previous research: educational performance of second generation migrants in the Netherlands

In the year 2000, about 60% of Dutch children between 2 and 4 attend pre-school, while only 35% of non-OECD immigrants (including Turkey) did. There is large variation between immigrant groups and coverage increased during the last decade. Nevertheless, today's Kindergarten attendance rates are still comparatively low in the Netherlands: 53% of children of immigrants attend pre-schools in 2007, probably due to its correlation with educational attainment of parents. However, empirical findings do not always support the beneficial effect of early childhood education (OECD, 2008c,a).

Educational performance

The Dutch government introduced large scale programmes for second language training in the early 1990s. This was already much later than in France and Belgium, but earlier than in Germany (Crul and Vermeulen, 2003). Nine-year-olds have a total of 1019 contact hours with teachers in Dutch compulsory schools, which is a lot more than in Germany (Crul, 2007). The overall performance of the Dutch education system is good compared to other OECD countries. PISA 2003 scores measuring basic competencies of students aged 15 are above the OECD average, although public spending on education in 2004 was only 5.1% (OECD average is 5.7%) (OECD, 2008a).

Table 3.2: Highest educational qualification of second generation migrants and natives in the Netherlands

<table>
<thead>
<tr>
<th></th>
<th>Primary or none</th>
<th>Lower secondary</th>
<th>Upper Secondary</th>
<th>Tertiary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Males</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native borns</td>
<td>23.4</td>
<td>24.9</td>
<td>25.9</td>
<td>25.8</td>
</tr>
<tr>
<td>Turkish 2.gen</td>
<td>40.7</td>
<td>31.0</td>
<td>22.9</td>
<td>5.4</td>
</tr>
<tr>
<td>Moroccan 2.gen</td>
<td>57.5</td>
<td>24.2</td>
<td>15.2</td>
<td>3.4</td>
</tr>
<tr>
<td>Surinamese 2.gen</td>
<td>35.6</td>
<td>27.4</td>
<td>25.6</td>
<td>11.4</td>
</tr>
<tr>
<td>Antillean 2.gen</td>
<td>28.8</td>
<td>17.0</td>
<td>31.3</td>
<td>22.9</td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native borns</td>
<td>24.7</td>
<td>29.8</td>
<td>24.5</td>
<td>21.0</td>
</tr>
<tr>
<td>Turkish 2.gen</td>
<td>49.9</td>
<td>28.2</td>
<td>17.2</td>
<td>4.7</td>
</tr>
<tr>
<td>Moroccan 2.gen</td>
<td>57.4</td>
<td>20.5</td>
<td>17.4</td>
<td>4.7</td>
</tr>
<tr>
<td>Surinamese 2.gen</td>
<td>34.3</td>
<td>28.6</td>
<td>27.3</td>
<td>9.8</td>
</tr>
<tr>
<td>Antillean 2.gen</td>
<td>34.1</td>
<td>22.9</td>
<td>26.8</td>
<td>16.2</td>
</tr>
</tbody>
</table>

Source: Tesser and Dronkers (2007)

Table 3.2 lists the highest educational qualifications of second generation migrants in
the Netherlands in an average of the years 1988, 1991, 1994, and 1998. Second generation migrants tend to have much lower levels of education than natives. Male second generation migrants attained more frequently a primary or no educational certificate and less frequently an upper secondary or tertiary certificate than natives. This also applies to female and male Moroccan second generation migrants, the exception being second generation Antillean, who attain upper secondary education more often than natives. Generally, Surinamese and Antillean second generation migrants obtained higher levels of education than Turkish and Moroccan.

In Table 3.2, the same trend holds more or less for female second generation migrants. Also in the Dutch education system, there is a gender divide. Traditional gender roles often drive Turkish girls in the Netherlands to enter lower vocational education in care-work or textile. The strong traditional gender divide in the Turkish community seems to prevent women from profiting from the relatively open educational system in the Netherlands (Crul and Schneider, 2005). Generally, a lower percentage of women reaches higher education in the Netherlands than in Germany, but there are still more Turkish girls in higher education in the Netherlands than in Germany (Crul and Schneider, 2005).

Immigrants and their children are initially streamed more often in low- or middle-level learning programmes. About 70% of student whose parents do not stem from Western countries and 52% of native students go into MBO secondary pre-vocational education, which lasts four years (OECD, 2008b). Even though some of the second generation migrants are more likely to continue in higher streams afterwards, the share of second generation children in tertiary education is significantly lower as compared to natives (OECD, 2008c,b). In general, education systems that allow many native children to enter higher education appear to be more accessible for ethnic minority groups as well (Crul and Vermeulen, 2003, 982).

Usually, second generation migrant pupils with Postcolonial background outperform those with Mediterranean backgrounds, while second generation migrants with Moroccan origin perform better than those with Turkish origin. It has been found for the Netherlands that Moroccans are better represented in academic tracks and higher education, while Turkish second generation migrants typically pursue shorter and more vocationally oriented educational tracks. Turkish girls perform relatively well in school. Nevertheless, they are more likely to drop out of school to marry or to work than Moroccan girls (Crul

---

23 The table is based on SPVA data (Social Position and Facilities Use of Ethnic Minorities) that provides four surveys of samples of households from the four largest second generation ethnic minority groups (Turks, Moroccans, Antilleans, and Surinamese) and natives. The surveys have been conducted in 1988, 1991, 1994 and 1998, but second generation migrants are concentrated in the waves 1994 and (especially) 1998. The groups include persons at the age of 18-59. Therefore, the educational level depicted here should be higher than in the data on which we base our analysis.
3.3. EDUCATION AND TRAINING SYSTEMS

and Doomernik, 2003; Crul and Vermeulen, 2003).

Upper secondary vocational education

Children of immigrants have more difficulties in finding BBL/BBO apprenticeship position because it is difficult for them to find an apprenticeship contract with a company (OECD, 2008b). The consequences might not be as dramatic as in Germany, though, as migrants can enter MBO/BOL education instead. Generally, apprentices in the Netherlands are to a significant degree allocated to lower-level positions and returns to education in the Netherlands are among the lowest positive in Europe (Gangl, 2000, 15).

Reasons for worse attainment

Early selection into streams at the start in secondary education and too little flexibility between streams thereafter (educational differentiation) is held responsible for comparably low attainment of second (and first) generation migrants in the Netherlands. This is the case although the Dutch education system offers some possibilities to undo negative effects of early streaming. It has a relatively high upwards permeability and weaker students are supported by school funds partly calculated based on pupils’ socio-economic background. When controlling for socio-economic background, lower educational level of parents reduces the educational differences between natives and the second generation by more than half (OECD, 2008b).

Drop-out rates

Although the Dutch education system seems to hold some advantageous feature for native and second generation migrant children, the percentage of pupils that do not receive a secondary education diploma is quite high in the Netherlands. Drop-out rates at lower secondary vocational education level (VBO or equivalent) are 1.5 times larger in the Netherlands than in Germany. The age, the balance between learning in the classroom and working as an apprentice, and the content of the curriculum are held responsible for this gap in drop-out rates. At the age of 14 or 15 pupils already obtain a “Hauptschule” diploma in Germany, while they are still in full-time school in the Netherlands. Moreover, the practical orientation of the dual apprenticeship system may play a role (Crul, 2007).
Table 3.3: Differences in PISA 2006 scores between second generation migrants and native children

<table>
<thead>
<tr>
<th>Country</th>
<th>Mathematics</th>
<th>Reading</th>
<th>Differences in highest parental schooling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unadjusted</td>
<td>Adjusted</td>
<td>Unadjusted</td>
</tr>
<tr>
<td>Netherlands</td>
<td>66</td>
<td>30 (-36)</td>
<td>61</td>
</tr>
<tr>
<td>Germany</td>
<td>78</td>
<td>38 (-40)</td>
<td>83</td>
</tr>
</tbody>
</table>

Source: OECD 2008

3.3.3 Educational performance of second generation migrants in the two countries

Compared to other European countries, second generation migrant pupils’ educational outcomes are substantively worse in both countries. Second generation migrants perform much worse in PISA scores than native pupils, but slightly better in the Netherlands than in Germany. Table 3.3 states the point differences in OECD PISA 2006 data for mathematics and reading literacy at age 15 compared to natives of second generation migrants (native born children with foreign parent(s)) in Germany and the Netherlands. The unadjusted values refer to the point differences in the raw scores, while the adjusted values represent the differences after controlling for the socio-economic background of students. The adjusted values are 8 and 19 points lower for the Netherlands in mathematics and reading than in Germany (12 and 22 for the unadjusted scores).

The OECD PISA scores for reading indicate that second generation migrants’ language attainment is weaker compared to native-borns. It is especially weak in Germany compared to the Netherlands (and to most other countries in the data set) (OECD, 2008c). Reading competence is mainly influenced by schools and access to certain types of schools. However, as attainment of reading expertise happens increasingly self regulated, PISA authors assume that reading competence correlates strongly with characteristics of social origin in Germany (Baumert, Klieme, Neubrand, Prenzel, Schiefele, Schneider, Stanat, Tillman, and Weiss, 2001, 360).

Moreover, parents of second generation immigrants have lower levels of education in Germany (-4.9) than in the Netherlands (-3.1) (Table 3.3) compared to native parents (cp.

---

24 They controlled for socio-economic background by the International Economic Index of Occupational Status (ISEI), the highest level of education of the student’s parents, the index family wealth, the index of home educational resources, and the index of possessions related to “classical culture” in the family home. For each test the mean score was set at 500 points, with a standard deviation of 100 points.
OECD, 2008c). The PISA scores indicate that in comparison with countries in which the educational level of parents vis-à-vis the children of natives is similarly large, the Dutch education system performs well in achieving equal outcomes for the native-born children of immigrants (cp. OECD, 2008c). Germany tends to have larger gaps in the educational performance of natives as compared to children of immigrants. The socio-economic background of pupils is comparatively worse in Germany and schools do not compensate.

Reading competence reflects language proficiency. The PISA reading score results, thus, contradict that there are few differences in subjectively measured language proficiencies between natives and second generation migrants. The findings show that language proficiency is a major obstacle for second generation migrants as compared with natives. Thus, language proficiency is an important factor in the analysis of labour market entrance for Germany and the Netherlands. This is especially the case as written and reading language competences are a signal to employers in application processes. Moreover, the cross-sectional results contradict the view that parents of second generation migrants are skill-wise more positively selected in Germany than in the Netherlands (cf. Euwak, Dagevos, Gijsberts, and Roodenburg, 2007a). The PISA data, however, includes younger second generation migrants than in our data. The group composition of the parents is, thus, influenced by later, higher qualified waves of immigrants in Germany.

Due to the differences in the education systems, it has been argued that the Turkish second generation migrant communities will become more homogenous in Germany and more heterogeneous in the Netherlands. National educational institutional arrangements lead to large school drop-out rates – the percentage of persons who do not attain at least secondary education – and at the same time larger percentages of second generation migrants with academic certificates in the Netherlands. School drop-out rates are much higher among Turkish second generation migrants in the Netherlands than in Germany. Consequently, the Turkish second generation may become more and more heterogeneous in the Netherlands with a Turkish elite and an underclass. The small Turkish elite in the Netherlands might play a crucial role in the emancipation of the group as a whole, while the other group might drag the community into a negative spiral (Crul and Schneider, 2005; Crul, 2004).

In contrast, the apprenticeship system influences individual employment histories of a large majority of second generation migrants positively in Germany. While two thirds of second generation migrants follow a vocational track in Germany, this applies to one third in the Netherlands. Moreover, schools and neighbourhoods are less segregated in Germany than in the Netherlands. Consequently, the Turkish community is supposed to become more homogeneous in Germany, with a large majority slowly moving up the social ladder.
Nevertheless, further restructuring of the industrial sector, which provides jobs for skilled workers in Germany at the moment, could lead to unemployment that hits migrants hard. Moreover, the strong selectivity of the education system complicates prospects of moving up through education in Germany. Furthermore, the Dutch educational system is more open and might allow the gender gap to close faster among the Turks in the Netherlands than in Germany. Turkish girls can be found more often in more prestigious school tracks in the Netherlands than boys in the long run. In contrast, drop-out rates of Turkish girls seem to increase in Germany since recently. In both countries, however, second generation migrant girls stop their educational careers at relatively early age. On the long run, thus, it is unclear whether homogeneous or heterogeneous communities serve best (Crul, 2004).

### 3.3.4 How the German and the Dutch education systems influence school-to-work transitions

Germany and the Netherlands have highly selective and standardised education systems. In international comparison, both countries exhibit early selecting tracking systems. Nevertheless, the Dutch education system has some characteristics that might benefit educational outcomes of second generation migrants more than in Germany. Compared to Germany, pupils enter schools two years earlier and selection into tracks takes place two years later in the Netherlands. Thus, Dutch pupils have about two more years of education before they are selected into tracks in the crucial development phase in which they begin to learn the majority language (Crul and Schneider, 2005). They go to school four years longer together with pupils from possibly other tracks. Moreover, there are more face-to-face hours between teachers and pupils during compulsory schooling in the Netherlands than in German schools. Finally, there are less specific language support programmes in Germany than in the Netherlands. Consequently, second generation migrants are streamed into lower educational tracks and are overrepresented in general and vocational streams to a larger extent in Germany than in the Netherlands.

**Apprenticeship system**

Germany and the Netherlands have strong vocationally oriented training and education systems, which are supposed to smoothen labour market transitions for young workers. Employees are ‘preselected’ by schools in both systems (Franz, Inkmann, Pohlmeier, and Zimmermann, 1997; Gangl, 2003; Blosfeld, Buchholz, Bukodi, Ebralidze, Kurz, Reilkowski, and Schmelzer, 2005). Nevertheless, young people should transit more successfully – fast and into stable jobs – from school-to-work after completing a dual apprenticeship in Ger-
many, which includes school-based vocational education and learning in firms, than those in the Netherlands who graduated from occupationally specific training in vocational schools. (Second generation migrant) apprentices in Germany can show a diploma and their employment record after an apprenticeship, while many apprentices in the Netherlands can neither show a diploma nor any work experience at the same age. In countries with dual apprenticeship systems, job search phases should be rather short because training is firm-specific and employers, who are interested in reducing the training costs of new employees, are likely to offer further employment to apprentices (Gangl, 2000). As a result of the large range of occupations that are trained for as well as the large extension into the service sector, German apprentices have been found to have the largest positive returns to an apprenticeship. Apprentices have the advantage that they can build networks and gain practical experience during their training phase, which may serve as a bridge to the labour market and include shorter job search phases. Apprenticeships seem to function as safety-nets on the labour market whose effect is mostly visible at the beginning of labour market careers (Gangl, 2003). Moreover, in both the theoretical, school-based vocational training and the dual apprenticeship system, persons who do not receive certificates are disadvantaged (Blossfeld, Buchholz, Bukodi, Ebralidze, Kurz, Relikowski, and Schmelzer, 2005, 12). There is a larger number of persons who do not attain a secondary school degree in the Dutch education system than in the German one. Because of the dual system of vocational training and apprenticeships, youth unemployment rates have generally been low in Germany (Klijzing, 2005). The German dual apprenticeship system balances the consequences of a rather disadvantaging education system to a certain extent. This also applies to second generation migrants, at least when they manage to enter the dual apprenticeship system.

In favour of the Dutch system, one could, however, argue that school-based vocational training is not regarded worse by Dutch employers. It, thus, should not provide young people with less smooth transitions. Moreover, (additional) school based vocational training has the advantage in occupationalised labour markets (like in the Netherlands and Germany) that employers can recognise skills better (Gangl, 2003). As school-based vocational training provides young people with specific and general skills, they should be able to find an adequate job match afterwards, and job changes within the same occupational field should be easier and more frequent. The highly standardised qualifications of dual apprenticeships might prevent unintended mismatches, but the link between vocational skills and occupational opportunities may restrict job mobility later (Blossfeld, Buchholz, Bukodi, Ebralidze, Kurz, Relikowski, and Schmelzer, 2005). Furthermore, dual apprenticeship systems might not be well equipped to provide students with social skills or the capacity of self-learning, which are necessary for a service based knowledge economy.
Moreover, the widespread idea that the dual apprenticeship system has only positive effects on labour market entrance may not be completely true. While completing an apprenticeship goes along with a lower risk of unemployment it may also lead to less favourable employment outcomes. It remains uncertain if it facilitates transitions into stable and adequate jobs (Franz, Inkmann, Pohlmeier, and Zimmermann, 1997; Gangl, 2003). Besides, the German system relies heavily on the willingness of employers to train. In times of economic downturn firms might reduce their training budgets. The consequences are severe as the apprenticeship system is the only viable ticket to a decent job in Germany. Employer’s selectivity in times of economic downturn might affect persons with migration background to an overproportional extent as we will argue below (see Section 4.3.1). The twofold Dutch structure might be less vulnerable to economic swings. The preferred vocational education pathway, BOL, is publicly financed and vocational schools generally do not reduce their budgets. The number of persons in firm-based BBL can easily increase in phases of economic upswing and those in school-based BBO in times of economic downturn (Anderson and Hassel, 2008, 25). As a consequence, migrants might not be as strongly affected by economic swings in the Netherlands as migrants in Germany.

The different types of apprenticeship systems in Germany and the Netherlands might, however, simply reflect different labour market structures: the industrial sector has always been larger in Germany than in the Netherlands. Specific skills are necessary for more service sector employment, while dual apprenticeship systems benefit employment in manufacturing. The Dutch system seems to be better suited for the post-industrial economy (Anderson and Hassel, 2008). Therefore, it is not straightforward whether dual apprenticeship systems benefit labour market entrants more than mainly school-based vocational training systems.

\section*{3.4 Structure of the labour market}

This section contrasts Dutch and German labour market structures and specific situation for labour market entrants in both countries. In the previous section we saw that the design of education systems induce the composition of the workforce. It determines patterns of skill and occupational allocation among market entrants. The labour market structure, in contrast, determines the demand for certain jobs and the succeeding competition among workers. The education system and the labour market – the composition of the workforce and the competition among workers – interact during school-to-work transitions.

This section describes the labour market structure of both countries. We then give an overview of previous research. Finally, we contrast the specific features of the German and Dutch labour markets, which may influence second generation migrants disadvantages
3.4. STRUCTURE OF THE LABOUR MARKET

during school-to-work transitions.

3.4.1 The German labour market

Germany has a flexible, coordinated labour market with closed employment relationships. This involves long-term, institutionalised, trust based forms of cooperation between employees and firms (also concerning functional flexibility of employees). Labour unions and workers’ councils are particularly strong in Germany. Moreover, the state has an active role in the market. The German labour market is characterised by collective wage agreements, a highly standardised occupational system, a comparatively strong seniority system, and relatively extensive safeguards against dismissal (Mills and Blossfeld, 2005; Blossfeld, Buchholz, Bukodi, Ebralidze, Kurz, Relikowski, and Schmelzer, 2005). There are tight occupational boundaries through education supply and/or union action in recruitment processes. This occupational labour market supports job competition on the basis of skills more than on the basis of experience. Therefore, it comparably privileges young labour market entrants (Gangl, 2003, 287).

On the other hand, strict employment legislation in Germany is mainly regarded as having a negative effect on the labour market access of young workers. Employment security and stability clearly favour so called labour market insiders – mainly older full-time workers with permanent employment – over labour market entrants (Blossfeld, Buchholz, Bukodi, Ebralidze, Kurz, Relikowski, and Schmelzer, 2005).

The overall level of flexibility is rather low on the German labour market and dismissals are very costly (Buchholz and Kurz, 2008). There is a strong seniority system. Moreover, safeguards against dismissal are extensive: longer durations of firm membership increase protection against dismissal in general and in the case of mass-layoffs. Employment in large firms gives additional employment security because workers’ councils exist. Moreover, severance schemes take age as well as family situations into account.

The German Employment Promotion Act of 1985 gradually extended possibilities for fixed-term contracting. The law mostly affected the situation of young people and labour market entrants as the regulations were designed for new employment contracts and em-

---

25In closed employment relationships, employees exhibit high control over access to their jobs. In closed employment relationships an employees’ job is closed to outsiders because they ‘own’ their job. Others can only get access to it if the employee leaves his job and a vacancy is established. Thus, the process of matching persons to jobs has then been called vacancy competition. In vacancy competition employers are highly concerned about the relationship between personal characteristics and productive capacity because once hired the employee cannot easily be dismissed (Sorensen and Kalleberg, 1981).

26Employers’ possibilities to offer fixed-term contracts were strongly restricted until 1985. Fixed-term contracting was possible only under certain conditions and for a maximum duration of six month. Moreover, employers had to give reasons for offering fixed-term contracts.
Employment contracts following vocational education. The reform enabled enterprises to offer fixed-term contracts with maximum durations of 24 months. Additionally, the reform increased the number of fixed-term contract extensions a company can give before it has to offer a permanent position (Buchholz and Kurz, 2008).

Development of the German labour market

In the second half of the 1980s unemployment rates decreased in Western Germany. During the early 1990s there was a short phase of economic boom because new markets opened up after the German reunification. Shortly afterwards beginning with 1993 unemployment increased all over Germany, especially in the Eastern part. As a consequence, the labour market chances of young workers declined since the mid 1980s and increasingly since 1993 (Buchholz and Kurz, 2005). Due to growing volatility at labour markets, young workers will increasingly find it difficult to enter smoothly. Their situation will worsen in case of economic cycles and/or large cohort sizes (Blossfeld, Buchholz, Bukodi, Ebralidze, Kurz, Relikowski, and Schmelzer, 2005, 25).

Nonstandard employment

Permanent full-time employment is still the dominant form of employment in Germany. Atypical and nonstandard forms of employment (including agency work, marginal part-time work and especially temporary work) have been largely expanded since the early 1990’s. While this trend helped to foster employment careers of women, it may have bad consequences for others. There is evidence that transition from atypical forms of employment to regular employment relationships is difficult in Germany (Oschmiansky and Oschmiansky, 2003).

As a consequence of the labour market structure, those workers without or with low educational degree (like many second generation migrants) are in danger of becoming permanent outsiders in precarious positions. Persons at the margins of employment like migrants and young workers increasingly have to accept flexible working conditions in Germany as we argued above. Because labour market insiders are favoured in the German labour market, entrants are likely to face the largest problems. This means that they have to search longer until they find a first job (Buchholz and Kurz, 2005, 2008; Scherer, 2004). Furthermore, labour market chances in Germany seem to differ according to educational levels, occupational classes, gender, and migration background.
3.4. STRUCTURE OF THE LABOUR MARKET

3.4.2 The Dutch labour market

In contrast to Germany, the Netherlands mainly exhibit open employment relationships (Mills and Blossfeld, 2005).27 Like Germany the Dutch labour market is occupationalised. There are tight occupational boundaries in the Dutch labour market through education supply and/or union action in recruitment processes. The link between formal education and the labour market is close. Persons who followed certain tracks of education are likely to enter jobs in sectors for which they have been trained for. Like in Germany, job competition is based more on skills than on work experience (Gangl, 2000).

'Flexicurity' has been promoted in the Netherlands and in contrast to Germany the labour market is highly deregulated (Mills and Blossfeld, 2005). Non-standard employment relations and foremost part-time work are widespread in the Netherlands. To reduce the rapidly increasing unemployment during the 1980s the Dutch government intensively reformed the labour market.28 The government liberalised rather strict rules on hiring and firing, rigid laws on working hours and the opening hours of the shops. The main focus of the reforms was on “numerical flexibility” in terms of flexible labour contracts (Remery, Doorne-Huiskes, and Schippers, 2002). Increased flexibility set the ground for the strong increase in part-time jobs in the Netherlands, which is not necessarily marginal work. Labour law prevents the use of part-time workers as a cheap labor source by enforcing equal treatment between full-time and part-time workers (Kalleberg, 2000). Dutch part-time workers have a minimum hourly wage and often permanent jobs. Part-time workers are in the same way protected against unfair dismissal as full-time workers.

Nevertheless, the Dutch labour market poses barriers to outsiders via several labour market institutions. One of the barriers is the strict employment protection legislation for permanent contracts which decreases chances for outsiders like second and first generation migrants. Moreover, second and first generation migrants are discouraged from entrepreneurship through administrative and regulatory burdens (OECD, 2008c).

27 Open employment relationships seem to emerge in the private sector in profit-maximizing firms in the Netherlands. Closed employment relationships can be found in the public sector or in the salariat within the private sector. Closed positions are presumably only present when there is free market competition (which is likely to be only in a few segments of the Dutch economy due to minimum-wage regulations) (see van der Velden and Wolbers, 2007).

28 A cornerstone of this transformation was the Wassenaar agreement of 1982, which was jointly launched by employers and trade unions and supported by the Dutch government in a consensus. The agreement included moderate wage increases, more opportunities for part-time jobs, and more labour market flexibility.
Minimum wages

Minimum wages are high in the Netherlands compared to other EU member states. They exist since 1993 and are important for school-to-work transition as they are age dependent. Moreover, they affect job search behaviour as we will argue below (see Section 4.4.2). There are eight reduced rates ranging from 30% for workers aged 15 to 85% of the adult rate for workers aged 22. The full adult rate applies to workers aged 23 and above. The existence of youth sub-minimum wages is compensated to some extent by specific clauses in collective agreements, which mostly are above the statutory minimum wage for the relevant age group. As this acted as a barrier to hiring unskilled youth it has recently been changed (OECD, 2008a). Besides, employers have the possibility to reduce their tax bill if they employ low-paid workers (OECD, 2008c).

Development of the Dutch labour market

In 1994, the overall Dutch unemployment rate peaked and declined afterwards. Since 2001, the Netherlands experienced a comparatively strong economic downturn. During the following four years the employment opportunities deteriorated quickly (OECD, 2008c). However, after 2005 unemployment fell to a low level again, GDP growth strengthened in the Netherlands (annual average 3%) and the labour market is tight. Labour utilisation has been the main source of this growth (OECD, 2008c).

Nonstandard employment

More than 43% of workers at the age of 15-24 had a temporary contract in 2006, while the OECD average amounted to 34%. Among workers at the age of 25-54 10% had a temporary contract in the Netherlands in 2006 (OECD, 2008a). Dutch average working time is one of the lowest of all OECD countries (OECD, 2008c). Flexibility and part-time work might offer precarious jobs to many younger people. One third of young people are working part time, one third (partly the same persons) have a flexible contract and one-sixth got their job through a work detachment agency (Becker, 2000). Young workers are increasingly and involuntarily employed in work shorter part-time hours than older workers. While most forms of temporary employment are stepping stones to permanent employment rather than traps, ethnic minorities often find it difficult to get into jobs with permanent contracts.

The differentiation spurred a threshold effect: persons aged 22 tend to be replaced by younger persons. Therefore, the existence of youth sub-minimum wages is compensated to some extent by specific clauses in collective agreements. About half of the collective agreements set the age for receiving adult pay rates at below 23, varying from 18 to 22. The collectively-agreed scales for youth wages are between 13% and 21% higher than the minimum wage for accordant age groups (OECD, 2008a).
They cannot benefit from the stepping stone-stone effect that these contracts offer (OECD, 2008a).

Second and first generation migrants

As there are not many findings on second generation migrants specifically, we will report findings for first and second generation migrants here. Ethnic minorities get on badly in the Dutch labour market. They are more often unemployed than natives. This especially applies to Islamic (males) from Turkey and Morocco, but also high among people from Surinam and Dutch Antilles. The rates among females from ethnic minorities are more favourable, but their work participation is low. While the Dutch society is famous for its tolerance, it is a tolerance of a traditionally segmented society (Becker, 2000).

Immigrants seem to function as a buffer on the labour market in the Netherlands. While unemployment among migrants was 22% in 1996, it went down to 10% in 2001 (at the peak of the business cycle). Then, during the economic downturn unemployment rose again rapidly and was 16.4% in 2005 (OECD, 2008c).

Moreover, being unemployed after leaving school usually has lasting negative effects on career prospects in the Netherlands. Those who become unemployed directly after leaving school have an almost two times higher chance of becoming unemployed later. Long-term unemployment affects disadvantaged youth disproportionately, especially early school drop-outs and pupils with a non-European background (OECD, 2008a).

Discrimination is likely to cause difficulties for migrants to get into employment. Discrimination is more widespread when there is tough competition in the labour market because employers can afford to (Crul, 2007). In an experimental test of hiring procedures in many OECD countries, significant discriminatory behaviour of employers was found also for the Netherlands.\(^\text{30}\)

Gender differences

About two thirds of working women have part-time jobs, but part-time work is also widespread among men. The educational level of (especially young) women has improved since the 1990s in the Netherlands. Employment rates and mean job levels of women have significantly increased. During the 1970s and 1980s public employers, particularly in health care and education, offered part-time work as a solution to job shortages. Full-time work was redistributed to part-time work. This way, explosive growth of female part-time work

\(^{30}\)Identical CVs were sent to employers of persons with migration background and native-born Dutch. The proportion of applicants with a migration background that was eliminated in the application process was 50% (see OECD, 2008c).
in the two decades until the early 1990s may have enhanced gender inequality in the Dutch labour market (Bevelander and Groeneveld, 2006; Becker, 2000).

The labour force participation of Turkish and Moroccan women is lower than those of native women, while there is little difference in the labour force participation of Surinamese, Antillean and Dutch women. The employment rate of ethnic minority women increased at a faster pace than the native employment rate during 1991 and 2002 and ethnic minority women have a higher full-time labour market participation rate than native Dutch women (Bevelander and Groeneveld, 2006).

Unemployment rates of second generation migrants in Germany and the Netherlands

Controlled for education employment rates of female and male second generation migrants are lower than those of children of natives. The differences in employment rates between the children of natives and the children of immigrants (whether controlled for education or not) in Germany and the Netherlands are not large in international comparison (OECD, 2008b, 60).31 For instance, the difference in employment rates are larger in the United Kingdom, Norway, France, Sweden, and Denmark, whether education is controlled for or not. It is lower in the classical immigration countries Canada, Australia and United States. For males, the difference in employment rates is a bit larger in Germany than in the Netherlands without controlling for education. After the educational level of immigrant children has been controlled for, employment differences between second generation migrants and children of natives are larger in the Netherlands than in Germany. The same holds true for female second generation migrants, but the difference is a bit smaller after education is controlled for. A similar picture shows for other OECD countries Germany, France and the Nordic countries that have a similar migrant mix like the Netherlands. Thus, employment rate differences that could be achieved if second generation migrants had the same educational levels like native children are slightly smaller in the Netherlands than in these other countries and Germany. This indicates that differences in education explain a smaller part of the gap in native and second generation employment rates than elsewhere (OECD, 2008b, 60/61).

Generally, second generation migrants women are more frequently employed in Germany than in the Netherlands. Part-time jobs also seem to be more widespread among second generation women in the Netherlands. While the majority of Turkish women works part-time in Turkey, most Turkish women work full-time in Germany (Crul and Schneider, 2005).

31The data in the OECD report is based on the year 2006 for Germany and 2005 for the Netherlands.
Figure 3.1 depicts German and Dutch unemployment rates for youth and overall population. Overall unemployment rates were always much lower in the Netherlands than in Germany. Between 1993 and 1997, the overall unemployment rate increased in German, while it decreased in the Netherlands. The gap between the two countries' unemployment rates widened between 1996 and 1998. German and Dutch overall unemployment rates decreased slightly between 1997 and 2001. The Dutch unemployment rate, however, decreased to a larger extent between 1997 and 2001 than afterwards. The opposite is true for Germany. Thus, compared to the Dutch the decline of German labour market situation was stronger. Labour markets in Germany and the Netherlands were especially tight in the years 2001-2005, the unemployment rate of both countries strongly increased during these years. In both countries, there seems to be the tendency of a positive correlation between youth unemployment rates and overall unemployment. Youth unemployment slopes, however, increase steeper than that of overall unemployment. Especially German youths were hit by unemployment when overall unemployment rose after 2000.

The Netherlands have low unemployment, but comparatively high rates of youth unemployment. Dutch youth always had a higher unemployment rate than the overall population. The economy was stronger in the Netherlands than it was in Germany during our observation period (GSOEP: 1984-2006, Dutch data: 1993-2005). Therefore, second generation migrants might have had comparably better chances in the Netherlands during that period. We thus control for regional employment rates in our analyses. Youth unemployment rates are higher than overall unemployment rates in the Netherlands. Both unemployment rates follow the same trend over time. In contrast, the overall unemploy-
ment rate is only slightly higher than the overall unemployment in Germany. Between 1993 and 2006 youth unemployment rates have always been below EU15 average in Germany and the Netherlands (see Table 3.1). Between 1993 and 1996, youth unemployment rates were lower in Germany than in the Netherlands, but afterwards they always exceeded the Dutch rate. Moreover, the German rate did not decrease as much as the Dutch rate between 1997 and 2000. After 2001, the German unemployment rate increased much more than the Dutch. The gap between the rates is largest in 2006.

A particular industrial or occupational structure can lead to different outcomes in country comparisons between school-to-work transitions (Gangl, 2000). The percentage of industrial jobs is much larger at the German than at the Dutch labour market. This might lead to more or more adequate job offers for labour market entrants in Germany.

3.4.3 How the German and the Dutch labour markets influence school-to-work transitions

The Netherlands and Germany are coordinated market economies with occupationalised labour markets. While Germany exhibits mainly closed employment relations, the Netherlands have rather open employment relationships. In contrast to Germany the Dutch labour market is deregulated. Temporary contracts helped to inject flexibility into certain segments of the German labour market (see Mills and Blossfeld, 2005). The percentage of part-time employment is much larger in the Netherlands than in Germany. In the Netherlands these jobs are not necessarily marginal forms of employment, though. Entering part-time jobs hardly has negative career consequences in the Netherlands. Both in Germany and the Netherlands, however, fixed-term contracts bear the risk of labour market exclusion for young second generation migrant and native entrants.

Labour market segmentation disadvantages labour market entrants in both countries. The German and the Dutch labour market are regulated and far more segmented than in other European countries. Segmentation takes place on the basis of qualifications and occupationally defined fields (cp. Scherer, 2004). Younger workers are labour market outsiders and their lack of work experience, seniority, lobby, and networks render access to employment difficult (Blossfeld, Buchholz, Bukodi, Ebralidze, Kurz, Relikowski, and Schmelzer, 2005, 6). Those who face difficulties when entering the labour market are increasingly affected by labour market flexibility, which is likely to have long-term labour market career consequences. School-to-work transitions would, thus, result in a sorting process, if second generation migrants would enter temporary jobs to an overproportional extent.
3.5 Summary of institutional similarities and differences

Economic and sociological viewpoints place the two countries’ institutional regime types with regard to school-to-work transitions in two typologies (Brzinsky-Fay, 2007). According to the economic perspective there are two types of school-to-work transition regimes: internal labour markets (ILM) and occupational labour markets (OLM). According to this classification Germany and the Netherlands generally fall into the category of OLM, where vocational education is highly standardised and the definition of qualifications is very clear for employers (Gangl, 2003; Marsden, 1999; Shavit and Müller, 1998).

Another type of classification sorts countries into patterns of school-to-work transitions depending on differences in the educational systems. Germany and the Netherlands are included in the group of countries with extensive vocational training systems at the upper-secondary level and with low proportions of people who do not progress after compulsory school and significant proportions of upper-secondary school leavers with vocational qualifications (Gangl, 2003).

Table 3.4 sums up the most important institutional differences and similarities in Germany and the Netherlands that we discussed in the previous sections. Both Germany and the Netherlands recruited Turkish labour migrants during the 1950s and 1960s. The Turks are the largest group of immigrants in both countries. Their integration is regarded as problematic as first generation migrants were skill-wise negatively selected in both countries. Germany’s other large groups of immigrants are also labour migrants (Ex-Yugoslav, Spanish, Greek, and Italian). The other large groups of immigrants in the Netherlands are descendants of Moroccan labour migrants and of Postcolonial migrants (Surinamese, Netherlands Antilleans and Arubians). Generally, the integration of Postcolonial immigrants in the Netherlands is perceived as better than of other groups. The fact that Postcolonial migrants have a longer immigration history to the Netherlands than labour migrants contributes to this. Furthermore, interethnic marriages between Postcolonial migrants and natives are more frequent than among other immigrant groups and natives. Antilleans have a better Dutch language proficiency than (most) other migrants as Dutch is one of the official languages in the Dutch Antilles.

During the 1980s and 1990s naturalisation, family formation and family reunitification had been easier in the Netherlands than in Germany. Integration policies improved quality of life and identification with the host country. Due to easier access to the country, however, the Netherlands attracted skill-wise different immigrants than Germany. The restrictive German policies seem to have shaped the skill composition of first generation migrants in a more favourable way for school-to-work transitions. Moreover, the Dutch integration policies emphasised the difference of ethnic minorities from natives and may
### Table 3.4: Institutional similarities and differences

<table>
<thead>
<tr>
<th>Field</th>
<th>Similarities</th>
<th>Differences Germany</th>
<th>Differences The Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education system</td>
<td>Highly (vertically and horizontally) standardised and stratified, early selecting in both countries</td>
<td>School starts two years later</td>
<td>Selection takes place two years later, inequalities are better balanced, more language support programmes, large drop-out rates</td>
</tr>
<tr>
<td>Vocational training</td>
<td>Firm- and school-based apprenticeship system</td>
<td>Dual apprenticeship system</td>
<td>The majority follows school-based vocational training</td>
</tr>
<tr>
<td>Labour market structure</td>
<td>Occupational labour markets, close relationship between formal education and the labour market</td>
<td>Large percentage of non-marginal (female) part-time work, minimum wages</td>
<td></td>
</tr>
<tr>
<td>Immigration history and policy</td>
<td>Recruitment of Turkish labour migrants</td>
<td>Recruitment of other labour migrant groups, largest groups came from Turkey, Italy, Spain, Greece, and Ex-Yugoslavia</td>
<td>Largest labour migrant groups came from Turkey and Morocco, Postcolonial migration, Dutch is official language in the Netherland Antilles, more restrictive immigration/family reunion policy, official integration policies</td>
</tr>
</tbody>
</table>
have produced counter-integrative effects.

Both the Netherlands and Germany have a highly stratified, standardised and early selecting education system. The Dutch education system, however, seems to balance inequalities better than the German one. Net differences between second generation migrants' educational outcomes and natives are smaller. Moreover, pupils stay four years longer in joint classes before being selected to different streams: tracking takes place two years later in the Netherlands than in Germany and school starts two years earlier in the Netherlands than in Germany. Moreover, language support classes are more frequent in the Netherlands than in Germany. Nevertheless, young school drop-outs are a much larger problem in the Netherlands than in Germany.

While the German education system is less favourable for second generation migrants (Crul and Doornik, 2003; Crul and Schneider, 2005; OECD, 2008c), the dual apprenticeship system if second generation migrants manage to enter might compensate for some of the disadvantages (Gangl, 2003). Most apprentices follow mainly school based apprenticeships in the Netherlands. German dual apprenticeships take place in schools and firms at the same time. Dual apprenticeships are supposed to smoothen labour market entrances of young people.

Both labour markets are regulated and exhibit a close link between formal qualifications and certain occupations. Part-time work is much more widespread (especially among women) in the Netherlands than in Germany. However, it is not necessarily a marginal form of employment. In contrast to Germany there exists a minimum wage in the Netherlands. We will argue later that this might cause self-selection of second generation migrants or make it more difficult for them to enter higher labour market entrance positions (see Section 4.4.2). Generally, the existing dual apprenticeship system and the non-existing minimum wage are factors which might lead to more favourable school-to-work conditions for second generation migrants in Germany than in the Netherlands.

3.6 Comparative logic of the thesis

We argued above that both, Germany and the Netherlands, have institutional contexts which are similar in factors relevant for ethnic inequality in school-to-work transitions. Both countries recruited labour migrants, both education systems are early selecting, highly (vertically and horizontally) standardised and stratified. Moreover, both countries have extensive vocational training systems at the upper-secondary level, occupational labour markets and a close link between education and the labour market (see above). However, in contrast to Germany, the vocational training system in the Netherlands is twofold. The
comparative interest of this thesis is to look at the influence of firm- and school-based
apprenticeships in otherwise similar relevant school-to-work transition contexts. Thus, we
study a causally decisive difference in otherwise relatively similar objects. With comparing
Germany and the Netherlands we chose a case oriented difference-in-similarity design (see
Ragin, 1978). The observational unit are individuals, the explanatory unit is the countries'
institutional design with regard to vocational training. We use the comparative method
and try to explain social phenomena by citing cross-societal differences and similarities (cf.
Chapter 4

Theory

This chapter summarizes theories related to ethnic inequality in school-to-work transitions and presents the according hypotheses. It starts with embedding school-to-work transitions in early life course sociology. Then, we discuss how the acknowledgment of the institutional influence has entered migration research on structural integration and school-to-work transitions. Afterwards, we present theories and hypotheses regarding ethnic inequality in school-to-work transitions in two sets: 1) composition factors and 2) distribution factors.

The first set consists of theories that yield hypotheses concerning composition factors. These factors relate to certain characteristics that are distributed within ethnic groups to an overproportional extent and might lead to ethnic inequality in school-to-work transitions. Therefore, they are supposed to partly explain ethnic inequality in school-to-work transitions. For instance, a composition factor leading to ethnic inequality in school-to-work transitions is education: compared to natives second generation migrants on the average exhibit lower levels of education. Theories regarding composition factors are human capital theory, intergenerational transmission, and social capital theory.

The second set of theories deals with theories and hypotheses regarding distribution factors. Due to distribution factors second generation migrants distribute themselves into certain jobs or are selected by employers to enter certain job positions. Moreover, they experience a certain timing of school-to-work transitions. Distribution mechanisms can work in addition to compositions factors, but do not depend on group compositions. Examples are specific preferences of individuals or employers. They lead to different outcomes of school-to-work transitions for second generation migrants compared to natives. Distribution factors are supposed to explain inequality in school-to-work transitions that is only due to being a second generation migrant. For instance, the fact that second generation migrants search for jobs differently than natives would be a distribution factor that could lead to ethnic inequality in school-to-work transitions. Theories regarding distribution
factors include discrimination and job search theory.

4.1 Early life course theory

The life-course approach serves as a research paradigm which guides the present analyses. The aim of this section is to describe why (ethnic) inequality in school-to-work transitions can affect the later life course. Moreover, early life course theory sheds light on which institutional and other structures have to be looked at when analysing ethnic inequality in school-to-work transitions.

In contrast to subjective biographies, the life course is the set of decisions of a person between alternatives, which are institutionally constrained. It refers to “the sequence of activities or states and events in various life domains spanning from birth to death” (Mayer, 2005). Changes in states (like from being in school to not being in school) or transitions build trajectories, of which the school-to-work transition is one. The time between transitions is called duration. In the context of our work the duration is the waiting time after leaving the education system and entering the labour market, as we explained above.

According to life course sociology lives are influenced by changing historical and biographical context that are in constant flux (Elder, Johnson, and Crosnoe, 2004). Thus, it is crucial to connect school-to-work transitions with biographical and historical time and changes in social life during this time. Furthermore, decisions of the life course are influenced by preceding decisions (cf. Meulemann, 1990). Age is of special importance in life course sociological analyses. It serves as a marker in historical time, for a point in the life span and a subjective understanding about the temporal nature of life (Elder, Johnson, and Crosnoe, 2004).

Different dimensions possibly explain life course outcomes: 1) institutions: the life course is influenced by the degree and manner to which societies are internally differentiated into subsystems or institutional fields. 2) life trajectories and their precedents: the internal dynamic of individual lives (in group contexts)/reasons for behavioural outcomes in the

---

1 There is a debate on whether life course transitions from childhood to old age have become more and more destandardised. Social and economic changes as well as deindustrialisation, extended education, increasing labour market participation of women have had an impact on life-course patterns. Moreover, they changed the life-course patterns of individuals differently according to the respective societal mix of labour-market dynamics, industrial relations, welfare-state institutions and social networks (Heinz, 2001, 4). Some argue that patterns for the organisation of the life course have been rapidly dissolving. This can be seen for instance, in fluid and reversible transitions between education and work. For instance, persons improve their education after their first gainful employment and maybe change their profession later (Mayer, 1996, 74).
prior life history or in normatively guided or rational purposive action, 3) current, preceding and succeeding cohorts: aggregates of individuals appear in the form of populations such as for instance birth cohorts (Mayer, 2003, 464).

The first dimension explaining life course outcomes are institutions. Life course sociologists think that the welfare mix explains the largest part of variation in life-course outcomes. The welfare mix refers to “the relative importance and manner of the interconnection of economic markets, the family, and the state across historical time and across contemporary societies” (Mayer, 2003, 467). The modern life, therefore, has to be conceptualised as a series of status configurations that are embedded in the structures of the welfare state (Heinz, 2001, 4). This includes the education system and occupational structures as main influencing factor.

Nevertheless, job outcomes of young people depend only partly on their own educational and other resources. These outcomes depend on the number of jobs available in particular occupations, industries, regions and on how many persons obtained certain qualifications and hold other resources. Besides, institutional settings like the education and training system, more or less formal requirements for entering certain jobs, or regulations govern the rights and obligations of workers and employers. The affiliation to a certain group of qualifications affects the occupational career depending on labour market and occupational structures.

The welfare states enable or restrict labour market related choices (see Chapter 3). This is the case because individual expectations and actions are always affected by particular opportunity structures located at the macro level. For instance, social norms of an institutional context shape timing and quality of school-to-work transitions which in turn strongly shape future lives. Due to age norms, for instance, it might seem inappropriate to leave the education system at an older age and later it might be too late and the “window of opportunity” for going back to education later is closed (cf. Neugarten, 1979; Kempner and Kinnick, 1990).

The institutional context narrows or widens open or closed life options (Mayer, 2003). It is debatable whether second generation migrants are more often selected by a given institutional context instead of being able to chose options themselves. One could argue that because resources and information are distributed very unequally in this group, more second generation migrants have to accommodate than have the opportunity to exert control.

The second dimension explaining life course outcomes are trajectories. When looking at this dimension the main question is whether situational, personal or contextual conditions, experiences, and resources acquired at earlier stages of the biography shape certain life-course outcomes. In our context, this relates to the influence of educational careers and
vocational training on school-to-work transitions. Looking at causal effects at the micro level, however, does not answer the question whether selection outweighs adaptation by choice or vice versa. Social norms, cultural scripts and rational choice might also matter in this context (Mayer, 2003).

Life trajectories and their precedents can be divided into within-country differences, historical changes over time and the comparison of life courses across societies (Mayer, 2005, 24). Cross national comparisons are an especially suitable way to untangle links between institutional settings and lives. In that context specific (not aggregated) institutional arrangements should be related to specific life course outcomes rather than aggregate a series of life course outcomes. Moreover, there are four signposts for life course analyses that are important to note: first, life courses are part and product of a societal and historical multilevel process as they are tied to the lives of other persons. Second, they develop in different mutually related and mutually influenced life domains and are therefore multidimensional processes. Third, since the individual acts on the basis of prior experiences and resources (endogenous causation) the life course can be seen as a self-referential process. Fourth, individuals reproduce and change social structure through their own individual lives (Mayer, 2003).

The third dimension shaping life course outcomes are succeeding and preceding cohorts. From life course’s theoretical approach lives are linked because people live interdependently (Elder, Johnson, and Crosnoe, 2004). The third dimension relates to the fact that preceding cohorts, in our case first generation migrants, are influential for school-to-work transitions of second generation migrants.

School-to-work transitions take place at the micro and the macro level (Mayer, 2003, 467). In our analysis we look at the macro to micro effect. This means we analyse how the institutional or structural macro conditions mentioned above influence individual school-to-work transitions of second generation migrants at the micro level. Furthermore, we analyse this across countries. We draw the links to parents with the horizontal micro direction and are interested in how linked lives of family affect the transition. Our results may shed light on the question how micro outcomes (influencing factors in school-to-work transitions of second generation migrants) should influence macro configurations.

4.2 The institutional influence

The influence of institutional designs at structural integration processes and also school-to-work transition is a comparatively new aspect in migration research. Therefore, this section explains in which way this line of thinking has entered migration research. First, it presents segmented assimilation theory as the first theory to acknowledge the influence
4.2. THE INSTITUTIONAL INFLUENCE

of the interplay of individual and context factors for first and second generation migrants' structural integration. Second, a strand of thoughts, that has been called institutional embeddedness, further discusses these issues with a closer focus on school-to-work transitions.

4.2.1 Segmented assimilation

As one of the first theories in migration research, segmented assimilation theory connects migration research with institutional influence. Although mainly related to the US American context segmented assimilation theory acknowledges the interplay of individual and context factors for the adaptation processes of first and second generation migrants. It argues that institutional influences — modes of incorporation — shape the translation of first and second generation migrants’ human capital into structural integration outcomes (Portes and Zhou, 1993).

Segmented assimilation theory places the process of “becoming American” in terms of both acculturation and economic adaptation, in the context of a society consisting of segregated and unequal segments. The theory explains why different patterns of adaptation emerge among contemporary immigrants and how these patterns necessarily lead to the destinies of convergence or divergence. The theory assumes three possible multidirectional patterns instead of a uniform process of adaptation. The three patterns are: 1) upward mobility by acculturation and economic integration into the normative structures of middle-class America, 2) downward mobility: the opposite road to permanent poverty dictating the acculturation and parallel integration into the underclass, and 3) economic integration or rapid economic advancement into middle-class America, but with lagged acculturation and deliberate preservation of the immigrant community values and solidarity (Portes and Zhou, 1993; Zhou, 1997).

Although remaining quite vague about the precise impact of single factors, segmented assimilation explains into which segment of American society a particular immigrant group assimilates by individual as well as contextual determinants. In contrast to assimilation

2The idea that assimilation without acculturation can lead to economic advancement is one of the new contributions of this theory.

3The important influencing factors on integration in context of the theory are individual factors, structural factors, family variables, and the context that immigrants find upon arrival in their new country. Individual factors include education, other factors associated with exposure to American society, aspirations, identification, English language ability, place of birth, age upon arrival, and length of residence in the United States. Structural factors consist of racial status, family socio-economic backgrounds, and place of residence. The same or very similar determinants that contribute to successful adaptation are specified by the assimilation model: educational achievement, stronger aspirations and motivation, proficiency in English, native birth or arrival at younger age, longer U.S. residence, lighter skin colour, higher family class status, and residence outside ethnic enclaves (Alba and Nee, 1997).
CHAPTER 4. THEORY

theory, segmented assimilation theory assumes that the two sets of determinants are in themselves of minimum importance. The theory focuses instead on the interaction between individual and contextual factors (Zhou, 1997, 984). In the framework of the theory, ‘modes of incorporation’ are a typology of factors affecting adaptation outcomes. On the contextual side modes of incorporation are formed by the policies of the host government, the values and prejudices of the receiving society, and the characteristics of the coethnic community. Modes of incorporation depend on the history of each ethnic group and its specific profile of vulnerabilities and resources (Portes and Zhou, 1993; Portes and Fernández-Kelly, 2006; Portes and Rumbaut, 2005).

Certain ethnic groups become vulnerable to downward assimilation by colour, location, and absence of mobility ladders. Physical features become redefined as handicaps by the host society. Concentration of immigrants households in cities and particularly central cities puts new arrivals into close contact with concentration of native-born minorities. As a result, the majority identifies immigrants and native poor as the same. On the other hand, if immigrants join well-established and diversified ethnic groups they possess extensive access to moral and material resources. Economic diversification of several immigrant communities offers niches of opportunity, for instance as self-employed, for low-skilled co-ethnics from the second generation (Portes and Zhou, 1993).

Segmented assimilation theory, however, cannot be completely transferred to the European context. First, segments in Europe are not as rigidly ethnically stratified. Second, no ethnic group is as strongly residentially and socially segregated as ethnic groups in the United States. Third, there is no such groups as the blacks with acculturation to which downward assimilation is likely to occur. Moreover, the black-white schism might not be as rigorous in Europe as in the US, even though different phenotypical stigmas according to colour of skin may exist.

4.2.2 Institutional embeddedness

A promising theoretical approach with regard to second generation migrants in Europe is “institutional embeddedness” (Thomson and Crul, 2007). Institutional embeddedness in the context of labour market integration of ethnic groups is a relatively new field in

4 According to segmented assimilation context variables regarding first generation migrants include characteristics of the sending countries political relations between sending and receiving countries, the state of the economy in the receiving country, and the size and structure of pre-existing coethnic communities.

5 According to Thomson et al. there are two promising important theoretical approaches with regard to second generation migrants in Europe (Thomson and Crul, 2007). The other important approach is the concept of “blurred” and “bright” boundaries (Alba, 2005). These boundaries vary in their intensity across different nation states. “Bright boundaries” represent sharper division between ethnic groups. They are assumed to be more difficult to cross than the more malleable, less divisive “blurred boundaries”. The
migration research, even though it had been mentioned within segmented assimilation theory. In comparison to the American assimilation debate, the focus on institutions and cross-country comparisons of integration processes can be seen as a special feature of European migration research. At least it got much more attention in European research than elsewhere (Crul and Vermeulen, 2003, 967).

Disadvantages in school-to-work transitions are influenced by host societies. They vary across countries due to institutional arrangements that shape resources and influence the decision-making of immigrant job seekers and employers. Matching of persons with a migration background to jobs and the observed outcomes of the match differ across European countries. This institutional approach shifts the focus from the position of persons with migration background to the macro level (Kogan, 2007). Institutional embeddedness has mainly been described for first generation immigrants. In the following we describe the factors that also apply to school-to-work transitions of second generation migrants.

Three institutional components intervene in the basic mechanism of immigrant labour market inclusion: 1) immigration policy, 2) labour market structure and regulations and 3) the welfare system. National immigration policies serve the purpose of regulating access to residency by controlling the numbers and characteristics of immigrants that suit particular economic needs or fulfil political, social or other obligations. Pre-existing ethnic attitudes, national boundaries and hierarchies and even a wider national doctrine find their reflection in immigration policy. Certainly it influences attitudes towards immigrants and gives rise to formal and informal institutional arrangements (like laws, organisational policies, and popular culture) that all affect the opportunities available to newcomers and determine their constraints. Immigration policies explicitly or implicitly stipulate the selection of immigrants, particularly with respect to human capital, and channel the way this capital is utilised. Even if intended, immigration policies cannot always control immigrants’ skill levels because of family ties and social networks that affect selection.

Individual characteristics like education and qualifications, knowledge of the host country language, financial resources and existing networks have a major impact upon their position within the host society. For inclusion into the labour market basic features of the host societies also matter (Kogan, 2007).
CHAPTER 4. THEORY

There are two particularly relevant government policies, that are indirectly related to immigration policies: 1) programmes which aim at assisting immigrant settlements and integration and 2) policies aimed at the regulation of inter-group relations (see Kogan, 2007). Integration programmes could, for instance, include language courses or professional retraining. Inter-group relation policies exist in anti-discrimination laws, equal rights provisions in employment, housing, and other spheres of society. Host country immigration policies also play a central role concerning school-to-work transitions. Immigration policies influence employers in the complex process of selection and self-selection of second generation migrants with respect to human capital resources. This is the case because they explicitly regulate the selection of immigrants on the basis of human capital or competencies that are in demand in the receiving society (Kogan, 2007). This affects second generation migrants as well because attitudes, experience and the composition of first generation migrants transmits 4.3.2.

Moreover, labour market structures play a role for second generation migrants’ school-to-work transitions because ethnic minority groups might be distributed into certain labour market segments (see Section 4.3.1 for a discussion of labour market segmentation theory). European countries differ most concerning the size of low labour market segments, employment structures and labour market regulations that affect immigrants’ chances of entering higher-status employment. These labour market dimensions might have both independent and joint impacts on the employment success of immigrants and on the nature of jobs held by newcomers. As labour markets are interrelated with other institutions of society like immigration policy and the welfare state comparative analysis have to include the impact of these related institutions (see Kogan, 2007).

Furthermore, welfare regimes are important for school-to-work transitions of second generation migrants. Labour markets and their regulations together with welfare provisions form the basis of welfare regimes. Welfare regimes are intended to adjust labour market outcomes for immigrants (and the native-born) via social services and assistance, income redistribution and employment protection. As migrants are a vulnerable part of the host society, they may particularly depend on welfare provisions. Moreover, employment protection legislation increases the costs of firms to fire workers (Kogan and Kalter, 2006). In countries with high employment protection legislation firms have greater incentives to screen out seemingly less productive workers. Firms may then base their selection of workers on assumptions about the productivity of different categories of workers (“statistical discrimination”, see Section 4.4.1) and decide against ethnic minority workers (Heath, 2007). Employment legislation is strong in Germany but weak in the Netherlands through reforms that flexibilised the Dutch labour market (see Section 3).

In addition to the three dimensions presented above, one could include discrimination
as producing ethnic inequality at school-to-work transitions. This refers to the fact that treatment of minorities influence their labour market chances. The degree of discrimination, the conception of the nation, access to citizenship, and strength and presence of antidiscrimination legalisation are important in this context (Heath, 2007; Heath, Rothon, and Kilpi, 2008).

4.3 Composition factors

Group composition of second generation migrants and natives determines their success at school-to-work transitions. How a group is composed is due to processes that operate prior to entry into the labour market. We distinguish these composition factors from distribution factors (see Section 4.4). This section summarizes theories from which we derive hypotheses on composition factors. The following section deals with distribution factors.

In this section on composition factors we use the origin-education-destination (OED) diagram to depict which mechanisms the presented theory explains. In social stratification research the OED diagram has been widely used to depict intergenerational transmission mechanisms through the relation of education, origin and destination (Erzberger and Kluge, 2002; Heath, Rothon, and Kilpi, 2008). It mainly argues that class origin (O) affects a person’s educational (E) and labour market outcomes (D). When the diagram is applied to second generation migrants, class origin can be substituted by minority status (M) because the groups of second generation migrants that we are looking at have very similar social class backgrounds (Kalter, Granato, and Kristen, 2007; Heath, Rothon, and Kilpi, 2008).

Furthermore, we drew an arrow from education to destination in the diagram because educational level influences labour market destinations D in school-to-work transitions as we will argue in the following section on human capital.

Figure 4.3 depicts the extended, modified origin-migrant-education-destination (OMED) diagram. The important messages of the triangle in our context are that: 1) second generation migrant membership M is influenced by class origin O, 2) educational outcomes E influence labour market destination D (see previous section), 3) second generation migrant

---

7 Heath et al. also categorised the institutional influences on structural integration. Their approach is quite similar to the approach presented above, but they explicitly include discrimination as producing inequality and have slightly different names for the different facets. Heath et al. name the following four dimensions: 1) social and economic properties of the destination societies and general processes of social reproduction, 2) discrimination, 3) immigration policies, and 4) the general nature of the economy (Heath, 2007; Heath, Rothon, and Kilpi, 2008).

8 We have argued above that we are largely dealing with children of labour migrants. Moreover, labour migrant and late Postcolonial migrant parents of second generation migrants have similar social class backgrounds.
membership M and class origin O influence educational outcomes E, and 4) second generation migrant membership M and class origin O influence labour market destination D. We will describe these mechanisms in detail in the following sections.

4.3.1 Human capital, signaling, screening, and queuing

One of the most prominent explanation why ethnic disadvantages persist for second generation migrants in the labour market is that they lack the resources which are necessary to succeed. This section focuses on the second aspect of the OMED-diagram, the ED link. We will argue that second generation migrants are disadvantaged on the labour market because compared to natives they have lower levels of education. Therefore, they have lower labour market destinations chances. This section introduces human capital theory and signaling, screening and queuing hypotheses. It explains why second generation migrants face disadvantages when endowed with lower levels of human capital.

Human capital theory (Becker, 1964; Mincer, 1993) suggests that occupational achievement and employment income reflect different levels of productivity. Employers do not know the real productivity of an employee and finding out is related to costs. Therefore, they base their hiring decisions on characteristics which they think are related to productivity: human capital indicators. First of all, this includes educational attainment of individuals. Moreover, work experience and job-specific training create labour market skills that increase productivity in the future. Formal education and practical on-the-job training substitute or complement each other in generating productivity. In addition to education and training human capital factors include all abilities and skills\footnote{Skills have become highly valued in new "knowledge societies". Broader, more analytic general competences and skills instead of narrow job-specific skills are increasingly demanded. Moreover, less hierarchically fixed activities and more autonomous work in processual and cooperativework settings are asked for. Cooperative work groups, services and management tasks proliferate. This implies an increased level} that account
for worker’s productivity. Formal qualifications are only a proxy for human capital, often unmeasured aspects like language proficiency, cultural knowledge, social networks have to be taken into account (Kalter and Granato, 2007, 281). Employers select the most productive workers for qualified occupations because it is less easy for them to control these tasks. Qualified jobs contain less clearly defined, checkable tasks and the exchange between employee and employer is more diffuse. Employers depend on employee’s commitment (cf. Buchholz and Kurz, 2005). On the other hand, individuals with higher human capital may choose different jobs than individuals with lower level of education.

The screening hypothesis argues that educational certificates are adequate indicators for hiring decisions of employers because it has been shown that productivity usually increases with higher levels of education (Arrow, 1973a). School certificates therefore can be regarded as a forecasting instrument, on whose basis employers screen job applicants (Müller, Steinmann, and Schneider, 1997, 181). “Screening devices” are characteristics that employers use to select job applicants (Stiglitz, 1975). For instance, educational certificates are screening devices. Additionally, the signaling hypothesis argues that educational certificates are a ‘signal” for employers because they indicate the time an individual needs for vocational adjustment. Job applicants try to “signal” their productivity by the attainment of additional education (Spence, 1973). Consequently, being low-skilled has become a negative signal. On the one hand, low-skilled persons have been discredited due to the decreasing size of this group over the last decades. On the other hand, the signaling value of being low-skilled has additionally led to sorting out or self-selection processes (Solga, 2002, 2008). One straightforward reason why second generation migrants are disadvantaged at the labour market according to screening and signaling is that they on the average hold lower educational certificates (cf. Kogan, 2007). The extensions of the signaling and screening hypotheses and human capital theory also suggest that lower first positions or phases of uncertainty negatively affect future employment chances and may lead to continuous disadvantages (Scherer, 2004; Blossfeld, Buchholz, Bukodi, Ebralidze, Kurz, Relikowski, and Schmelzer, 2005).

Education is the most prominent determinant of first labour market success not only because it proves productive capacities and signals them to employers as described above, but also because job entrants are least competitive. They have few or lack work experience, employment histories, and professional contacts. Experiences at labour market entrance are an immediate consequence or short-term return of educational decisions taken earlier. It has been suggested, therefore, to view education more as a productive resource of labour market entrants securing an adequate start into the working life rather than a mere credentialist screening device (Gangl, 2000, 33).
According to the queuing hypothesis employers presumably rank job candidates in a queue when faced with a pool of job applicants. Employers seek to recruit the most productive and least costly applicant for a certain position based on job applicants’ potential performance (including his or her adaptability and trainability). Because productivity is unobservable, the position in the queue is not determined by his/her absolute level of productivity, but rather his/her rank in relation to other candidates. This happens according to characteristics the employer perceives as relevant. For the employer these characteristics serve as proxies for expected productivity (Thurow, 1975; Sorensen and Kalleberg, 1981). In line with the human capital model these proxy characteristics will definitely include workers’ skills, education and training, but they might additionally include ethnicity. First and second generation migrants’ ethnicity depicts a negative signaling value (and, thus, a later position in the queue) because it is often assumed to be accompanied by being low-skilled and obtaining lower language proficiency. However, the signaling power of this signal should diminish over a longer period of time. First, the power of this signaling value decreases because employers learn about second generation migrant employees’ real abilities over a period of time. Therefore, they may be more willing to hire second generation migrants. Second, as those persons without migration background are taken out of the market in the first rounds of hiring, there are more employees with ethnic background in the pool of employees for a specific position and, therefore, the power of the signal ethnicity further decreases.

The duration of waiting time until jobs might be negatively correlated with individual skills because younger persons compensate their lack of labour market experience with education. Young persons who lack human capital are therefore likely to experience unfavourable conditions at job entry like longer job search phases (Blossfeld, Buchholz, Bukodi, Ebralidze, Kurz, Relikowski, and Schmelzer, 2005, 9). We argued above that second generation migrants attain lower educational certificates than natives in the Netherlands and Germany. Therefore, they are likely to be disadvantaged with regard to school-to-work transitions. Ethnicity is supposed to have a negative influence – the according hypothesis 8 is derived below, see Section 4.4.2. Education accounts for a large part of second generation migrants’ ethnic inequality. We are interested in the effect of ethnicity that remains after taking the effect of different educational attainment between natives and second generation migrants into account. We expect that accounting for human capital by introducing it in the empirical models on duration of waiting times decreases the negative coefficient of ethnicity. This effect should show for all groups of second generation migrants (with Turkish, Italian, Spanish, and Greek background in Germany and with Turkish/Moroccan or Surinamese/Antillean/Arubean background in the Netherlands).

\textit{H 1: Higher levels of education reduce the negative effect of second generation ethnicity}
4.3. COMPOSITION FACTORS

on duration of waiting times.

We want to test whether firm-based apprenticeships indeed hold positive effects for natives and second generation migrants in the Netherlands. Dual apprenticeships are supposed to smoothen school-to-work transitions and we expect them to positively influence first labour market outcomes. The two pathways of mostly school-based BOL and dual BBL/BBO are, however, supposed to be equally valued by employers. Therefore, we should not find the same smoothening effect, that is a duration of waiting time shortening effect, for those who completed a BBL/BBO apprenticeship in the Netherlands like for those who completed dual apprenticeships in Germany. Moreover, the positive effect of dual apprenticeship completion on first labour market outcomes should be larger in Germany than in the Netherlands.

H2: Completion of dual apprenticeships reduce duration of waiting times more in Germany than in the Netherlands.

An important unmeasured facet of human capital for second generation migrants is language proficiency. It is mostly seen as a key ingredient for their labour market outcomes. Although second generation migrants are better off with regard to these factors than their parents, there might be a considerable gap between them and the indigenous youth, which might be of importance for succession of second generation migrants (Kalter and Granato, 2007, 281). Similar to the argument of hypothesis 1, accounting for differences in language proficiency between second generation migrants and natives should decrease the negative effect of second generation migrant ethnicity. We look at spoken and written language proficiency because both are important for finding a job. Acquiring writing skills requires a systematic way of learning, which is promoted by a higher level of education, while speaking fluency is rather acquired by communication (Dustmann, 1994b, 154).

H3: Better written and spoken language proficiency reduces the negative effect of second generation ethnicity on duration of waiting times.

The ideas of human capital theory, signaling, screening and queuing presented above apply to both, natives and (first and second) generation migrants. We have argued that they lead to disadvantages for second generation migrants mainly because this group attains lower levels of education and language proficiency. The following section explains why and how exactly human capital endowment is different for second generation migrants than for natives (cf. Granato and Kalter, 2001).
4.3.2 Intergenerational transmission

Based on intergenerational transmission theory this section deals with the OE and OD links of the OMED-diagram. It explains specifically for second generation migrants why 1) class origin O and educational outcomes E are related (the OE link) and 2) why class origin O also has a direct influence on labour market destination D (the OD link).

Intergenerational transmission assumes that a large part of educational and labour market outcomes of children can be explained by their parents' investments. Parents transmit support, resources, knowledge, earnings, assets, and consumption to their descendants (Becker and Tomes, 1986; Becker, 1993; Solon, 1999). The endowments that children inherit from their parents comprise transmittable human capital, genetic and cultural factors that are helpful for educational and labour market outcomes. Consequently, some children have a relative advantage at the labour market and in the education system as they are born in families with substantial abilities, a strong emphasis on childhood learning, and other favourable cultural and genetic attributes. Regarding second generation migrants' labour market entrance intergenerational transmission is less favourable. This mainly works through two mechanisms: 1) lower possible investment and 2) restricted investment decisions (cf. Granato and Kalter, 2001).

Lower possible investments in migrant families

The first mechanism relates to the fact that human capital of parents directly influences children's educational outcomes (the OE link) and additionally labour market outcomes (the OD link). This is the case because educational success of children depends on parents' homework support and knowledge about the educational system which is mediated by their human capital. Moreover, intergenerational investments in migrant families which are helpful for labour market entrances are not possible as much as in native families because first generation migrants are disadvantaged at the labour market. Consequently, first generation migrants might have less knowledge about functioning of the labour market and obtain less helpful information or contacts that they can transmit.

There are two pronounced reasons why first generation migrants are disadvantaged at the labour market and transmit this to their children. First of all, they are endowed with lower levels of human capital themselves and second, segmentation of labour markets increases their disadvantages (Granato and Kalter, 2001). We explain the two reasons in more detail as they describe why the link between class origin and migrants status is strong and disadvantaging for second generation migrants.

There are three mechanisms why first generation migrants are endowed with lower lev-
4.3. COMPOSITION FACTORS

eels of human capital. First of all, most first generation labour migrants are “negatively selected” with respect to human capital in Germany and the Netherlands (Kalter and Granato, 2007; Borjas, 1987; Van Tubergen, 2006). The different endowment with human capital can be due to differences in average endowment with human capital between home and host country or individuals with lower levels of human capital might be more likely to immigrate. Second, migration devaluates (overall) human capital (Chiswick, 1977). This mechanism might especially apply to country specific human capital like knowledge on the functioning of the labour market and language skills. Third, migrants might have specific preferences and motives, which affect their behaviour at the labour market.\(^\text{11}\) The shorter the expected periods of returns to human capital, the less it is worth to invest (Mayer, 1996). If migrants consider their stay as temporary, they might be more reluctant to invest in aspects of human capital that are specific to the host country (Dustmann, 1994a; Dustmann and Van Soest, 2000). Additionally, first generation migrants’ motives might differ because of anticipated temporary stays: they might be willing to accept worse working conditions or wages although they do not differ from native workers with better conditions or wages with regard to resources (Bonacich, 1972; Weins, 2004).

In the case of first generation labour migrants in Germany all these mechanisms are relevant (Kalter and Granato, 2007, 278). The same is true for the Netherlands as negative skill-wise selection also applied to later waves of first generation Postcolonial migrants. Their language skills were devaluated as the official languages in their home countries was neither German nor Dutch. Moreover, because of the initially planned German “rotation model” migrant workers thought that they would stay temporarily (Kalter and Granato, 2007). The fact that expected temporary stays may not be applicable to Postcolonial migrants in the Netherlands, is another reason why we hypothesize that their labour market outcomes exceed those of labour migrant descendants.

Second, first generation migrants are disadvantaged at the labour market and transmit this to their children because they are concentrated in certain labour market sectors. They were newcomers at the labour market and tended to be concentrated in external segments of the labour market and in lower positions in firm hierarchies (see Section 3.1). This and their expected return to the home country negatively affected their chances to be hired and climb up the career ladder. Furthermore, their lower levels of formal education further decreased their chances to participate in training (Granato and Kalter, 2001).

This argumentation is based on labour market segmentation theories. According to seg-

\(^{11}\)Thus, it is different from the argumentation that migrants might face ethnic disadvantages at the labour market simply because they orientate themselves towards different careers than natives. These career preferences might rather be due to a limited number of realizable opportunities that are shaped by different endowment with human capital (cf. Granato and Kalter, 2001, 501).
mentation theories consist of several closed segments that restrict career mobility chances (see for details e.g. Doeringer and Piore, 1971; Blossfeld and Mayer, 1988). The theory of labour market segmentation splits the labour market in a primary and a secondary sector. Workers in primary labour markets can obtain higher wages, job security, better chances of job advancement, and barriers to entry against those employed in the secondary segment of the labour market like ethnic minorities. Atypical forms of employment belong to the external partial labour markets with insecure conditions of work.

The distinction between primary and secondary labour markets links to another economy related argument explaining cross-nationally observed patterns of ethnic penalties. The barriers between primary and secondary labour markets vary between countries. They create market imperfections which protect privileged categories of workers (men or natives) from competition with second generation migrants to differential extent between countries (cf. Heath, 2007).

The concentration of first generation migrants in certain labour market sectors affects their children's school-to-work transitions: first generation migrants may have a say in the hiring of apprentices in work councils of employees of the labour market sectors they are concentrated in only. This improves training opportunities for migrant children in these sectors and make it harder to enter others (Worbs, 2003, 1029).  

Restricted investment decisions in migrant families

The second mechanism of intergenerational transmission, restricted investment decisions, relates to the fact that education and labour market decisions have an investment character. At the investment in education the returns to education are subjectively evaluated because investments in education are risky and costly. For this decision the educational level of parents matters. If parents do not think that investment in education will yield returns, this restricts educational investment decisions of children (cf. Granato and Kalter, 2001). Parents influence children's "fields of opportunities" in this decision. This is the case because parents motivate, are role models, and guide their children throughout life courses. Parents influence their children's aspirations and expectations for higher achievement (Bourdieu and Passeron, 1979). Parents do not only influence their children to complete higher education, they also teach them how to manage to be successful. Then

---

12There was an increasing shortage of apprenticeship positions in the German economy over the last couple of years. Due to the signaling value of ethnicity (as argued above with regard to the queuing hypothesis) and discrimination (see Section 4.4.1) this increases competitive pressures especially for young persons with a migration background. If they find access to apprenticeships, they are concentrated in certain "traditional" occupations as auto mechanic, electrician, painter, hairdresser and doctor's receptionist, while natives often go into office jobs (Worbs, 2003, 1029).
the transmission of cultural and social capital is not only about values, goals, and dispositions, but it additionally includes strategies or competences to reach these goals (Andres and Adamuti-Trache, 2008). It is a type of agency that individuals can learn from their parents. These aspirations and motivation strategies matter for labour market entrance decisions. The decision of the parents in turn is shaped by the resources they and their children hold. The decisions are made within a frame of institutional and social conditions offering opportunities and in line with existing resources.\footnote{Some formal models show that the mechanism of intergenerational transmission do not only slow down trends towards ethnic equality but that underinvesting in human capital reproduces itself and generates a stable equilibrium of ethnic stratification at the labour market. However, theoretical conditions have not yet been described sufficiently (see Granato and Kalter, 2001).}

Occupational status of fathers reflect class origin of descendants and socio-economic background in our analyses. It reflects both, the investment of parents and a type of agency that individuals can learn from their parents. In the context of second generation migrants especially fathers’ occupational status matter because most of the families live traditional gender roles (also see Section 2.6). Fathers with jobs or higher labour market positions might have occupational networks which offer more information flow and are more able to provide their descendants with important information for job search or about the labour market. Higher job positions of the father are assumed to be more helpful.

\textit{H 4: Higher job positions of fathers reduce duration of waiting times.}

4.3.3 Social capital

Social capital is another factor which is supposed to enhance successful economic or structural absorption of (second generation) migrant in the country of residence. The concept of social capital dates back to Bourdieu who developed the idea that cultural and social capital can be reduced to economic capital. This means that social capital allows actors to reach economic capital (Bourdieu, 1983). In Coleman’s point of view social capital is available in the family and outside the family in the community (Zhou, 1997). According to him the culture an individual is raised in is a form of human capital common to all members of that group. This common human capital influences the opportunity structure of the individual and affects his behaviour, human capital formation, and labour market outcomes (Borjas, 1992; Portes, 1998; Coleman, 1988). Thus, the concept of social capital refers to the idea that involvement and participation in groups can lead to positive consequences for the individual and the community (see for review Portes, 1998).

Social capital depends on the social relationships itself, but also on the amount and quality of these relationships or networks. The literature mostly distinguishes two types
of social networks: 1) bonding networks that unite people with similar background characteristics (strong ties) and 2) bridging networks that link people with different interests and habits (weak ties) (Granovetter, 1973; Portes, 1998; Drever and Hoffmeister, 2008). Bonding, strong tie network insiders are supposed to share resources efficiently. Mutual trust, cooperation, and information flows (social capital) are thought to be easier in strong tie networks because network members share reliable information about each other. Besides, the violations of social norms can easily be punished. Dense networks are therefore often seen as a resource also to ethnic minorities.

However, social capital through strong ties can have negative consequences when it leads to the exclusion of outsiders, excess claims on group members, restrictions of individual freedom, or downward leveling norms (Portes, 1998). Moreover, members of bonding, strong tie networks are often distrustful, distant, and reluctant to cooperate with members of the surrounding society. Consequently, the information flow across network borders may be limited (see for review Drever and Hoffmeister, 2008). The similarity of contacts in bonding networks might create redundancy of information which leads to “structural holes” (Burt, 1992). These structural holes are assumed to emerge if social connections are truncated through the interaction with those in similar situations. They are characterised through the scarcity of occupants of influential positions and middle class families in the areas where networks exist (see for review Portes, 1998, 13). In line with this argumentation, Granovetter notes the “strength of weak ties” (Granovetter, 1973). He argues that bridging, weak ties are critical to the economic and social advancement of individuals while strong, bonding ties create fragmentation at the societal level.

In the context of the present thesis this boils down to the question whether it is more useful for immigrants to develop contacts with coethnics or native-borns. The crucial point is whether (second generation) migrants gain more social capital by investing in networks which consist of their coethnics than by investing in bridging, weak tie networks that offer a link to the wider society. Therefore, this debate is closely linked to the assimilation debate in migration research (Drever and Hoffmeister, 2008, 427). On the one hand, one might

---

14 There are other, more differentialised distinctions. For instance Portes identifies three types of social capital: 1) community social bonds and control, 2) familial support, and 3) network-mediated benefits beyond the immediate family (outside networks) (Portes, 1998).

15 The basic idea that “assimilation” leads to success (and structural integration) is highly debated (e.g. Gans, 1979; Portes, 1998; Zhou, 1997; Warner and Srole, 1945). The concrete hypothesis which were based on assimilation theory are that 1) immigrants who arrived at a younger age, 2) immigrants with longer duration of stay, and 3) successive immigrants generations will show higher integration (Van Tubergen, 2006). Later, scholars have reworked the initial strict ideas of the assimilation approach (Alba and Nee, 1997; Gans, 1992). As mentioned above in segmented assimilation theory Portes and Zhou argue that a growing number of empirical experiences contradicts the expectation of assimilation theory that foreign-born people and their offspring will not acculturate first and seek entry and acceptance among the native-
argue that bridging, weak ties lead to diminishing cultural difference. As a consequence, immigrants hardly differ from the mainstream society and profit in terms of better access to job and better other economic social opportunities. It has been argued that economic integration might be better gained by preserving ties to one’s own ethnic group and ethnic identity. However, this is often assumed to be a good strategy only for newly arrived migrants and those with few skills (Drever and Hoffmeister, 2008, 428).\(^\text{16}\)

On the other hand, social capital induced by strong ties is supposed to facilitate access to employment, mobility through occupational ladders, and entrepreneurial success (Portes, 1998, 12). Some researchers state that ethnic networks offer good labour market chances because hiring by means of (ethnic) personal networks allow immigrant groups to dominate particular professions. Through these ethnic economies ethnic minority members help each other to avoid the brunt of impacts of restructuring (Drever and Hoffmeister, 2008; Waldinger, 1994). Researchers emphasise the importance of structural opportunities for immigrants to share ethnic resources and form “ethnic enclaves” or “ethnic labour markets”. Larger group size and spatially concentration would then enable immigrant groups to develop an independent, mono-ethnic labour market in which immigrants can obtain positions otherwise held by natives (see Van Tubergen, 2006). In contrast, in other work on ethnic niches and ethnic economies it has been argued that assimilation and the breaking of ties to one’s ethnic community are necessary to gain economic success (see Drever and Hoffmeister, 2008).

Social capital theory has been introduced into the field of migration to explain differences between ethnic groups in their economic integration. It is assumed that immigrants are willing to help their co-ethnics by for instance offering jobs, buying goods and lending money. Economic opportunities are determined by the amount of resources the immigrants have at their disposal. In groups with more ‘ethnic capital’, immigrants have more resources available to them, which promotes their economic opportunities (Van Tubergen, 2006).

Second generation migrants may lack (some) language proficiency and host country specific knowledge. Therefore, they depend to a large extent on their social context and community at labour market entrance. Larger ethnic diversity of a region (the quantity of migrants in a region) essentially supports formal and informal migrant networks, that foster useful connections and strategies for successful job search. Besides, more indirect effects are working: a larger share of migrants who are active and visible in the labour market leads to a higher level of acceptance by employers, colleagues and customers. Prejudices against migrants may be diminished if employers are used to working with people from different cultural backgrounds (Haas and Damelang, 2007). Besides, job opportunities

\(^\text{16}\)This argument goes back to Park and his “race-relations cycle” (see Alba and Nee, 1997, 828).

\(^\text{born later}\) (Portes and Zhou, 1993; Zhou, 1997). We will not go into more detail here, as this debate is not directly linked to our research questions.
in ethnic economies might be larger if more ethnic group members live in the region of residence. Last but not least, larger ethnic group sizes may render second generation migrants language deficits less important (cp. Esser, 2006a). As a consequence a higher level of diversity is supposed to have mainly positive influences on labour market outcomes of second generation migrants in Germany and the Netherlands. Especially those regions with a large percentage of successful, working migrant population should prove useful for young persons with migration background.

\[ H_5: \text{Higher percentages of migrants in the region of residence decrease duration of second generation migrants' waiting times.} \]

\[ H_6: \text{Higher network participation of migrants in the region of residence decreases duration of second generation migrants' waiting times.} \]

Additionally, the quality of available resources in immigrant groups play a major role for educational and labour market outcomes. Borjas suggests that the ethnic environment in which an individual is raised equals ‘ethnic capital’, which he determines by the groups’ average educational level (Borjas, 1992, 1994). Social capital has a strong impact on the formation of human capital because the social context strongly distinguishes the achievement of otherwise equally competent individuals. Disadvantage for educational attainment of young migrants can emerge when the social capital of ethnic groups is less helpful as compared to those of natives (Loury, 1977, 176). According to Borjas the ethnic capital determines skills and labour market outcomes of individuals. He argues that ethnicity affects how parents invest in their children’s human capital through the average quality of ethnic environments in which parents make their investments. As a consequence of different ethnic capital between ethnic groups, differences in skills and labour market outcomes among ethnic groups can persist across generations without a necessary process of convergence (Borjas, 1992). Moreover, heterogeneity in the intergenerational transmission between groups of different ethnic origin depends on parental preferences for investing in children’s human capital (Hammarstedt and Palme, 2006). Arguably, intergenerational transmission can occur through (at least) two different, possibly entangled processes: parental capital and ethnic capital.

**Personal contacts in job-search**

In addition to the capital of the ethnic community as discussed in the previous section, social networks are important for job search. Occupational attainment is embedded in social networks as the large majority of job seekers, though, relies on personal contacts

\[ ^{17} \text{The effect is supposed to be true for Germany and the Netherlands, but due to data restrictions we are able to test the hypothesis only for the Netherlands.} \]
4.3. COMPOSITION FACTORS

for finding a job (Granovetter, 1995).\textsuperscript{18} Personal contacts include relatives, friends, co-workers or father's friends. This is the case because personal ties offer more profound information. Personal contacts are a major resource for job search. Individuals think that they might find the best (that is jobs with highest pay and prestige) and more satisfactory jobs this way. The transmission of information about job opportunities is a more important condition for finding a job than any characteristic of the job itself (ibid.). Individuals depend to a large extent on their set of existing personal contacts for information about job-change opportunities. Therefore, they may face enormous constraints by their social networks. An individuals’ position in a social network is much more important for job search than ones behaviour (e.g. type of job search) that may be determined by ethnic and cultural background. Individual network position are characterised by the identity of known people and the quality of the relationship to these people. Moreover, the people that your contacts know matter. Culture and personality may also influence the type of jobs individuals choose (Granovetter, 1995).

Contacts are particularly important when looking at persons who try to find their first job. Young workers have few or no work experience. Usually they have not acquired many useful work related contacts. Their job search depends even more on the social networks build in school or through family, friends and relatives. The quality and quantity of social resources accessible through contacts are especially important for young people.

In principle, immigrants and natives should have the same tendency to rely on contacts during job search. Contacts can provide them with news about job openings that they would not receive otherwise. Moreover, knowing someone with “inside information” might increase hiring chances. Independent of longer or shorter-term residence, some persons with migration background might need to rely on contacts more than others because they lack language competences and knowledge about the labour market and formal job search processes (Drever and Hoffmeister, 2008, 429).

Like in the debate about social capital, it has been widely discussed whether coethnic or native contacts prove more helpful during job search. Firstly, ethnically homogeneous contacts may only give access to information and resources available in the ethnic community. As a consequence, their ties might not be as helpful as ties to the indigenous population and lead to disadvantages at labour market entrance (Kalter and Granato, 2007; Portes and Rumbaut, 2001). Secondly, coethnic network-based hiring may lead to migrants being more likely to enter jobs in certain sector, with certain employment conditions and

\textsuperscript{18}Methods of finding a job are usually characterised as formal or informal. Formal ways of finding a job include commercial and public employment agencies and advertisements. Informal methods refer to using any personal contacts or directly applying to employers or personnel agents of any kind, who the job-seeker does not personally know beforehand. Direct applications may fall into a category on their own as they are neither formal methods of job search nor include the use of personal contacts.
payment. The concentration of Latina women in the Los Angeles textile industry is an example for this (see Drever and Hoffmeister, 2008, 432).

The number of realistic employment opportunities that can be distributed via contacts might be lower in Germany and the Netherlands than in countries without highly regulated labour markets. In both countries formal qualifications are especially important. Basic jobs require formal qualifications and many people hold the according credentials. As a consequence, employers do not need to rely on personal contacts so much in Germany and in the Netherlands like in other countries. Nevertheless, recommendations might be even more important for those who drop out of the labour market in Germany and the Netherlands. Therefore, it can be assumed that they are of special importance for (second generation) migrants (cf. Drever and Hoffmeister, 2008, 432).

4.4 Distribution factors

While the proceeding section argued that the composition of second generation migrants influences their school-to-work transition, this section will argue that there are factors working “on top” of group compositions. We named these factors distribution factors because they lead to the distribution of second generation migrants into different jobs only because they are second generation migrants. Second generation migrants either enter different jobs or they are selected by employers into different jobs. Different hiring behaviour of employers towards second generation migrants (e.g. discrimination) and job search behaviour specific to second generation migrants are examples of distribution factors. This section summarizes the respective theories and presents hypotheses.

4.4.1 Prejudices and discrimination

One of the most common arguments for labour market disadvantages of persons with migration background is that employers hire immigrants and their descendants less often, i.e. employers treat members of ethnic groups differently even after human capital factors are controlled for. This means that persons with a migration background face some form of overt or hidden discrimination on the labour market (Kogan, 2007; Kalter and Kogan, 2002). Kalleberg and Sorensen put it this way: “discrimination exists when equally productive workers do not receive equal job rewards” (Kalleberg, 1979). Although we cannot test discrimination in this work (see below), we discuss discrimination and prejudice approaches. They are important for the present thesis as they partly explain what might be disguised in ethnic penalties.
4.4. DISTRIBUTION FACTORS

One reason for ethnic inequality in school-to-work transitions are prejudices. Prejudices can apply to many areas, but a substantial body of research has been involved in attitudes towards immigrants and ethnic minorities (see Van Tubergen, 2006). Although there is no overarching prejudice theory, there are general assumptions and ideas which can be related to second generation migrants and ethnic minorities. It is generally assumed that people have 1) a positive attitude towards their own group, and 2) a negative attitude towards out-groups. A third is often added: 3) negative attitudes towards an out-group lead to negative actions towards the members of that group (see Van Tubergen, 2006). The degree of positive and negative attitudes is conditional and variable. Sometimes in-group preferences are stronger than in other times, some out-groups are more disliked than others. The reason for this is not entirely clear or straightforward. The “group-level approach” is, however, empirically quite successful in explaining differences of prejudice across time, regions, and groups. The group-level approach argues that prejudice directly varies with perceived (for instance economic or cultural) threat from an out-group. In turn, perceived threat is assumed to increase with the number of out-group members, the visibility of out-group members, and the scarcity of goods that are at risk (see Van Tubergen, 2006).

When knowledge about prejudices is transferred to the integration of immigrants the following assumptions are made: 1) natives identify themselves with their country as an in-group and have a positive attitude towards their country fellows, 2) natives consider immigrants or “ethnic minorities” as the out-group and can have negative attitudes towards them. The assumption that immigrants are not seen as a homogeneous out-group enables the explanation of differences between immigrants (e.g. varying negative attitudes or social distances) (Van Tubergen, 2006). Thus, the extent of racial prejudice can vary across countries (Heath, 2007). Prejudice theories, however, have the shortcoming that they do not take the dynamics of immigration, the labour market and social security schemes into account (Tesser and Dronkers, 2007, 369). Several approaches try to explain market failures that lead to discrimination and are discussed in the following.

---

19 According to social-psychology people strive for a positive self-concept, which they partly derive from identification (social identity) with a social group. People have a positive attitude towards the in-group and negative towards out-groups because they mainly perceive positively valued characteristics of the own group and compare this to the mainly negatively valued characteristics of other groups. People can identify themselves with a number of groups (e.g. family, neighbourhood, race, and sex) (see Van Tubergen, 2006).

20 As anti-immigrant attitudes can vary between regions immigrants in some regions are better integrated economically than in other regions. Some authors suggest that a distinction between immigrants in terms of culture and physical appearance, a low socio-economic background of immigrants and the size of immigrants groups cause social distance towards groups and regional variation in prejudice. These factors cause cultural or economic threat which is assumed to result in stronger anti-immigrant attitudes among natives (Van Tubergen, 2006). Moreover, the prevailing conception of the nation among the host society may influence xenophobia and prejudices: ethnic conceptions of the nation may be accompanied by higher levels of xenophobia than civic conceptions (Heath, 2007; Heath and Cheung, 2007).
Statistical discrimination refers to the idea that employers do not have full information on the productivity of workers and impute some group information instead (Arrow, 1973b; Phelps, 1972). It describes the process that employees separate out applicants because they belong to a certain group (Suntum and Schlothöller, 2002). Therefore, this stands in contrast to the signaling and screening approach where certain characteristics of applicants influence employers decisions.

In the framework of statistical discrimination there are three aspect in which groups are assumed to possibly differ: 1) their mean productivity, 2) variances in productivity or 3) the reliability of tests trying to measure productivity (see for review Kalter and Granato, 2007, 280). If employers judge the productivity of an individual in statistical discrimination by the average productivity of the group to which s/he belongs, they approximate or ascribe average group productivity to individual group members. This follows a rational decision. The attribution of mean characteristics of a group to individuals is unverifiable in empirical models, though, because positive and negative mean deviations cancel each other out (Kalter and Granato, 2002; Kalter and Kogan, 2002).

The third type, the reliability of tests trying to measure productivity, can be tested with returns to formal education and forms an application of the signaling theory. In Germany and the Netherlands the link between educational and vocational qualifications and the labour market is especially close as described above. Consequently, the signaling power of formal education (that is the reliability of the test variable) is strong. This also applies to second generation migrants who acquired their certificates in the domestic education system (Kalter and Granato, 2007; Heath and Cheung, 2007, 280). Due to the close link between education and the labour market in Germany and the Netherlands we should not find strong differential returns to education in both countries for second generation migrants.

As statistical discrimination will only predict individual discrimination but not discrimination on a group level, one should distinguish the related but distinct mechanism of error discrimination. Error discrimination assumes that due to the lack of full information false beliefs (rather than statistical approximations) are imputed about the true productivity of workers (see Kalter and Kogan, 2002). In that case immigrants are victims of employers’ uncertainty of information regarding their true productivity (see Kogan, 2007). While the intentions of statistical or error discrimination are not based on personal preferences, it is in the case of “taste for discrimination”. These tastes on the side of employers, employees or customers can lead to effective market discrimination. This mechanism might be more widespread when the economic situation is worsening and the supply of labour is high because employers can simply “afford to” discriminate. Nevertheless, discrimination is not a successful strategy because employers risk not to choose the best applicant because of
their affinity to discriminate (Becker, 1971).

It has been argued that taste discrimination and error discrimination will not persist over a longer period of time in otherwise competitive markets. Non-discriminating employers are more efficient and push discriminating firms out of the market (Arrow, 1973c). Therefore, the explanatory power of these approaches may be questionable in the middle or long-run. The reason is that if no other market failures exist, actors with taste discrimination or error discrimination are not able to compete successfully against other actors without tastes or false beliefs (see Kalter and Granato, 2007).

For instance, business cycles can influence the amount of discrimination in labor markets (see Freeman and Wise, 1982). On the one hand, when supply of labor is large, there is room for exclusion of job seekers by means of discrimination. The more the market diverges from competitiveness through a economically good situation the less is the pressure on discriminatory firms to maximize their profit and not to discriminate (Heath, 2007). On the other hand, when supply is scarce, discrimination involves a risk for demanders (Tesser and Dronkers, 2007, 369/370). Standard economic theory predicts that firms make higher profits if they do not discriminate because they do not risk to exclude good applicants. Therefore, it suggests that enduring discrimination is irrational and does not arise in perfectly competitive labor markets. Thus, some degree of market failure or imperfection is a necessary condition for the existence of discriminatory behaviour (Becker, 1971; Arrow, 1973b). Therefore, it has been concluded that taste discrimination and error discrimination explanations are not convincing for Germany with regard to disadvantages of longer-established groups of migrants like labor migrants (see Kalter and Granato, 2007).

On the other hand, in protected labor markets employers’ statistical and/or error discrimination may increase because institutions influence their recruitment of job seekers. The degree of labor market flexibility in a given country can influence employers’ decision-making when hiring workers since in highly protected labor markets employers are faced with potentially higher dismissal costs. Rational employers will prefer strategies of intense screening of applicants before formal hiring when the hiring threshold is quite high. Given the constraints of strict labor market protection legislation, employers favouritism of native born workers (as opposed to persons with a migration background) appears to be quite rational. Uncertainty about an applicant’s actual productivity will push employers to look for observable and clear signals of appropriate skills in order to reduce the risk of a bad match. Thus, employers will look more closely at indicators of productivity (education or training) and ascriptive characteristics (gender or migration background). Acute necessity of the ‘perfect’ match might increase the risk that statistical error discrimination practices intervene in the screening processes and cause employers to appear to be more
readily acting on their prejudices. Expected outcomes of severe labour market regulation are potential aggravation of immigrants' outsider status and the institutionalisation of their segmentation in the secondary labour market (Kogan, 2007).

We believe that differences between immigrant groups will show in the Netherlands. Postcolonial migrants and their descendants are the longer-established group of migrants compared to (descendants of) labour migrants in the Netherlands. Besides, cultural, and linguistic proximity of parental origin countries with the host country influence the signaling power of human capital for prospective employers (Kogan, 2007). Due to the colonial history and longer immigration of Surinamese/Antillean/Arubean migrants labour migrants might be stigmatised in a special way in the Netherlands. We suppose that longer length and type of immigration history, on the average better language proficiency due to colonial history, higher social-status of earlier Postcolonial immigrants and perception by natives induce differences between second generation migrants with Turkish/Moroccan and Surinamese/Antillean/Arubean background in the Netherlands (see Section 3.1). Therefore, when employers look for observable and clear signals of appropriate skills and productivity, descendants of labour migrants are placed behind (descendants of) Postcolonial migrants in the labour queue. The disadvantages for descendants of labour migrants should show despite of the deregulation of the Dutch labour market.

\[ H_7: \text{Second generation migrants with Turkish or Moroccan background have longer waiting times than those with Surinamese, Dutch Antillean or Arubean background.} \]

Generally, it is not the aim of this work to test the level of discrimination or prejudices in Germany and the Netherlands.\(^{21}\) It is impossible to prove the existence of employer discrimination with standardised survey data. Only experimental studies can directly detect differential treatment (Kogan, 2007). We discussed the discrimination and prejudice approaches as they partly explain what is disguised in ethnic penalties. Nevertheless, even if discrimination was absent ethnic penalties could exist because a relevant factor is unobserved. Formal educational qualification, language competences and skills are only approximations of human capital (cf. Kalter and Granato, 2007, 281).

\(^{21}\)This is the reason why other forms of discrimination like institutional or monopsonistic discrimination are not discussed here. Monopsonistic discrimination describes situation where there is a lack of competition for labour on the demand side because there is only one employee. Examples for institutional discrimination are: 1) non-recognition of foreign educational or vocational credentials when they actually provide a valid indication of professional knowledge and ability and 2) institutionalised exclusion of immigrants from certain job positions (e.g. public sector jobs in Germany) (Kogan, 2007).
4.4. DISTRIBUTION FACTORS

4.4.2 Job search theory - ethnic inequality in job search

According to matching models, individual job matches will form if employers perceive suitable applicants for the particular position in question against the alternative of non-contracting. Employers are likely to employ those applicants they consider to be most productive and least costly for the kind of work required for the job. At the same time, young job applicants want their job conditions to be appropriate against the alternative of unemployment or continued participation in training activities (Müller and Gangl, 2003b, 5). Job matches are matches between individual qualifications, abilities, preferences on the one hand, and job requirements on the other that have to satisfy both individual workers and employers (Couppié and Mansuy, 2003, 86).

From the perspective of individuals, the period of unemployment or how long they search for their first job depend on the wage rate that they think they will achieve in the labour market and on the opportunity cost of their searching activity (McCall, 1970, 114). According to job search theory an individual will reject job offers that disappoint his expectations and remain searching or in unemployment, if s/he thinks that his skills or services are highly valued. On the other hand, the individual will limit his searching activity if information costs a lot. Costs of search include purely economic considerations such as transportation costs, the value of foregoing alternatives, and the psychic cost of looking for work. Moreover, the individual's returns during unemployment (unemployment compensation, welfare payments, and perhaps some leisure benefits) may convince him/her to remain searching or unemployed. Two explanations are possible: 1) persons with attractive employment opportunities and large personal fortunes who are very likely to choose remaining unemployed regardless of the costs of search or 2) “discouraged workers” chose not to search for alternatives out of desperation (McCall, 1970, 114).

The underlying process of job search can be understood as the problem of matching (the requirements of) jobs to (the characteristics of) individuals. The actors are employers and school leavers, who both are assumed to look for an optimal solution from their point of view (Kalter and Kogan, 2002). Workers typically do not know the full range of job opportunities available including how many openings firms have in certain fields, and with what kind of wages. Workers have to devote time and energy to find out (Devine and Kiefer, 1991). On the other hand, the aim of employers is to find the applicant with the highest productivity potential given the search activities of the firm and given the characteristics (including the wage) of a certain vacancy (Kalter and Kogan, 2002). As we argued above employers forecast a prospective employee’s performance on the basis of his or her experience, training and other observable characteristics (Devine and Kiefer, 1991). Therefore, the duration of the job search phase might serve as an indicator for individual skills.
Apart from the possibility of differential treatment by potential employers and discrimination the search and matching model predicts that search behaviour of employees (given human capital resources) determines success at school-to-work transitions. It assumes that temporary mismatches at the labour market result from imperfect information.\textsuperscript{22} The mechanisms accounting for ethnic disadvantages at the employee side of job search are similar to those explained above for human capital disadvantages (Kalter and Kogan, 2002). Also the (lack of) relevant resources for job search is transmitted to second generation migrants from first generation migrants. As we argued above there are multiple ways in which different forms of capital in forms of either physical or social inheritance are transmitted from generation to generation (see Section 4.3.2). Therefore, job search behaviour is dependent on skillwise selection of first generation labour migrants, their stay intentions and possible devaluation of their human capital as well. Moreover, the degree to which immigrants invest in human capital that is relevant to the host country and their job search preferences largely depend upon the perceptions among immigrants and employers regarding the legal status of the immigrants population and the temporary presence. Thus, human capital investments and the formation of job search preferences of second generation migrants respond to immigration policies and reception contexts (Kogan, 2007; Kalter and Kogan, 2002).

According to economic search theory (Devine and Kiefer, 1991) the search for further vacancies implies costs (C) on the one hand, and uncertainty about whether the search will be successful (p) on the other. In this logic, the prospective employee stops searching as soon as the utility (U) of a given alternative exceeds a certain threshold or a certain reservation wage (see for review Kogan, 2007; Kalter and Kogan, 2002). A simple representation of these ideas is the following:

The expected utility of a potential job alternative A is given by $U_A$ and the utility of the status quo is given by $U_{SQ}$. The search for alternative jobs generates costs C. The subjective probability of finding an alternative is given by $p$. The utility of the search is then given by:

$$U_{search} = pU_A + (1-p)U_{SQ} - C$$

The utility of stopping for further search is:

\textsuperscript{22}This is underlined by the argument that over-education is typically higher in the phase of the transition from school to work. In contrast to the search and matching theory, human capital theory would explain this mismatch by less experience at the beginning of the employment career.
In a sequential model search is continued as long as $U_{\text{search}} > U_{\text{endsearch}}$ which for $p \neq 0$ is equivalent to

$$U_{SQ} < U_A - C/p$$

Above we explained the basic model of job search theory. Now we want to argue that natives and migrants behave differently when searching for a job. Of course it might be that not ethnicity itself influences labour market entrance, but ethnic background rather channels cultural factors or other aspects. Cultural factors are likely to influence behaviour at choosing/preferring certain jobs over others, while ethnicity itself is much less important for choosing certain job search types over others (Granovetter, 1995). Data restriction do not allow to look at cultural factors specifically. Additionally, we have argued above that there is good reason to assume that ethnic groups share common experiences to a certain degree.

In the context of the second generation it is reasonable to assume that ethnic minorities have higher search costs as they may lack specific knowledge and specific social capital with respect to the labour market of the host society and 2) minorities may fear discrimination in the labour market even if it does not actually exist. This results in a lower subjective probability of being successful in finding an alternative job. Both arguments decrease the reservation wage of migrants (Kalter and Kogan, 2002). Moreover, migrants may be reluctant to invest and the utility of further search (and thus their reservation wage) may be lower due to the job seeker’s temporary orientation. Although the third consequence rather applies to first generation migrants this behaviour may also transmit to their children (Kogan, 2007).

All these mechanisms result in shorter search durations and lower level jobs for non-native job seekers. This mechanism thus can be understood as leading to a sort of “self-selection” on the side of immigrants with respect to higher level jobs (Kalter and Kogan, 2002). To sum up ethnic differences in search durations might result from several distinct mechanisms: 1. lack of human capital, 2. effects of social origin, 3. discrimination, 4. country-specific information, and 5. self-selection. The absolute and relative weight of each mechanism varies between countries because it depends on structural background conditions like migration history and institutional settings (Kalter and Kogan, 2002, 17).

Above we explained the basic model of job search theory. Now we want to argue that job search behaviour is different for natives and migrants. Two central factors influence
the speed of the matching process of workers to jobs: 1) search efficiency (the objective probability of finding a matching vacancy, given the search activities of an employee) and 2) search intensity. Analysing ethnic inequalities thus implies explaining why these factors systematically differ for immigrants and the indigenous population. With respect to search efficiency it is reasonable to assume that specific information about the labour market plays an important role in finding matching vacancies and, therefore, it may differ with respect to ethnicity. As such information is based on cultural-specific knowledge and social capital which is specific for the host society, we expect first generation migrants and their descendants to be disadvantaged in this respect. In the context of the second generation it is reasonable to assume that ethnic minorities have higher search costs as they may lack specific knowledge and specific social capital with respect to the labour market of the host society and may fear discrimination in the labour market even if it does not really exist. On one hand, this increases their job search costs $C$ and on the other hand, it decreases their subjective probability to find a job $p$. First, this means that they have to search longer to find a job for which the utility is higher than status quo. We hypothesize for Germany and the Netherlands:

$H_8$: Second generation migrants have longer waiting times than natives.

We would also expect that these ethnic disadvantages decrease in the course of time because we assume diminishing marginal returns of additional information. This means the longer the duration of search, the narrower the information gap between the indigenous youth and the young immigrants (Kalter and Kogan, 2002).

Second, the arguments decrease the reservation wage of migrants and result in shorter search durations and lower level jobs for second generation migrant job seekers (Kalter and Kogan, 2002). Search costs are larger and feared or actual discrimination result in a lower subjective probability of being successful in finding an alternative job for second generation migrants. However, migrants may be reluctant to invest and the utility of further search (and thus their reservation wage may be lower) due to the job seeker’s temporary orientation. Although this rather applies to immigrants this behaviour may also transmit to their children. Apart from individuals' job search intensity, existing social networks, and availability of financial resources also welfare benefits determine search costs and job acceptance thresholds. Individuals with a migration background are more likely to rationally focus upon obtaining employment that better fits their qualifications when they can draw upon more extensive financial support during job search (Kogan, 2007). This mechanism, thus, can be understood as leading to a sort of “self-selection” on the side of immigrants with respect to higher level jobs (Kalter and Kogan, 2002). The following hypothesis is valid for Germany and the Netherlands:

$H_9$: Second generation migrants enter jobs with lower status than natives.
Third, second generation migrants have lower chances to enter jobs in the Netherlands. The minimum wage in the Netherlands fixes the reservation wage at the same level for natives and second generation migrants. Therefore migrants cannot decrease their reservation wage and low paid jobs are taken off the market for natives and migrants. While the minimum wages do not seem to be a barrier to the hiring of Dutch youth per se, it might be for young second generation migrants. The reason is that it could further worsen labour market entrance chances of workers, who face discrimination or have a low productivity level. Their possibility to price themselves into the labour market is limited (OECD, 2008c). As a consequence, migrants might have lower chances to enter any (legal) job because they cannot lower their reservation wage (at a certain job status).

\[ H_{10}: \text{Second generation migrants have lower chances to be employed than natives in the Netherlands.} \]

Another form of lowering their threshold could be that second generation migrants might be more willing to take up flexible forms of first employment than natives.

4.5 Hypotheses

Table 4.1 summarizes the hypothesis derived from the theories presented above. Hypotheses 1, 3, 5, 6, and 7 relate exclusively to second generation migrants. Hypotheses 1 and 3 relate to compositions effect with regard to human capital. Second generation migrants lack relevant resources for labour market entrance like education and language skills that is crucial for school-to-work transitions. Therefore, second generation migrants’ ethnic background should prolong the duration of waiting time less after their educational level is controlled for. Higher levels of education are supposed to reduce the negative effect of second generation ethnicity on duration of waiting times (Hypothesis 1). Moreover, the composition of second generation migrants with regard to their language proficiency should also influence the negative effect that second generation migration background has. Better language proficiency is expected to decrease the negative effect of second generation ethnicity on duration of waiting times (Hypothesis 3).

Hypotheses 5 and 6 refer to specific effects of social capital for second generation migrants. Second generation migrants have to rely more on their networks because they lack relevant resources at labour market entrance. A larger percentage of migrants in their region of residence should then increase formal and informal migrant networks providing them with useful connections, job search strategies and job opportunities. Higher visibility of migrants increases acceptance by employers and diminishes prejudices. Therefore, higher
### Table 4.1: Summary of hypotheses

<table>
<thead>
<tr>
<th>Hypothesis relates to...</th>
<th>Theory</th>
<th>No.</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2.gen migrants</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Human capital</td>
<td>H 1 Higher levels of education reduce the negative effect of second generation ethnicity on duration of waiting times.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H 3 Better language proficiency reduces the negative effect of second generation ethnicity on duration of waiting times.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H 5 Higher percentages of migrants in the region of residence decrease the duration of second generation migrants’ waiting times.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social capital</td>
<td>H 6 Higher network participation of migrants in the region of residence decreases the duration of second generation migrants’ waiting times.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H 7 Second generation migrants with Turkish or Moroccan background have longer waiting times than those with Surinamese, Netherlands Antillean or Arubean background.</td>
</tr>
<tr>
<td>All individuals</td>
<td></td>
<td>Intergen. transm.</td>
<td>H 4 Higher job positions of fathers reduce the duration of waiting times.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Country comparison</td>
<td>H 2 Completion of dual apprenticeships reduces the duration of waiting times more in Germany than in the Netherlands.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.gen vs. natives</td>
<td>H 8 Second generation migrants have longer waiting times than natives.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Job search theory</td>
<td>H 9 Second generation migrants enter jobs with lower status than natives.</td>
</tr>
<tr>
<td>The Netherlands</td>
<td></td>
<td>Job search theory</td>
<td>H 10 In the Netherlands second generation migrants have lower chances to be employed than natives.</td>
</tr>
</tbody>
</table>

percentages of migrants and larger network participation in the region of residence are supposed to reduce duration of waiting times for second generation migrants (Hypotheses 5 and 6).

Hypothesis 7 addresses differences between groups of second generation migrants in the Netherlands. Due to different language proficiencies, duration of migration history and perception of natives we assume that second generation migrants with Turkish or Moroccan background have longer waiting times compared with those with Surinamese, Netherlands Antillean or Arubean background (Hypothesis 7).

Hypothesis 2 is a country comparative hypothesis concerning the effect of dual apprenticeships in Germany and the Netherlands. As firm and school-based apprenticeships are not better rewarded in the Netherlands, they should decrease waiting times less than dual apprenticeships in Germany (Hypothesis 2).

Due to negative skill-wise selection and temporary stay intentions that possibly decreased investment in education first generation migrants can less support their children than natives. Nevertheless, parental occupational networks provide their descendants with information on labour market structures and job search. Thus, higher job positions of the father should decrease the duration of waiting time until first jobs (Hypothesis 4). Hypothesis 4 is a general hypothesis concerning all individuals in the sample. We include it
to see whether it applies to durations of waiting times, other indicators of school-to-work transitions and second generation migrants.

Hypotheses 8, 9 and 10 relate to distribution factors and assume different outcomes for second generation migrants than for natives. Hypotheses 8 and 9 are derived from job search theory. Second generation migrants have higher job search costs because they lack important information and knowledge about the labour market. In line with the theory we assume that second generation migrants have to wait longer to enter first jobs (Hypothesis 8). As second generation migrants fear discrimination they have a lower subjective probability to find a job. Consequently, they are willing to accept a job with lower status sooner than natives (Hypothesis 9). Hypothesis 10 relates to a specific effect for second generation migrants in the Netherlands. Due to Dutch minimum wages second generation migrants' lowered reservation wages should show in their lower chances to enter the labour market (Hypothesis 10).

In the first empirical part we test hypotheses 1, 3, 4, 8, 9, and 10 in the German context (see Chapter 5). The second empirical part is devoted to the Netherlands and the testing of hypotheses 1, 3, 4, 5, 6, 7, 8, 9, and 10 (see Chapter 6). The third empirical part addresses the country comparative hypothesis 2 (see Chapter 7). In this chapter we calculate empirical models only for Turkish second generation migrants and natives. In summary sections following each empirical chapter we discuss whether the results support the hypotheses with regard to the analysed indicators of ethnic inequality in school-to-work transitions.

We derive hypotheses that relate to the duration of waiting times until any job. We will additionally test them with regard to entrance into specific jobs: first jobs with a certain type of contract, occupational status and income. We think that due to the interrelatedness of quality and timing of school-to-work transitions different mechanisms work when persons enter certain positions as first jobs. Therefore, we additionally test the hypotheses for these indicators of school-to-work transitions.

### 4.6 Dependent variables

To analyse ethnic inequality in school-to-work transitions we look at four indicators because we want to test whether institutional mechanisms work differently with regard to various indicators of school-to-work transitions. Figure 1.1 identified the following indicators: 1) access to the labour market, 2) duration of waiting time until first jobs, 3) duration of waiting times until jobs with temporary/permanent contracts, and 4) quality of first positions by income and ISEI occupational status scores. We believe that these indicators
reflect important parts of school-to-work transitions and are able to describe the quality and process of these transitions well.

The duration of waiting time is an important indicator of school-to-work transitions as the waiting time is a proxy for unobserved individual heterogeneity. During school-to-work transitions individual tastes and opportunities matter, that are usually unobserved. These unobserved factors can be interpreted as factors that are valuable to firms and are independent of the permanence in the unemployment state (Moscarini, 1997). If these factors are observed and differently rewarded by firms, the duration of waiting time includes some of this information.

Moreover, the duration of waiting times until first jobs is an important indicator for equal chances at labour market entrances. On the one hand, longer waiting times may lead to early and adult detachment from the world of work. Instability at the beginning of the career lowers accumulated work experience and allows skills and human assets to decay. Longer or frequent periods of unemployment may then have a discouraging effect (Alon, Donahoe, and Tienda, 2001, 1009). Early phases of instability may result in premature withdrawal from the labour market. On the other hand, longer waiting times may optimise labour market matches and refinement of young workers. Then they can lead to better jobs and also increase labour market attachment of workers (Alon, Donahoe, and Tienda, 2001).

We look at the duration of waiting time jointly with type of contract and job position of first employment. We have argued before that the duration of job search influences the quality of first labour market positions. Thus, the timing of labour market entrance and its quality are interrelated (see Section 4.4.2).

We look at the type of contract of first positions as an indicator of the emergence of flexible forms of employment for young persons. We argued above that labour market entrants are especially vulnerable because the beginning of their career is crucial for their later labour market career (see Section 2.1). Flexible forms of employment at the beginning of labour market careers are likely to negatively affect later labour market careers as they can increase the risk of later unemployment. If temporary employment is non-transitional for labour market entrants or chances for advancement are low, it has an involuntary “trap” character. Therefore, especially the chance to find first jobs with a permanent contract is a crucial indicator for the chances of young workers to integrate into the labour market. It is a source of ethnic inequality if second generation migrants are more likely to enter temporary contracts after they transitioned from school to work.

First jobs with different types of contracts may still have a different quality. Even if temporary jobs help young people to enter the German labour market fast, low placement in the labour market can negatively affect their labour market careers. The consequences
of entering the labour market via less prestigious job positions only balance out over a long period of time (Scherer, 2004). Lower entrance positions are accompanied by higher risks of unemployment and less prosperous career chances. Therefore, we additionally look at the quality of first employment based on first income in the Netherlands and ISEI occupational status scores in Germany. We look at income in the Netherlands to test whether Dutch minimum wages affect second generation migrants in a specific way.
Chapter 5

Second generation migrants in Germany

This chapter presents empirical findings on ethnic inequality in school-to-work transitions of second generation migrants in Germany. The chapter begins with introducing the data set on which the analyses are based and sample construction. Then, we describe specification of the empirical models and present descriptive statistics. Finally, we present the results on duration of waiting time and quality of first jobs based on a Cox proportional hazard model including time-varying covariates, a piecewise constant exponential model, a Cox proportional hazard competing risk model, and a logistic regression model.

5.1 Data and sample

For the analysis of ethnic inequality in school-to-work transitions in Germany we use German socio-economic panel (GSOEP) data. The GSOEP is a multidisciplinary household panel study covering questions on a wide range of social and behavioral issues. The longitudinal data set included 6,000 yearly interviewed households in 1984. Due to inclusion of further samples the data set consisted of approximately 12,000 households in 2007 (Pannenberg and Rendtel, 1996; Wagner, Frick, and Schupp, 2007). Over-sampling of foreigners and migrants allows the identification of second generation migrants.

Individuals encounter different experiences in the passage from school-to-working life. There is no precise definition but only a loose identification of the process (Couppié and Mansuy, 2003, 63/4). To analyse school-to-work transitions, we needed to define leaving school, the waiting time and labour market entrance. However, concepts of school to work transitions are fuzzy in nature. While a transition is clearly defined as a change in state, states and changes from one state to the other do not always have a clear definition. The most important issue to avoid model misspecification is finding appropriate definitions of these states (Blossfeld and Rohwer, 2002, 262). The first job has to be carefully defined
as its definition might influence empirical findings on school-to-work transitions (Hotz and Tienda, 2002, 1008). Therefore, it is necessary to go into detail on the definitions used in the present work and how we identify first and significant first jobs. The following sections explain how second generation migrants, leaving school, the waiting time and labour market entrance have been operationalised in the GSOEP data.

GSOEP: identification of second generation migrants and natives

We used the country of origin (that is the country of birth) of the parents to identify second generation migrants. The sample is restricted to second generation migrants for whom we have information on at least one parent’s country of origin in the GSOEP data.

Second generation migrant origin is assigned to their mother’s country of origin if the father has a different country of origin than the mother or information on his origin is missing. Thus, we apply a definition used in the literature (González-Ferrer, 2006, 183). But as the cultural influence of the father may be as strong as the mother’s, second generation migrants’ origin is assigned to the country of birth of the father if information on mother’s origin is missing.

The sample includes only persons as second generation migrants of whom at least one parent has been interviewed for GSOEP and stated his/her country of origin once. As the information cannot change, we filled information of parental country of origin backward and forward. Missing information on country of origin of one parent due to his/her death would not affect the definition of ethnic groups. Single parents are included in the definition. The definition of second generation migrants excludes third generation migrants (persons who had at least one migrant grandparent, but whose parents have been born in Germany) as at least one parent has to have been born abroad.

Native-born Germans are persons with two parents who have been born in Germany. For natives information on country of origin of both parents had to be included in GSOEP at least in one survey year.

GSOEP: definition and operationalisation of leaving school

Before identifying persons who leave schools we formatted the GSOEP data appropriately. First of all we closed little gaps in the spell data set. This was necessary because we wanted to exclude months from the waiting time in which a person is not really searching for a job. There are four reasons why gaps occur: 1) between education spells, 2) between work spells, 3) between school and work, and 4) between work and unemployment spells. Gaps are especially likely to occur in Germany, where school-leavers on average take about one year to find their first job. However, we split the waiting time into two steps: (1) the time between the end of the last school spell and the beginning of the first occupation, and (2) the time between the end of the job spell and the beginning of the next job spell. If the time between the beginning of the job spell and the beginning of the next job spell is shorter than one month, we classify the person as having more than one job spell within one year. Otherwise, the time gap between the end of the job spell and the beginning of the next job spell is counted as part of the waiting time. For the second gap, we exclude years with more than 12 months of unemployment.

1GSOEP provides no information on ethnic origin of persons born in Germany.
2Due to low case numbers, we will not look at parental composition later or identify single parents in the analysis.
spells, 3) before maternity leave, and 4) before military service.

The first case relates to months in which a person just waits for another education spell to start. A good example is the transition from school into an apprenticeship. In Germany people usually finish school during summer in June or July, the exact time depends on the federal state. Most apprentices start in September with classes for the theoretical part of a dual apprenticeships ("Berufsschulen"). Persons who change their apprenticeship position can enter at any time. Moreover, firms who did not find an apprentice can hire all year long and the schools include apprentices even if they find their apprenticeship positions months later. To exclude persons in those prolonged search phases we filled gaps up to six months between two education spells.

Second, to avoid identifying persons as school leavers who have short phases of education between two phases of labour market participation we replaced little education spells (up to six month) with no participation in education.

Third, in line with theoretical assumptions about prevailing institutional incentives for the male breadwinner model we include the possibility that becoming mothers with 'waiting time' (see below) prior to birth do not search a job. Therefore, we excluded up to nine months before maternity leaves from the waiting time. Additionally, we did not count up to six month before military service as waiting time for a job. We assume that individuals would not start their labour market career or search actively for a job during that time.

The subsequent procedure of identification of school leavers included several steps. As a start, we used annual GSOEP data to identify the first month of the year when an individual stated not to be in school at the time of the interview, while s/he attended school in the previous year. This change indicated a transition out of school. Afterwards, we used the GSOEP monthly spell data called artkalen to identify the exact month of the transition out of school. First, we searched for the last month in education before months in waiting time or in a job during the last year where respondents stated still being in school. Second, for some people no transition out of school could be identified up to that point. Their education spell continued until the following year or longer. In these cases we searched for the the end of the last education spell in the first year in which they stated not being in school anymore. Third, a person has only been identified as a school leaver if s/he left the education system for at least six month. We do not include persons in our sample for whom we could not identify a school leave.

GSOEP: definition and operationalistion of the waiting time

The duration time in our analysis is the waiting time until first jobs. We define the waiting time as consisting of person-months in the following spelltypes: unemployment, other, re-
tirement, gap, minijob, and short working hours. Therefore it is not entirely an active job search phase. One may argue that only months in unemployment are phases where people search for a job. However, even while unemployed some people may not search as actively as others. Moreover, the borderline between seeking work or not is blurred - especially for younger people.

We add one synthetic month to the waiting time of each person in the sample. More precisely, we count the last month in education as the first month in waiting time for all persons in the sample. We do this to not lose persons who enter employment directly in the month after finishing school or vocational training. The proportional hazard assumption might be violated for these people (see Section 5.3).

For some persons we do not know the duration of their waiting time. They are not included in our analysis. This includes for instance respondents who were in education during the whole GSOEP observation period. The exclusion of left censored cases is discussed in Section 5.6.

**GSOEP: definition and operationalisation of the first job**

In our analysis full-time and part-time positions lasting at least six month are considered first jobs. Because we aimed at identifying the first job that is significant and may even influence the later career, we chose to include only jobs that lasted at least the 6 month of the probationary period given by German law. Thus, we include only positions for whom a persons has passed the probation period. Apart from that, neither in Germany nor in the Netherlands, labour market entrance periods with frequent job changes ("shopping and trashing periods") are usual for job entrants. Individuals are not likely to take any job they can get and then try to move on.

We exclude persons who enter self-employment after their waiting time due to very low case numbers in this category. Moreover, different mechanisms might work at transitions from school-to-self-employment. Self-employed occupation in ethnic niches might be a strategy for second generation migrants to escape unemployment (see Section 4.3.3).

To assure that individuals are in their early career we restrict our sample to natives and second generation migrants who leave school between age 15-33. By confining our sample to persons older than 15 we assure that individuals completed compulsory schooling. With excluding those who are older than 33 we censor our data at the right. The age threshold 33 provides for a sample which almost exclusively consists of children of labour migrants. Age 33 is a reasonable cut off point as the large majority (about 90%) of young people entered a job at that age already (see Section 3). A similar age threshold has also been applied previously (Buchholz and Kurz, 2005, 10).
5.1. DATA AND SAMPLE

However, there is no consistent definition in the literature concerning the age range during which individuals are supposed to experience school-to-work transitions. After leaving the education system, intrinsic preferences might be a factor for choosing entry age. Some persons may want to enter the labour market during their twenties, others might want to do that much later. Although it is possible that the age of school-to-work transitions differs with cultural characteristics, second generation migrants who have been born in the Germany (or the Netherlands) do not differ systematically from natives. In fact, any definition of significant school-to-work transitions and the involved definitions is bound to be somewhat arbitrary. We cannot rule out the possibility that we do not always identify persons' real first school-to-work transitions.

Persons with an identified school leave who did not experience an event, that is enter any job, in the observed period are included as right censored cases. Persons who re-enter education are not in our sample. We exclude persons for whom we could identify a transition out of school (after filling the gaps as stated above), but who entered education after their waiting time. We cannot distinguish whether they do that as a strategy and try to escape unemployment with entering the education system or whether they initially planned to enter the education system after some time off.

Sample construction

Without any selections, 24 waves of the GSOEP (1984-2007) offer information based on parental country of origin for 5,405 natives and 712 second generation migrants. These persons are at different ages and did not necessarily experience their school-to-work transitions in the observed period. After excluding persons for whom we could not identify a school-to-work transition according to the above mentioned criteria, the sample consists of 2,162 natives and 358 second generation migrants. Additionally, we delete information on eight persons who where older than age 33 at the beginning of their waiting time or right censored at the end of the observed period. The sample then consists of 2,155 natives and 357 second generation migrants. We deleted information for another 223 (-4.1%) natives and 18 second generation migrants (-2.5%) because they entered the education system after the waiting time.

Our analysis concentrates on school-to-work transitions of persons in education tracks up to secondary education. Lower tracks are especially interesting with regard to second generation migrants as they are to an overproportional extent streamed into them. Moreover, with focusing on up to secondary education we assure comparability among data sets for Germany and the Netherlands. In the Dutch data set respondents of the second cohort are not old enough to have reached tertiary education in the observed period (for further
details see Chapter 6). By deleting those who follow(ed) tertiary education, the sample decreases by 88 observations, two second generation migrants (-0.3%) and 86 natives (-1.8%).

The final sample of those who experience any transition (into part-time, full-time or no job) consists of 122 second generation migrants with Turkish, 36 with Spanish background, 68 with Italian background, 66 with Greek background, and of 1.336 natives. 56 persons do not experience an event within the observed period and are right censored.

Due to the low case numbers it is impossible to look at all second generation migrant groups separately. To grasp as much ethnicity related information as possible in the process of school-to-work transitions we decided to contrast descendants of Turkish immigrants with those from Italy, Greece and Spain. Our reasons are the following. First, Turkish second generation migrants are a special group because they form the largest group of (first and second generation) migrants in Germany, the Netherlands and Western Europe. Thus, their community is often spatially concentrated. Second, in contrast to immigrants from Italy, Greece and Spain they are a group with a traditional muslim background. Third, the integration of Turks is often considered to be especially difficult (Crul and Vermeulen, 2003; Crul, 2004, 970). Fourth, in contrast to Spain, Greece and Italy, Turkey is not a member state of the European union (yet). Thus, Turks have not been included in the free movement of labour so far. Moreover, we single out the Turkish second generation migrants because they are the only group in both countries that is large enough to study across countries.

Immigrants from Ex-Yugoslavia face different legal status which possibly affects labour market choices of their children. Immigrants from Ex-Yugoslavia are not included in the free movement of labour within the European Union during the observed period 1984-2007. Like Turkey none of the countries created from former Yugoslavia is a member state of the European union (yet). This also precludes the inclusion of second generation migrants in our sample whose parents did not come as labour migrants but as refugees during the Kosovo War. Case numbers of the group of second generation migrants from former Yugoslavia are too small to be looked at separately. Furthermore, we do not group them with second generation migrants from Italy, Greece and Spain. Much different mechanism might work in their school-to-work transition compared to the other groups. Thus, we exclude second generation migrants from Ex-Yugoslavia from our analyses and delete the respective 35 cases.

We group second generation migrants with Spanish, Italian and Greek background. Despite of the fact that this is a heterogeneous group\(^3\), all second generation migrants

\(^3\)For instance, second generation migrants with Italian background attain worse educational certificates compared to those from Greece or Spain.
from this group have a Southern European background. Compared to Turkish second generation migrants they are more likely to be similar to each other.

5.2 Model specification

For the empirical analysis regarding Germany, we analyse four dependent variables: 1) duration of waiting time until first job with full- and part-time employment, 2) duration of waiting time until first job with temporary or permanent contract and 3) occupational status of first jobs. In contrast to the chapter on the Netherlands, we do not analyse access to the labour market due to the large majority of school-leavers entering first jobs (see Section 5.3). Moreover, we do not analyse income in the first labour market year or of first jobs based on GSOEP. The reason is that the measures is not comparable across data sets. The Dutch data set is based on register data, while GSOEP income information is based on self-reports. Thus, illegal jobs are not included in the Dutch data, while they could be included in the GSOEP.

In all four empirical models we proceed stepwise and include the same independent variables. Successively the steps of the models include information on 1) ethnicity, 2) individual characteristics, 3) educational level, 4) social background, 5) skills, and 6) interaction terms. Table 5.1 depicts detailed specification of independent variables in the empirical models. The first step includes the two ethnicity variables: second generation migrants with Turkish and with Italian, Spanish and Greek background. This step, thus, depicts net differences between second generation migrant ethnic groups and natives. It does not take group compositions into account.

Control variables are included in the second step. Low case numbers do not render a separate analysis for males and females possible, but gender is an important control variable in our analysis. The age at the beginning of the waiting time reflects the time an individual needs to complete his highest educational degree. Responsibility for a child might influence chances to take on a job as we have argued above. Child birth in the household is likely to have opposite effects on the job entrance rate of men and women. In a former version of the model we therefore included an interaction term of number of children in the household and gender, which did not show any significant results and did not substantially change the remaining results. Furthermore, in the model we control for the gross household income as a measure of the financial resources within a household. We include the adjusted monthly household net income in Euro one month before labour market entrance to control for financial resources available during job search phases. We include the information of the previous month to not have a tautological measure: certainly, household income increases
### Table 5.1: Specification of independent variables: empirical part on Germany

<table>
<thead>
<tr>
<th>Step</th>
<th>Independent variables</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ethnic migration background</td>
<td>Ref.: natives, two dummies for second second generation migrants 1) with Turkish and 2) Greek/Italian/Spanish background</td>
</tr>
<tr>
<td>2</td>
<td>Gender</td>
<td>Reference category: males</td>
</tr>
<tr>
<td></td>
<td>Year of labour market entrance</td>
<td>Dummy indicating labour market entrance before or after the year 1993 measured in month after 1990</td>
</tr>
<tr>
<td></td>
<td>Age at entering the waiting time</td>
<td>Ref.: no. children in hh, continuous variable</td>
</tr>
<tr>
<td></td>
<td>No. of children</td>
<td>Adjusted monthly household net income in EURO (in the month before labour market entrance)</td>
</tr>
<tr>
<td></td>
<td>Household net income</td>
<td>Annual percentage, values for each of the Western German federal states</td>
</tr>
</tbody>
</table>
| 3    | Highest educational certificate | 1) Ref.: inadequately completed (ohne Abschluss/berufliches Praktikum), Casmin classification category 1a  
2) elementary school/basic qualification (Haupts-/Volkschule) with/without any vocational education excluding apprenticeships (Casmin classification categories: 1b & 1c)  
3) intermediate school/general qualification (Realschule) with/without any vocational education excluding apprenticeships (Casmin classification categories: 2a & 2b)  
4) apprenticeship and elementary, intermediate or maturity education (Casmin classification categories: 1c+apprenticeship, 2a+apprenticeship & 2c_voc+apprenticeship)  
5) maturity certificate ((Fach-)Hochschule) with/without vocational education excluding apprenticeships (Casmin classification category: 2c_gen) |
|      | Educational level of mother | 1) Ref.: left school without graduating/school not attended/ not yet graduated  
2) basic track secondary education (9th grade)  
3) intermediate-track secondary education (10th grade)  
4) technical secondary degree/upper secondary (academic track)/other graduation diploma (12th-13th grade) |
| 4    | Written language proficiency | Categories: 1) fairly/not good, 2) good and 3) very well |
|      | Work experience | Full time work experience in years + (0.5 * part time in years) |
| 5    | Occupational status of father | ISEI score (scale 16-90, mean substitution of missings) |
|      | Occupational status father missing | Dummy variable indicating a missing value |
| 6    | Interaction terms | Ethnicity * education, ethnicity * regional unemployment rates, ethnicity * work experience, ethnicity * gender |
when individuals enter the labour market. To control for the demand side of the labour market we include regional annual unemployment rates (at entrance into the waiting time) and labour market entrance cohort. We include a dummy variable indicating labour market entrance in Germany before or after 1993. These variables are supposed to control for the worsening labour market situation and cohort effects. Moreover, they are supposed to capture regional labour market conditions and business cycles. We introduce the year of labour market entrance as a dummy and not as a time varying variable, while yearly regional unemployment rates are included as time varying covariate. The reason is that there is already evidence based on GSOEP data that durations until first employments especially increased in the phase after 1993 (Buchholz and Kurz, 2005). Therefore, in addition to the time varying regional unemployment rates, the dummy variable indicates labour market entrance in a time of increasing competition on the labour market.\footnote{Below we discuss the possibility of endogenous factors (e.g. education and pregnancy, see Section 5.6).}

The independent variables of our main interest are education, social background and skills. We introduce them after some other variables have been controlled for, to present their remaining effects. Thus, we include educational level and mothers’ levels of education in the third step. Educational level is divided into four categories: 1) inadequately completed, 2) elementary, 3) intermediate, 4) apprenticeships, and 5) maturity education/Abitur. Elementary education includes those people who completed the German “Hauptschule”, while intermediate education refers to those with certificate from a Realschule. To obtain the groups we regrouped the Casmin classification categories. Categories 2, 3 and 5 include people who may additionally have attained any vocational education except for apprenticeships. In contrast, category 4 consists of persons who only completed elementary, intermediate or maturity/Abitur education and an apprenticeship.\footnote{Additionally, the idea was to test whether completing a preparational year influences ethnic inequality in school-to-work transitions, but in the final sample only nine persons followed a preparation year (while being registered as not being in the education system). Due to the low case numbers, we could not include a dummy variable indicating whether a person completed a preparation year or not into our final analysis.}

We recoded the variable on educational level of mothers into four categories: 1) no education, 2) basic track, 3) intermediate-track secondary education, and 4) technical secondary degree/upper secondary (academic track)/other graduation diploma. The category “no education” contains women of the categories “Do Not Know”, “No School Degree” and “School Not Attended”. Category two includes those mothers who completed any basic secondary school degree. The third category comprises those with intermediate degree, technical school or upper secondary degree. We use casewise deletion and lose 0.7% of the sample due to missing values in this variable.

The fourth step introduces social background variables. We include the socio-economic status of the father by respective scores of the International Socio-Economic Index of
Occupational status (ISEI). ISEI was developed in 1992 and is a relative measure of job positions. The ISEI scores consists of weighted averages of standardised measures of the income and education of incumbents of each occupation (Ganzeboom and Treiman, 1992, 1996). It was created by scaling the ISCO88 classification and ranges from 10 (low) to 90 (high). We use this indicator to measure the quality of first jobs because socio-economic indexes are likely to capture the basic parameters of stratification processes better than prestige scores (Featherman, 1975, 45). As the occupational status of the father is measured on the basis of the ISEI scale it also mirrors parental education. We apply mean substitution of missing values and include a dummy variable indicating missings in ISEI scores.

In the fifth step we include two indicators for individual skills or competences: language proficiency and work experience. Work experience reflects the entire period of full- or part-time employment in the respondent’s career up to the point of the interview in years. For the purpose of a joint measure, part-time employment in years is multiplied by the factor 0.5 and then added to full-time employment in years.

Moreover, we introduce the subjective evaluation on written language proficiency. This information is included in GSOEP data in ten waves. In the meantime we filled the information forward. We argued above that written language proficiency is important for job search in addition to spoken language proficiency, but spoken and written language proficiency also correlate highly by .77 in the data. We recode subjective written language proficiency into three categories: 1) very well, 2) good, and 3) fairly/not good. Natives did not answer the question on language proficiency in the GSOEP. Therefore, we imputed the value “very good” for all natives. Despite of the fact that there might be differences in language proficiency among natives, the fact that the measure is based on self-evaluation supports this procedure. This group is more likely to self-evaluate their language proficiency as very high. Moreover, this substitution has been applied before (Kalter, 2006).

The last step of the models includes interaction terms. The interaction term of gender and ethnicity will shed light on differences between female natives’ and female second generation migrants’ school-to-work transitions. In addition, we test whether there are different effects of business cycles for different ethnic groups. Moreover, we analyse whether there are differential returns to education and work experience for second generation migrants than for natives.

---

6Monthly GSOEP data does not include information on job characteristics like the ISEI score. We used annual data to contain this information. This might produce a bias because the statuses which were predominant in a certain year are over-represented and we cannot account for within year mobility (see Kleemann, Matuschek, and Kogan, 2003).
5.3. FREQUENCIES

5.3 Frequencies

Only few large panel data sets allow for an appropriate identification of second generation migrants in Germany. Like in other empirical studies we face the trade-off between number of observations and available information (cf. Behrenz, Hammarstedt, and Månsson, 2007, 172).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tk</th>
<th>It/He/Sp</th>
<th>2.gen total</th>
<th>Natives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total sample size</td>
<td>122</td>
<td>170</td>
<td>292</td>
<td>1336</td>
</tr>
<tr>
<td>Sample (excluding casewise deleted missings)</td>
<td>95</td>
<td>142</td>
<td>237</td>
<td>1228</td>
</tr>
<tr>
<td>Persons entering 1. jobs (excluding casewise deleted missings)</td>
<td>92.6%</td>
<td>97.9%</td>
<td>95.8%</td>
<td>97.6%</td>
</tr>
</tbody>
</table>

Table 5.2 provides an overview of descriptives of the final sample. The upper part of the table (the second and third lines in the table) depicts total case numbers and the percentage of persons who enter first employments. The large majority of all ethnic groups enters significant first employments. Compared to natives fewer second generation migrants - and especially fewer Turkish second generation migrants - enter first jobs. In this context, the construction of our sample has to be kept in mind. First, we do not include persons who followed tertiary education. Thus, we might see a strong positive effect of persons leaving the German vocational training system here.
The lower part of the table starting from the third line depicts frequencies for persons who enter first jobs excluding cases with missings. Case numbers are kept constant, we exclude persons with missing values in the dependent or one of the other independent variables. There are fewer female second generation migrants in the sample than males, while the sample is nearly balanced for natives. While the initial GSOEP sample (without any selections) consists of 51.7% women, we lose females when we identify people's ethnic background by parental country of origin. Moreover, we lose females to a disproportional extent by focussing on those who follow up to upper secondary education only and deleting those who reenter the education system after a waiting time. Additionally, fewer women enter jobs after their waiting time. The interrelatedness with childbirth and self selection due to lower perceived chances at the labour market or discrimination because of (perceived or actual) more traditional family roles might contribute to this result.

In Germany the average number of children in households is larger among second generation migrants than natives. This is especially true for Turkish second generation migrants. The final models including all ethnic groups do not contain family status. The reason is that our sample consists only of second generation migrants of Spanish, Greek and Italian origin with family status "no partner" (including the family status: divorced, widowed, single, married but separated). In contrast, 12.1% of the Turkish second generation migrants have a partner (family status married).

Median and mean adjusted net household income (measured at the last month in the waiting time) indicate that second generation migrants compared to natives live in household with lower income. Household incomes of Turkish second generation migrants are lowest. Moreover, the difference between the mean and the less outlier biased median values is smaller for second generation migrants. This suggests that there are more high income outliers among natives than second generation migrants.

Mean age at entry to the waiting time ranges from 16.9 to 32.9 years. Second generation migrants are slightly younger than natives when they enter the waiting time. Persons with Italian background are younger at entrance into the waiting time than all other groups. On the one hand, these age differences reflect different educational levels (see below). On the other hand, migrants might also be older because they are more likely to repeat a class in the German education system. Thus, when we control for educational level later in the multivariate analyses, the age at entrance into waiting time indicator captures heterogeneity in the number of years a person needs to obtain a certain educational level.

As expected second generation migrants in our sample are overrepresented among persons with inadequately completed education and elementary education. In contrast, they

\footnote{The large majority of second generation migrants in our sample has two migrants parents. We could not include this variable in the models later because there is no second generation migrant in our final sample with one migrant and one native parent (only one migrant and one missing).}
are underrepresented among those who completed intermediate education, an apprenticeship (except for Italian, Spanish and Greek second generation migrants in apprenticeships) or the Abitur (each with or without vocational education). Compared to Turkish second generation migrants a larger percentage of Italian, Spanish and Greek second generation migrants obtained intermediate education, an apprenticeship, or the Abitur. Second generation migrants from Spain, Italy or Greece attain apprenticeships to almost the same extent like natives across 23 waves of GSOEP. With 19 to 24 percent, a comparatively low number of persons in our sample completed an apprenticeship. One has to keep in mind, though, that tertiary education and persons, who return to education after apprenticeships for instance to study, are not included here. Our longitudinal data hides the fact that second generation migrants have more difficulties than natives to enter apprenticeships in Germany. Besides, they might still enter apprenticeship position in less attractive fields (von Below, 2003).

The educational level of mothers varies strongly between second generation migrants and natives. While only 0.7% of native mothers have obtained no (completed) education, this is the case for the large majority of immigrant mothers (69.3% of Turkish mothers and 42.45% of Italian, Spanish and Greek mothers). The data might overestimate the percentage of immigrant mothers without education, however, because some foreign certificates might not be acknowledged or have no equivalent in Germany.

Turkish second generation migrants might evaluate their written language proficiency less well than second generation migrants from Italy, Spain or Greece: 51.1% from the latter group thinks they speak German very well, while the same is true for 36.4% of Turkish second generation migrants. Moreover, natives have at least twice as much work experience when entering the labour market than second generation migrants. Italian second generation migrants are the group with fewest experience, which may be related to the fact that they are the comparatively youngest group at labour market entrance.

The table indicates that the natives' fathers have jobs with higher occupational status than second generation migrants' fathers. Among second generation migrants the mean of father's ISEI score is highest for fathers of Spanish and Greek second generation migrants and lowest for those with Italian and Turkish background. However, the number of missing values is much larger among natives than among second generation migrants.

85.3% of the persons in our sample enter full-time jobs as first jobs (values not depicted in table). Women enter first part-time jobs to a larger extent than men. This is especially true for second generation migrant women, although part-time work is in general less widespread among second generation migrants. While 14.7% native women have a part-time job (native men 10.1%), 8.1% Turkish women (Turkish men: 3.5%) and 18.8% with other migration background (men 6.7%). Sample sizes for persons entering part-time jobs
do not allow the calculation of competing risk models for working hour contracts.

Hazard rate models

For the empirical analyses we use event history modeling. Event history or duration models are well suited for the analyses of ethnic inequality in waiting time and quality of school-to-work transitions. First of all, duration models allow the easy handling of right censored cases. Moreover, hazard rate models\(^8\) enable the estimation of failure probabilities depending on time-varying covariates.

We chose to calculate Cox proportional hazard models on the duration of the waiting time until first job and competing risk models on different characteristics of first jobs. The Cox proportional hazard model, developed by Sir David Cox, fits best for our analysis of duration of waiting time and the distribution into jobs because it does not make a theoretical assumption about a certain form of the hazard rate (Blossfeld and Rohwer, 2002). Moreover, the Cox model is appropriate because we have a theory driven interest in the relationship between covariates and the outcome and do not focus on the specific form of the time dependency (Box-Steffensmeier and Jones, 2004).

The proportional hazard (PH) model consists of the chance of an event in the form of a baseline hazard rate and a component which is influenced by the covariates and the regression parameters (Box-Steffensmeier and Jones, 2004). The constant of the Cox model is subsumed in the baseline hazard function and therefore not included in the outcome. The formula of the hazard rate for the i-th individual is the following:

\[ h_i(t) = h_0(t)e^{(\beta'x)}. \]

A positive coefficient indicates an increasing hazard rate as a function of the covariate. An interpretation is possible in the sense that “the hazard rate is such that, were that rate to continue for 1 time unit we would expect x failures” (Cleves, Gould, and Gutierrez, 2004, 16). Moreover, the time interpretation of coefficients is given as how long one would have to wait for a failure if the hazard rate stayed at the same level (Cleves, Gould, and Gutierrez, 2004). Similarly to increasing hazard rates the survival time is decreasing. Hence, negative coefficients hint towards longer waiting times.

By calculating the antilogarithm of the estimated coefficients (the alpha effects) we are able to interpret the coefficients as a percentage (Golsch, 2006). To assess the percentage change that a covariate induces one has to apply the following formula:

\(^8\)The transition or hazard rate in event history modeling refers to a propensity of individuals to change states in a given state space (Blossfeld and Rohwer, 2002, 262).
5.4 Results

This section presents the empirical results on duration of waiting time and quality of first jobs for Germany. It begins with descriptives on waiting times and cumulative hazard

\[
\% \Delta h(t) = \left[ \frac{e^{\beta(x_i=X_1)} - e^{\beta(x_i=X_2)}}{e^{\beta(x_i=X_2)}} \right] \times 100
\]

(Box-Steffensmeier and Jones, 2004, 60).

One of the additional advantages of event history models is that they allow the inclusion of covariates that change their value across the span of the observed period: time-varying covariates (TVC). The TVC coefficients in a Cox regression model can be interpreted as how much the risk of an event increases due to a change in the value of the TVC (Box-Steffensmeier and Jones, 2004).

Event history analysis models assume that autocorrelation does not take place. This means they expect that an observation’s event status at one point in time does not influence the observation’s event status at a subsequent point in time. When the data lacks independence, correlated error terms lead to biased estimates of standard errors and significance. When we calculate the stcox models we use the Stata commands nohr and robust. The nohr option means that Stata gives no hazard ratios, but reports coefficients. By including the Stata command robust we use robust variance estimation and calculate robust standard errors, which relax the assumption about the (time) independence of error terms. Robust estimation entails reestimation of the traditional estimator of the variance to account for the grouping or clustering of observations within a data set (Blossfeld and Rohwer, 2002, 114). Furthermore, with using the Stata cluster command we account for spatial dependence within West German federal states. As the Cox model relies on order of events, we use the Breslow method to handle ties.

The Proportional-Hazard (PH) model introduced by Cox assumes that the duration in a certain state is constantly measured in time (Cox, 1972). The major assumption of the Cox Model is that the transition rates of the different values of covariates are proportional (Blossfeld and Rohwer, 2002; Cleves, Gould, and Gutierrez, 2004, 240). Graphic testing of the PH assumption bears the risk of being inconclusive. Therefore, we test the assumption by computing the scaled and nonscaled Schoenfeld residuals with Stata and running the Kaplan-Meier, Log(t) and Rank(t) tests. We discuss accounting for violations of the assumption with stratifying or including the product of the according covariate and duration time in the according step of the model (cf. Box-Steffensmeier and Jones, 2004, 133).
Table 5.3: GSOEP descriptive statistics: waiting times

<table>
<thead>
<tr>
<th>2nd gen</th>
<th>Tk</th>
<th>It/He/Sp</th>
<th>Total</th>
<th>Natives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean waiting time in months</td>
<td>9.16</td>
<td>4.48</td>
<td>6.05</td>
<td>3.28</td>
</tr>
<tr>
<td>Median waiting time in months</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>75 percentile of waiting time in months</td>
<td>12</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Shortest waiting time</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Longest waiting time</td>
<td>106</td>
<td>113</td>
<td>113</td>
<td>138</td>
</tr>
<tr>
<td>Observations</td>
<td>95</td>
<td>142</td>
<td>268</td>
<td>1,228</td>
</tr>
</tbody>
</table>

Curves. Afterwards, we describe findings of a Cox proportional hazard model including time-varying covariates, a piecewise constant exponential model, a Cox proportional hazard competing risk model, and a logistic regression model.

Table 5.3 depicts summary statistics on duration of waiting times until first full-time and part-time jobs. The majority of respondents have a waiting time of 1 month. As explained above, waiting times of one month actually refer to those persons who do not have any waiting time. We added an artificial waiting time of one month for every person in the sample. The distribution of waiting times is right-skewed as the median value is 1 for all groups, while means diverge. The 75th percentile show the waiting time in month below which 75 percent of the observations in the sample fall. The much lower value for natives compared to Turkish second generation migrants (1 and 12), thus, indicates that they enter jobs to a larger extent directly after leaving the education system.

On the average, second generation migrants have to wait more than twice as much as natives to enter jobs. Turkish second generation migrants have the longest average waiting time (9.16 months), second generation migrants with Spanish, Italian and Greek background have an average waiting time of 4.48 months and natives wait 3.28 months to enter jobs. This is the case despite of the fact that the longest duration of waiting time is lower for second generation migrants than for natives. Natives’ duration of waiting times may simply be larger because variance is higher in their larger sample.

Cumulative hazard curves

Figure 5.1 further illustrates differences in waiting times between ethnic groups. It depicts smoothed hazard curves by ethnicity for the duration of waiting time until first job with any type of contract. A high hazard reflects a high chance to experience an event. The hazard rate reflects the chance of a person to enter her/his first job if she has not entered
5.4. RESULTS

Figure 5.1: Smoothed hazard estimates for the duration of waiting time until first job by ethnicity

![Image](Waiting_time_until_first_job_by_ethnic_origin.png)

A constant hazard rate of 1.5 in a one unit long time interval demonstrates that 1.5 events are expected in that interval.

Until about the 18th month, the curve for Turkish second generation migrants is constantly below those of natives or second generation migrants with Spanish, Italian or Greek background. Thus, during the first eight months after leaving school this group has lower chances to enter first jobs than the other groups. Greek, Italian and Spanish second generation migrants have higher chances than natives to enter first jobs during the first eight months. However, after about nine month waiting times of natives are most likely to enter first jobs, though. The hazard curve of Greek, Italian and Spanish second generation migrants peaks at the fifth month and decreases afterwards. Natives have a decreasing risk of entering first jobs only after about twelve months. In contrast, the hazard of Turkish second generation migrants is considerably lower than those of the other groups. The slope increases slightly during the first eight month and stays more or less stable until a waiting time of about 22 months before it decreases.

To test the null hypothesis that groups have the same hazard and there is no difference in failure rates among the ethnic groups, we conducted various tests that use different weight functions. The log-rank, Tarone-Ware, Peto-Peto-Prentice, Cox, and generalised Fleming-Harrington test of equality of the hazard curves indicated that the curves for the

---

9The hazard reflects the unobserved rate at which events occur and it is the probability that a person will experience an event at time t while it is at risk of experiencing an event.
Cox proportional hazard model including time-varying covariates

Preliminary testing provided evidence that some of the covariates are time-varying (see appendix, Chapter 9). Therefore, in this section we evaluate the values of TVCs at certain points in time (Box-Steensmeier and Jones, 2004, 95). This way, we take into account the longitudinal structure of the data. In contrast to the previous version of the model presented in the appendix this model is based on person-months formatted GSOEP data. The inclusion of TVCs in the Cox model is fairly easy because the partial likelihood function is determined by the ordered failure times, but not by the actual duration times. Therefore, calculations of the hazard ratio are only made at failure times. The TVC regression coefficients can be interpreted as the change in the log-hazard ratio for observations having a unit change in the value of the covariate at time $t$ compared to the value of the covariate for the remaining observations in the risk set at time $t$. Thus, the estimated covariate tells us how much a risk of an event “jumps” due to a change in the value of the TVC (Box-Steensmeier and Jones, 2004, 103).

In the model we consider age at entrance into the waiting time and regional annual unemployment rates as exogenous covariates because their value is determined outside the system under study. Regional unemployment rates influence the duration of waiting time but are not influenced by it themselves. The variable can change annually and the values are assumed to be stable between measurements.

The results in Table 5.4 depict the coefficients of the Cox proportional hazard model including TVCs. We find ethnic penalties for second generation migrants with a Turkish background in Germany. Turkish second generation migrants have lower chances to enter employment with any type of contract (significant at the 5% level or more throughout all steps) in step 1-4. The inclusion of work experience and written language proficiency explains ethnic penalties for the Turkish second generation migrants in step 5. Poor written language proficiency contributes to the fact that second generation migrants with Turkish background wait longer to obtain a first job. The results confirm previous findings concerning access to qualified labour market positions (Kalter, 2006). Thus, language proficiency matters not only for the quality of jobs, but also for the time needed to obtain them. There are many reasons for this. First, the better a person can write German, the better is his/her chance to write a good application. Second, language skills are necessary for almost all jobs and are an important criteria for employers for hiring. Language proficiency correlates with Turkish second generation migrant background by -.6 and with Spanish, Italian and Greek second generation migrant background by -.4. Therefore, it serves as
Table 5.4: Cox proportional hazard model on duration of waiting time (any type of contract) including TVC

<table>
<thead>
<tr>
<th></th>
<th>STEP 1</th>
<th>STEP 2</th>
<th>STEP 3</th>
<th>STEP 4</th>
<th>STEP 5</th>
<th>STEP 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>main</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 gens Turkish (ref. natives)</td>
<td>-0.361**</td>
<td>-0.286*</td>
<td>-0.268*</td>
<td>-0.251*</td>
<td>-0.059</td>
<td>0.417</td>
</tr>
<tr>
<td>2 gens It/He/Es</td>
<td>-0.044</td>
<td>-0.059</td>
<td>-0.042</td>
<td>-0.050</td>
<td>0.000</td>
<td>-0.170</td>
</tr>
<tr>
<td>Females (ref. males)</td>
<td>-0.014</td>
<td>-0.029</td>
<td>-0.024</td>
<td>-0.025</td>
<td>-0.004</td>
<td></td>
</tr>
<tr>
<td>LM entrance &gt;=1993</td>
<td>-0.257***</td>
<td>-0.255***</td>
<td>-0.331***</td>
<td>-0.331***</td>
<td>-0.329***</td>
<td></td>
</tr>
</tbody>
</table>

Reference: inadequately completed

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary education</td>
<td>0.100</td>
<td>0.095</td>
<td>0.084</td>
<td>0.021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td>0.233**</td>
<td>0.230**</td>
<td>0.210**</td>
<td>0.158*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprenticeship</td>
<td>0.302**</td>
<td>0.306**</td>
<td>0.283**</td>
<td>0.216***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abitur</td>
<td>0.409***</td>
<td>0.415***</td>
<td>0.384***</td>
<td>0.339***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education mother</td>
<td>-0.020</td>
<td>-0.033</td>
<td>-0.030</td>
<td>-0.038*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father isei</td>
<td></td>
<td>0.003</td>
<td>0.003</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father isei missing</td>
<td>-0.129***</td>
<td>-0.135***</td>
<td>-0.138***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience</td>
<td></td>
<td>0.019</td>
<td>0.033***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language proficiency</td>
<td></td>
<td></td>
<td>0.237**</td>
<td>0.237**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary*TK</td>
<td></td>
<td></td>
<td></td>
<td>0.370*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate*TK</td>
<td></td>
<td></td>
<td></td>
<td>0.284</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprenticeship*TK</td>
<td></td>
<td></td>
<td></td>
<td>0.454***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abitur*TK</td>
<td></td>
<td></td>
<td></td>
<td>0.282</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary*He/It/Es</td>
<td></td>
<td></td>
<td></td>
<td>0.223</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate*He/It/Es</td>
<td></td>
<td></td>
<td></td>
<td>0.231</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprenticeship*He/It/Es</td>
<td></td>
<td></td>
<td></td>
<td>0.294*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maturity*He/It/Es</td>
<td></td>
<td></td>
<td></td>
<td>0.146</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience*TK</td>
<td></td>
<td></td>
<td></td>
<td>-0.078*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience*He/It/Es</td>
<td></td>
<td></td>
<td></td>
<td>-0.146**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment rate*TK</td>
<td></td>
<td></td>
<td></td>
<td>-0.079**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment rate*He/It/Es</td>
<td></td>
<td></td>
<td></td>
<td>0.014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender*TK</td>
<td></td>
<td></td>
<td></td>
<td>-0.179</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender*Es/It/He</td>
<td></td>
<td></td>
<td></td>
<td>-0.049</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Log likelihood</td>
<td>-9518.423</td>
<td>-9500.518</td>
<td>-9488.823</td>
<td>-9468.007</td>
<td>-9445.137</td>
<td>-9431.359</td>
</tr>
<tr>
<td>LR Chi Square</td>
<td>10.27884</td>
<td>695.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Events</td>
<td>1410</td>
<td>1410</td>
<td>1410</td>
<td>1410</td>
<td>1410</td>
<td>1410</td>
</tr>
</tbody>
</table>

p<0.05=*, p<0.01=**, p<0.001=***
CHAPTER 5. SECOND GENERATION MIGRANTS IN GERMANY

a proxy for Turkish second generation migrants to a certain extent. Nevertheless, it explains why these migrants face special disadvantages. Moreover, the covariate is based on a subjective measure and might correlate with other characteristics like ability and contacts that influence the timing of labour market entrance. We filled information forward during measurement points of the variable (see above). Consequently, we do not overestimate self-evaluated level of written language proficiency. We might, however, underestimate written language proficiency at the first month in the labour market in our models. The procedure makes it less possible that persons improve their language skills in their new work context or in anticipation of a job (see Section 2.6 for discussion of endogenous language choice).

Moreover, a person with work experience is more likely to enter the labour market fast (significant in step 6). Persons with job experience have gained competences, that might be transferable to their first significant job. Second, the work experience gives future employers an additional measurement for an employee’s productivity.

Second generation migrants with Greek, Italian and Spanish background also have a lower chance to enter first employment, but the effect is not significant. These groups of second generation migrants seems to face less disadvantages than Turkish second generation migrants. Hypotheses 8 is confirmed for second generation migrants with Turkish background only, but later explained through worse language skills of this group.

Although the sign is negative, we do not find significantly different chances to enter employment for men and women. Results for step 6 of the model show that there are no additional gender disadvantages for second generation migrant women. As expected we find period effects on the labour market. There are strong negative effects of labour market entrance after 1993. The economic business cycle affects labour market entrances of young people. When the German labour market was worsening young people had lower chances to enter the labour market and had to wait longer to find a job.

The effect of childbirth, household income, unemployment and age (might) change over time (see appendix, Chapter 9). We include these variables as TVCs because we assumed that the current value of these variables might influence the hazard rate. Higher age at entrance into the waiting time reflects that a person took longer compared to others to complete a certain educational level. Expectedly, we find in all steps of the model and when education is controlled for that older persons are significantly less likely to enter a job quickly. The fact that the time varying covariate age significantly affects survival (being in waiting time) indicates that age is indeed time dependent and the proportionality assumption does not hold. However, we do not find significant effects for any of the other time varying covariates. We might not find significant negative effects of female gender as usually expected because we excluded the months before childbirth from the waiting time.

Hypothesis 1 is confirmed as the inclusion of education as a control variable decreases the negative effect of the coefficient of Turkish second generation migrants. However, the
decrease of the ethnicity effect is small. The size of the ethnicity coefficient decreases to a larger extent from step 1 to step 2 when labour market entrance period and age are included.

As compared to inadequately completing education, holding intermediate, apprenticeship or Abitur degrees increases the chance to find a first job quickly. The size of the coefficients increases with level of education. Apprenticeships completion increase the chance to the second largest extent after Abitur education. The finding confirms that apprenticeships do indeed smoothen labour market entrances. Elementary education does not significantly benefit a person in terms of a shorter waiting time compared to inadequately completed education. This result could indicate that elementary education is indeed accompanied by a stigmatisation or is expected of everyone.

Findings of step 6 of the model show differential returns to education for natives and second generation migrants. Second generation migrants with Turkish and Italian, Spanish or Greek background can especially profit from apprenticeship completion. Apprenticeships indeed function as 'safety nets' for second generation migrants concerning their waiting time until labour market entrance, if they manage to enter apprenticeships. Second generation migrants would, thus, profit from improved access to apprenticeships to an overproportional extent. Additionally, second generation migrants from Turkey are more likely to enter first jobs quickly after the achieved elementary education. This is an important finding, as a large percentage of female and male second generation migrants in our sample obtained elementary education only. Nevertheless, the interactions do not indicate whether these second generation migrants find adequate jobs or jobs that are comparable to those of natives with the same educational qualification. All remaining interactions of education and ethnicity are positive, but not significant.

If a person's mother has a higher educational level, this does not significantly influence his/her chances to find a job quickly. Thus, the educational level of mothers does not influence personal knowledge about the labour market. Higher ISEI occupational status scores of fathers have a positive but nonsignificant effect on chances to find employment quickly. However, missing ISEI scores of fathers have a highly significant negative effect. This indicates that missing values are non-random: persons with missing information share certain characteristics that correlate with longer durations of waiting time. Further analysis could try to estimate the missing values to show whether these characteristics are additional factors to those we identified in our analyses (see Section 5.6). We included the variable in the model because former versions of the model showed that results stay stable even when the missings are excluded.

The basic problem of transition rate modeling is to decide for a model that might assume a specific form of the transition rate. On the other hand, results sometimes strongly depend
on the type of modeling. Blossfeld and Rohwer conclude that “the best strategy is to estimate a broad variety of different models in order to find robust estimation results” (Blossfeld and Rohwer, 2002, 263). To compare the results with the model presented above, therefore, we calculated a Cox model with time independent covariates and a logistic discrete-time event history model. The findings largely support the results of the model presented above. For detailed discussion see appendix (Chapter 9).

Piecwise constant exponential hazard rate model: duration of waiting time

In this section we want to test whether the influence of ethnicity on the duration of waiting time changes across time episodes.\textsuperscript{10} To test the influence of time-independent covariates between certain time intervals we use a piecewise constant exponential hazard rate model. The model is parametric and based on the assumption of proportional risks for all subgroups (Box-Steffensmeier and Jones, 2004, 133). We split up the the waiting into four intervals. This way we do not risk having too few cases in one category. The intervals consist of persons who 1) enter employment immediately or after 1 month\textsuperscript{11}, 2) who find a job within 2-6 months, 3) within 7-11 months or 4) those who take longer (12 months or more). In episodes where no event takes place persons are considered as right censored. We add interval-specific variables for second generation migrants with Turkish and Spanish, Italian or Greek background. The interval-specific variables indicate whether the influence of a variable changes with increasing duration of the waiting time. The resulting significant coefficients can be interpreted as follows: a change of the variable form zero to one compared to the reference category changes the hazard of entering a job at a certain time interval in a positive or negative way. Natives form the reference category for each interaction of time interval and ethnicity. Furthermore, the size of the coefficient can be compared across time intervals.

The coefficients of the piecewise constant exponential hazard rate model indicate that chances to enter employment are duration dependent (Table 5.5).\textsuperscript{12} Duration dependence is significant and increases over time intervals. The longer a person is waiting for a job the less likely s/he is to obtain a job.

Turkish second generation migrants who do not enter jobs immediately or after 1 month

\textsuperscript{10}In principle, we could include all covariates of the previous Cox TVC model in the piecewise exponential hazard rate model. We calculate the models separately here, though, to explicitly show in what way the effect of ethnicity is time independent.

\textsuperscript{11}Due to the artificial waiting time of one month in our data the first interval comprises those who enter without waiting time or after one month.

\textsuperscript{12}The results in the table depict the coefficients of a piecewise constant exponential hazard rate model on the intervals of duration of waiting time until jobs with any type of contract. In the model we correct the standard errors for clustered data in regions.
Table 5.5: Piecewise constant exponential hazard rate model: duration of waiting time

<table>
<thead>
<tr>
<th></th>
<th>STEP 1</th>
<th>STEP 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>t</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no/1 month waiting time</td>
<td>-0.969***</td>
<td>0.243</td>
</tr>
<tr>
<td>2-6 months</td>
<td>-1.810***</td>
<td>-0.513***</td>
</tr>
<tr>
<td>7-12 months</td>
<td>-2.257***</td>
<td>-0.928***</td>
</tr>
<tr>
<td>13+ months</td>
<td>-3.380***</td>
<td>-1.866***</td>
</tr>
<tr>
<td>TK * no/1 month</td>
<td>-0.349</td>
<td>-0.250</td>
</tr>
<tr>
<td>TK * 2-6 months</td>
<td>-0.627**</td>
<td>-0.552*</td>
</tr>
<tr>
<td>TK * 7-12 months</td>
<td>-0.484</td>
<td>-0.376</td>
</tr>
<tr>
<td>TK * 13+ months</td>
<td>0.122</td>
<td>0.214</td>
</tr>
<tr>
<td>It/He/Es * 0/1 month</td>
<td>-0.070</td>
<td>-0.101</td>
</tr>
<tr>
<td>It/He/Es * 2-6 months</td>
<td>-0.009</td>
<td>-0.027</td>
</tr>
<tr>
<td>It/He/Es * 7-12 months</td>
<td>0.071</td>
<td>0.096</td>
</tr>
<tr>
<td>It/He/Es * 13+ months</td>
<td>0.109</td>
<td>0.210</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td></td>
<td>-0.016**</td>
</tr>
<tr>
<td>Age (entrance wt)</td>
<td></td>
<td>-0.005***</td>
</tr>
<tr>
<td>Females (ref. males)</td>
<td></td>
<td>-0.045</td>
</tr>
<tr>
<td>LM entrance &gt;=1993</td>
<td></td>
<td>-0.253***</td>
</tr>
<tr>
<td>Elementary(+voc/appr), ref.inad.compl.</td>
<td>0.137*</td>
<td></td>
</tr>
<tr>
<td>Intermediate(+ voc.)</td>
<td></td>
<td>0.303**</td>
</tr>
<tr>
<td>Apprenticeship(+ basic/maturity)</td>
<td>0.496***</td>
<td></td>
</tr>
<tr>
<td>Maturity(+ voc.)</td>
<td></td>
<td>0.662***</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-1830.947</td>
<td>-1789.535</td>
</tr>
<tr>
<td>LR Chi Square</td>
<td>547269.6</td>
<td>6706.633</td>
</tr>
<tr>
<td>Events</td>
<td>1410</td>
<td>1410</td>
</tr>
</tbody>
</table>

p<0.05=*, p<0.01=**, p<0.001=***
face the largest disadvantages in the first 2-6 months of job search. We find the influence of Turkish ethnicity is largest, negative and significant in the interval of 2-6 months. In the preceding and following intervals Turkish ethnicity has a negative effect, but it is smaller and insignificant. The result for Turkish second generation migrants is in line with the applications of job search theory to second generation migrants and signaling and screening theory. They predict that the signal of ethnicity decreases with time because, first, returns to more information about labour markets that second generation migrants gain with time diminish. Second, employers learn about actual skills of second generation migrants. Third, there are less native applicants for certain jobs on the market because they were hired in previous hiring rounds.

Again, we find no disadvantages for second generation migrants with Italian, Spanish and Greek background. The results for Italian, Spanish and Greek second generation migrants do not support the hypothesis as the size of the coefficients does not change much across intervals. However, the influence of Greek, Italian or Spanish ethnicity is not significant for any of the intervals. In the second step of the model we control for important covariates. The findings show that the results explained above are stable after the inclusion of these variables.

In event history time-dependence can be interpreted from various angles. Theoretically, it is supposed to be due to an underlying diffusion process. Moreover, it can be an expression of a theoretically important latent causal factor operating in time. For instance, the underlying factor here could be less knowledge about the labour market as discussed above. Besides, from a methodological point of view time-dependence can also be a consequence of unobserved heterogeneity (Blossfeld and Rohwer, 2002). In the latter case it does not allow for any substantial interpretation. Section 5.6 further discusses unobserved heterogeneity.

Duration of waiting time until first jobs with temporary/permanent contracts

This section aims at linking the duration of the waiting time with the quality of the school-to-work transition. We consider the possibility that young people can exit the waiting time to two different destination states. They can enter first jobs with temporary or permanent contracts. We have argued above that access to permanent jobs is an important indicator for ethnic inequality in school-to-work transitions. To test this we calculate continuous time competing risk models for the different destination states. We specify different destination-specific censoring variables and estimate separate Cox models for each destination state (Jenkins, 2005). As we split the sample into these two groups, case numbers are too low to look at both groups of second generation migrants separately like in the previous models.
Thus, we grouped all second generation migrants together in this model. The result will give interesting insights in whether there are effects concerning all second generation migrants. With estimating separate Cox models for each destination state we assume that the transitions in the monthly formatted data can only occur at the boundaries of the intervals (at the beginning of the month) (Jenkins, 2005, 93). People usually enter jobs at the beginning of the month and in exceptional cases at the middle of the month.

61.3% of the school leavers enter first jobs with temporary contracts. The information of 8.0% of the respondents on type of contract of their first job is missing. 62.0% of natives, 62.9% of second generation migrants with Turkish, and 53.7% of those with Greek, Italian and Spanish background enter first jobs with temporary contracts. Thus, without taking the composition of second generation migrants into account, they do not seem more likely to enter temporary jobs.

The results in Table 5.6 depict the coefficients of the Cox proportional hazard model of duration until jobs with temporary and permanent contract including TVCs depicted at the lower part of the table. We can see that second generation migrants have to wait significantly longer to enter temporary jobs than natives. They have longer survival times because the hazard rate is negatively associated with ethnicity in the model. The effect of second generation migration background is also negative in the model on permanent contracts, but not significant. The size of the ethnicity coefficient is larger in the model on temporary contracts, indicating a stronger influence of ethnicity concerning temporary contracts. The effect of ethnicity is later explained by the inclusion of written language proficiency in step 5 of the model.

The results indicate that second generation migrants are not significantly less likely to enter permanent positions. Thus, if labour market exclusion happens through temporary first positions, second generation migrants are not confronted with this risk. Type of contracts do not seem to be factors that produce ethnic inequality in school-to-work transitions at the German labour market. On the other hand, these result underline the importance of looking more closely at the quality of school-to-work transitions. The fact that we find significant positive returns to elementary education for second generation migrants might underline this: they have significantly lower waiting times until permanent first positions. The temporary jobs second generation migrants enter may be very different from those of natives. It might be the case that second generation migrants decrease their reservation wage by entering permanent jobs in lower segments of the labour market.

Results on step 2 of the model indicate that if the number of children in a household increases, persons are significantly less likely to enter permanent employment fast. The

---

13 Conclusions regarding the size of coefficients are based on marginal effects of Cox proportional hazard models without TVCs. They are not shown in the table.
### Table 5.6: Cox competing risk model: duration of waiting time until first jobs with temporary or permanent contract

|                             | Temp. 1 | Perm. 1 | Temp. 2 | Perm. 2 | Temp. 3 | Perm. 3 | Temp. 4 | Perm. 4 | Temp. 5 | Perm. 5 | Temp. 6 | Perm. 6 | Temp. 7 | Perm. 7 | Temp. 8 | Perm. 8 | Temp. 9 | Perm. 9 | Temp. 10 | Perm. 10 |
|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2.gen (ref. natives)        | -0.278*** | -0.077 | -0.261*** | -0.019 | -0.283*** | -0.002 | -0.319*** | 0.059 | -0.148 | 0.305 | -0.308 | 0.355 |       |       |       |       |       |       |       |       |
| Females (ref. males)        | 0.029 | -0.007 | -0.045 | 0.060 | -0.046 | 0.071 | -0.050 | 0.083 | -0.013 | 0.081 |       |       |       |       |       |       |       |       |       |
| LM entry after 1993         | -0.040 | -0.707*** | 0.004 | -0.763*** | -0.060 | -0.838*** | -0.034 | -0.855*** | -0.030 | -0.840*** |       |       |       |       |       |       |       |       |
| Ref.: Inadequately completed |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Elementary                | 0.237** | -0.049 | 0.218** | -0.039 | 0.213** | -0.084 | 0.178 | -0.165 |       |       |       |       |       |       |       |       |       |       |       |
| Intermediate            | 0.509*** | -0.324* | 0.501*** | -0.319* | 0.492*** | -0.373** | 0.400** | -0.417** |       |       |       |       |       |       |       |       |       |       |
| Apprenticeship          | 0.088 | 0.261 | 0.087 | 0.282 | 0.097 | 0.188 | 0.008 | 0.090 |       |       |       |       |       |       |       |       |       |       |
| Abitur                   | 0.420*** | 0.009 | 0.439*** | 0.009 | 0.440*** | -0.082 | 0.425*** | -0.163 |       |       |       |       |       |       |       |       |       |       |
| Education mother        | -0.068* | 0.011 | -0.067* | 0.022 | -0.071*** | -0.022 | -0.075*** | -0.026 |       |       |       |       |       |       |       |       |       |
| Father issei           | -0.003 | 0.011* | -0.003 | 0.011* | -0.003 | 0.012* |       |       |       |       |       |       |       |       |       |       |       |
| Father issei missing    | -0.150** | -0.107 | -0.122** | -0.150* | -0.108* | -0.153 |       |       |       |       |       |       |       |       |       |       |
| Work experience         | -0.090** | 0.115*** | -0.099* | 0.135*** |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Language proficiency    | 0.269* | 0.351* | 0.268 | 0.256* |       |       |       |       |       |       |       |       |       |       |       |       |
| Parental education       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Elementary*2.gen            | 0.182 | 0.412* |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Intermediate*2.gen         | 0.527 | 0.171 |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Apprenticeship*2.gen      | 0.528 | 0.500 |       |       |       |       |       |       |       |       |       |       |       |       |
| Abitur*2.gen              | 0.024 | 0.446 |       |       |       |       |       |       |       |       |       |       |       |       |
| Work experience*2.gen      | 0.050 | -0.230** |       |       |       |       |       |       |       |       |       |       |       |       |
| Reg. unemployment*2.gen    | -0.010 | -0.051 |       |       |       |       |       |       |       |       |       |       |       |       |
| Gender*2.gen              | -0.180 | 0.048 |       |       |       |       |       |       |       |       |       |       |       |       |
| No. children              | -0.004 | -0.031** | -0.003 | -0.031** | -0.003 | -0.029** | -0.004 | -0.025** | -0.004 | -0.022* |       |       |       |       |       |       |
| HH income                 | 0.000 | 0.000 |       |       |       |       |       |       |       |       |       |       |       |       |
| Unemployment rate         | 0.001 | -0.008*** | 0.000 | -0.008** | 0.001 | -0.008** | 0.000 | -0.007** | 0.000 | -0.006** |       |       |       |       |       |
| Age (entry wt)            | -0.000 | 0.000 |       |       |       |       |       |       |       |       |       |       |       |       |
| LR Chi Square             | 21.9563 | 3.5651 | 1215.527 | 527.4836 | 2749.839 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| N                     | 826 | 525 | 826 | 525 | 826 | 525 | 826 | 525 | 826 | 525 | 826 | 525 | 826 | 525 | 826 | 525 | 826 | 525 | 826 | 525 |

* p<0.05, ** p<0.01, *** p<0.001

Note: The table presents the results of a Cox competing risk model analyzing the duration of waiting time until first jobs with temporary or permanent contract for second generation migrants in Germany. The model includes various covariates such as gender, level of education, work experience, language proficiency, and age. The table also reports the log likelihood and LR Chi Square statistics for model fit.
effect is also negative with regard to temporary jobs, but the effect is not significant. The results might indicate disadvantages for women because they are mostly responsible for child care. Female gender has the expected positive coefficient in the models on temporary contracts and a negative in the model on permanent contracts, but the coefficients fail to reach significance. Increasing regional unemployment rates in the region of residence make young people wait longer for entering permanent first positions. Young people indeed seem to function as buffers at the labour market with regard to permanent jobs. Employers might refuse to hire young people on a permanent basis in phases of economic change. Releasing permanent workers is more difficult in case the economy turns down. In times of economic downturn, however, employers seem not to hire new workers on a temporary basis only to be able to release workers later. Our results indicate there is no change in employers’ hiring behaviour concerning temporary jobs. Chances to enter temporary jobs later of labour market entrants are not significantly affected after the year 1993. Age and household income do not significantly influence waiting time until permanent or temporary first positions.

In contrast to the ethnicity-specific effect, completing elementary education significantly increases the chance to enter jobs with temporary contracts quickly for the whole sample (step 3, 4 and 5). At the same time it decreases the chance to enter permanent employment, but the latter effect is not significant. Persons with intermediate education are significantly more likely (at the 0.1% level) to enter temporary jobs faster, while they are significantly less likely to enter permanent jobs quickly (significant at the 5% level). Completion of lower secondary education tracks, thus, might lead to jobs that bear the risk of labour market exclusion. Stigmatization of people completing these tracks might play a role (cf. Solga, 2002). Unexpectedly, people who obtained an apprenticeship are not significantly more likely to enter jobs with either temporary or permanent contracts, but coefficients are positive. Abitur certificates are associated with significantly shorter durations of waiting time until temporary contracts. They might decrease the waiting time until permanent jobs, but the effect is not significant. Higher educational levels of the mother make young people wait significantly longer until first jobs with temporary contracts (step 5 and 6). The finding turns significant only after work experience and language proficiency have been included into the model. This finding might hint towards the fact that persons with mothers who received more education wait for a better match before they enter temporary positions. In general, we find more significant influences of educational certificates on temporary jobs, maybe due to larger case numbers in this group.

Expectedly, previous work experience helps young people to access permanent positions. Employers are able to better estimate an applicant’s ability based on their work experience. More work experience significantly improves the chance of young people to enter permanent
positions quickly, while significantly decreasing the chance to enter temporary jobs. Persons who have already gained experience in a job might not be willing to accept temporary jobs. In addition, better written language proficiency fosters access to the labour market for both types of jobs. It is accompanied by shorter waiting times for permanent and temporary jobs. The effect is significant at the 0.5% level, the exception being temporary jobs in step 6 of the model. This is an expected effect as language skills are important for jobs with all types of contracts. Persons with lower German language proficiency might be less likely to enter high occupational status jobs, though (see next section).

When we split up the model into those with permanent and temporary contracts, we find an effect of father’s occupational positions. The higher the father’s socio-economic status, the significantly more likely a person is to enter a permanent job quickly. In contrast, s/he seems to be less likely to enter temporary jobs, but the coefficients fail to reach significance. Father’s job occupational status seems to matter especially with regard to quality of positions in terms of permanent contracts. We find significant negative effects concerning missing values of father’s socio-economic status in the models on temporary contracts.

The result indicate that second generation migrants cannot profit from work experience especially when entering permanent first position. Their work experience decreases chances to enter permanent jobs quickly. This is a clear disadvantage as we have seen before that work experience was important for natives’ quick entrance into permanent positions. Second generation migrants might gain work experience that is not transferable. On the other hand, employers might not evaluate their work experience the same way like natives’. Elementary education increases Turkish second generation migrants’ chances to enter permanent jobs. The remaining ethnicity-specific effects of education are positive, but not significant. Moreover, there are no significant ethnicity-specific gender effects.

\footnote{Note that highly qualified persons who might also be likely to enter temporary jobs are not included in our sample.}

\footnote{PH assumption test results based on the Schoenfeld residuals show that the proportional hazard assumption is violated for step 1 of the models on permanent and temporary contracts and in step 6 for the model on permanent contracts. For instance, work experience and age do not fulfill the assumption. We included interaction terms of duration time and the variables in former versions of the model, but the test results show that hazards were still not proportional for these groups. Therefore, we present the original results without correction here. In line with the results of the previous model we think that, a discrete-time model would not yield different results. Nevertheless, we interpret the results carefully.}
5.4. RESULTS

| Table 5.7: GSOEP descriptive statistics: ISEI score of first job |
|-------------------|-----------------|-----------------|-----------------|-----------------|
|                   | 2nd gen Tk      | It/He/Sp        | 2.gen total     | Natives         |
| 25th percentile   | 30              | 33              | 33              | 31              |
| Mean              | 36.45           | 39.21           | 38.18           | 39.57           |
| Median            | 34              | 38              | 34              | 38              |
| 75th percentile   | 38              | 43.5            | 43              | 50              |
| Observations      | 69              | 116             | 185             | 979             |
| Missings in %     | 21.6%           | 16.6%           | 18.5%           | 19.2%           |

Discrete-time logistic regression on entering first jobs with above/below median occupational status (ISEI)

Occupation is a major source of social inequality and one of the main dimensions of social stratification. To assess ethnic inequality in the quality of school-to-work transitions, this section analyses the ISEI occupational status scores of first jobs. We calculate a discrete-time logistic regression model and include the duration of waiting time as an independent variable. In this model the dependent variable is an indicator for entrance into an event that is labour market entrance and accounts for right censored cases. The analysis is based on person-months formatted GSOEP data.

Descriptives of socio-economic status by ISEI scores within first jobs clearly show that second generation migrants on the average enter job with lower status than natives (Table 5.7). The first quartile (25th percentile) and the third quartile (75th percentile) give the value of the ISEI scores below which 25 and 75 percent respectively of observations fall. 25 percent of all groups of young people enter first jobs with ISEI occupational status scores up to 30-33. The 75th percentile values, however, indicate that the distribution of Turkish second generation migrants is right-skewed: 75 percent of Turkish second generation migrants’ first jobs have ISEI occupational status scores below 38 (on a scale ranging from 15-90), while 75 percent of natives have ISEI scores below 50. ISEI scores of Italian, Greek or Spanish second generation migrants reach up to 43.5. Hence, Turkish second generation migrants are especially disadvantaged with regard to their first jobs’ socio-economic status.\(^\text{16}\)

The results in Table 5.8 depict the coefficients of a discrete-time logistic regression on below/above Median ISEI job positions of first jobs. Marginal effects are reported. We use the sample median value for the dependent variable because it is not outlier biased.

\(^{16}\)Looking at ethnic groups separately additionally showed that Italian second generation migrants enter low socio-economic status jobs while the Spanish almost enter jobs like natives with regard to socio-economic status.
Table 5.8: Discrete-time logistic regression on entering first jobs with above/below median occupational status (marginal effects)

<table>
<thead>
<tr>
<th></th>
<th>STEP 1</th>
<th>STEP 2</th>
<th>STEP 3</th>
<th>STEP 4</th>
<th>STEP 5</th>
<th>STEP 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ref: natives</td>
<td>0,113</td>
<td>-0,134</td>
<td>-0,093</td>
<td>-0,092</td>
<td>0,020</td>
<td>0,371</td>
</tr>
<tr>
<td>2nd gen Turkish (d)</td>
<td>-0,064*</td>
<td>-0,143*</td>
<td>-0,079</td>
<td>-0,106</td>
<td>0,064</td>
<td>-0,121</td>
</tr>
<tr>
<td>Duration of waiting time</td>
<td>-0,001</td>
<td>-0,002</td>
<td>-0,000</td>
<td>-0,000</td>
<td>0,000</td>
<td>-0,001</td>
</tr>
<tr>
<td>Females (ref. males)</td>
<td>0,167***</td>
<td>0,150***</td>
<td>0,168***</td>
<td>0,185***</td>
<td>0,200***</td>
<td></td>
</tr>
<tr>
<td>LM entrance after 1993 (d)</td>
<td>-0,023</td>
<td>-0,014</td>
<td>-0,102*</td>
<td>-0,101*</td>
<td>-0,097*</td>
<td></td>
</tr>
<tr>
<td>No. children</td>
<td>-0,035</td>
<td>-0,037</td>
<td>-0,032</td>
<td>-0,034</td>
<td>-0,035</td>
<td></td>
</tr>
<tr>
<td>Hh income</td>
<td>0,000</td>
<td>0,000</td>
<td>-0,000</td>
<td>-0,000</td>
<td>-0,000</td>
<td></td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>0,001</td>
<td>-0,002</td>
<td>0,000</td>
<td>0,002</td>
<td>0,000</td>
<td></td>
</tr>
<tr>
<td>Age (entrance wt)</td>
<td>0,005***</td>
<td>0,005***</td>
<td>0,005***</td>
<td>0,003*</td>
<td>0,004**</td>
<td></td>
</tr>
<tr>
<td>Ref: inad. completed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary (d)</td>
<td>0,146</td>
<td>0,153</td>
<td>0,177</td>
<td>0,063</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate (d)</td>
<td>0,208*</td>
<td>0,270*</td>
<td>0,200</td>
<td>0,135</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprenticeship (d)</td>
<td>0,247*</td>
<td>0,289*</td>
<td>0,211</td>
<td>0,202</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abitur (d)</td>
<td>0,361***</td>
<td>0,372***</td>
<td>0,341***</td>
<td>0,315**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education mother</td>
<td>0,043</td>
<td>0,038</td>
<td>0,027</td>
<td>0,018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rather isei</td>
<td>0,003</td>
<td>0,003</td>
<td>0,003</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rather isei missing (d)</td>
<td>-0,210***</td>
<td>-0,219***</td>
<td>-0,197***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,061***</td>
<td>-0,004</td>
</tr>
<tr>
<td>Language proficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,215**</td>
<td>0,334***</td>
</tr>
<tr>
<td>Elementary*TK (d)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0,264*</td>
</tr>
<tr>
<td>Elementary*He/It/Es (d)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0,010</td>
</tr>
<tr>
<td>Intermediate*He/It/Es (d)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,240</td>
</tr>
<tr>
<td>Apprenticeship*He/It/Es (d)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0,107</td>
</tr>
<tr>
<td>Work experience * TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,187***</td>
</tr>
<tr>
<td>Work experience * He/It/Es</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,172***</td>
</tr>
<tr>
<td>Unemployment rate * TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0,041</td>
</tr>
<tr>
<td>Unemployment rate * He/It/Es</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0,029</td>
</tr>
<tr>
<td>Gender * TK (d)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0,010</td>
</tr>
<tr>
<td>Gender * He/It/Es (d)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0,033</td>
</tr>
<tr>
<td>Pseudo R-Square</td>
<td>0,008</td>
<td>0,112</td>
<td>0,130</td>
<td>0,151</td>
<td>0,167</td>
<td>0,194</td>
</tr>
<tr>
<td>Ch2</td>
<td>3,786604</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td></td>
</tr>
<tr>
<td>p</td>
<td>.2854131</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>4270</td>
<td>4270</td>
<td>4270</td>
<td>4270</td>
<td>4270</td>
<td>4270</td>
</tr>
</tbody>
</table>

(d) for discrete change of dummy variable from 0 to 1, p<0.05=* , p<0.01=**, p<0.001=***
5.4. RESULTS

The results show differences between the two ethnic groups of second generation migrants. Second generation migrants with Italian, Spanish or Greek background have lower chances to enter first jobs with above median occupational status scores. The coefficient is significant at the 5% level until level of education is taken into account in step 3. Differences in occupational status of their first jobs are explained by the composition of the second generation migrants with regard to their lower educational level. Unfortunately, case numbers do not allow to test whether this effect is mainly driven by second generation migrants with Italian, Spanish or Greek background. In contrast, Turkish second generation migrants are not significantly more or less likely to enter higher occupational status jobs. This finding resembles cross sectional results that did not find significantly different ISEI occupational status for old and young Turkish second generation migrants in Germany (Euwals, Dagevos, Gijsberts, and Roodenburg, 2007b).

Generally, the inclusion of control variables does not decrease the influence of ethnicity in the models to a large extent. Longer durations of waiting times have no significant effect, but a negative sign.

Our results do not confirm that ISEI scores mainly reflect aspirations of a certain group, especially of white males. According to our results second generation migrants enter the same jobs like natives when educational level is controlled for. Thus, do not seem to have different preferences concerning jobs within the ISEI scale that are not mediated by educational level. As second generation migrants have been born in Germany, this is not surprising.

Step 2 of the model indicates that when the number of children in the household are controlled for, women are significantly more likely to enter above median socio-economic status jobs (significant at the 0.1% level). This effect is somewhat counter-intuitive and might be due to a sample selection effect. Our sample might include those women with higher occupational status scores to an overproportional extent: 25% of second generation migrant women occupational status scores are are missing, while 14.1% are missing in the male second generation migrant sample. For natives ISEI scores missings are almost balanced: 17.1% for native women and 20.0% for native men. ISEI of first jobs may simply reflect the higher educational level of women. Gender disadvantages might, thus, not be visible at school-to-work transitions, but set in later (for further discussion see Section 6.6).

Furthermore, the older a young person is at labour market entrance, the more likely is s/he to obtain a first job with higher status, which might be an effect of more possible work experience as the covariate loses significance in step 5. The effect is very small, though. Labour market entrance in times of worsening economy (after 1993) decrease chances for young persons to enter first jobs with higher occupational status. The covariate turns insignificant in step 5 and 6 after individuals’ social background in terms of fathers’
occupational status is taken into account. Income, the number of children in the household and unemployment rates do not significantly influence the chance to enter the labour market with higher occupational status. The second step of the model explains much more variance than the first, the Pseudo $R^2$ value jumps up from step 1 to 2 and gradually increases in the subsequent steps.

The third step of the model includes educational certificates. Expectedly, persons with Abitur certificates are more likely to enter job with higher occupational status. The result is significant at the 0.1% level in step 3 and 4 and at the 1% level in step 5 and 6. The positive influence of the Abitur certificate on first job occupational status scores is very strong, the size of this coefficient is largest in all steps of the model. Moreover, intermediate and apprenticeship education are associated with higher chances to enter higher occupational status jobs (at the 5% level). Their influence is later explained by composition in terms of skills in step 5 and 6: it turns insignificant after language proficiency and work experience have been introduced into the model. Step 6 indicates that more work experience and better German written language proficiency significantly increase chances to enter first jobs with higher occupational status. Elementary education and education of mothers have no significant influence on chances to enter first jobs with high ISEI scores.

Higher ISEI occupational status scores of fathers’ occupations do not significantly correlate with descendants chances to enter employment with higher occupational status scores (step 5). The missing value of father’s ISEI, however, significantly decreases chances to enter first jobs with higher occupational status (see Section 5.6). Furthermore, step 7 includes interactions of ethnicity with education, gender, unemployment rates and work experience. We find significant differential returns for second generation migrants concerning work experience. They are more likely to profit from work experience. Thus, second generation migrants with work experience have higher chances to enter first jobs with higher occupational status than natives with work experience. However, elementary education (“Hauptschule”) may indeed have a stigmatizing effect especially for second generation migrants: Turkish second generation migrants who attained elementary education are significantly less likely to enter first jobs with higher occupational status.

5.5 Summary of results for Germany

In this chapter we tested hypotheses 1, 3, 4, 8, and 9 in the German context. Table 5.9 summarizes the hypotheses and depicts whether they were supported or not by the data. With hypotheses 1 and 3, we tested whether group composition with regard to level of education reduces the negative effect of second generation ethnicity on duration of waiting times. Hypothesis 1 is not supported in the model on duration of waiting time until full-
Table 5.9: Results concerning hypotheses for Germany

<table>
<thead>
<tr>
<th>No.</th>
<th>Hypotheses</th>
<th>Duration of waiting time</th>
<th>Competing risks temporary / permanent contracts</th>
<th>Occupational status</th>
</tr>
</thead>
<tbody>
<tr>
<td>H 1</td>
<td>Higher levels of education reduce the negative effect of second generation ethnicity on duration of waiting times.</td>
<td>Not supported</td>
<td>Not supported</td>
<td>-</td>
</tr>
<tr>
<td>H 3</td>
<td>Better language proficiency reduces the negative effect of second generation ethnicity on duration of waiting times.</td>
<td>Supported</td>
<td>Supported</td>
<td>-</td>
</tr>
<tr>
<td>H 4</td>
<td>Higher job positions of fathers reduce the duration of waiting times.</td>
<td>Not supported</td>
<td>(Supported)</td>
<td>-</td>
</tr>
<tr>
<td>H 8</td>
<td>Second generation migrants have longer waiting times than natives.</td>
<td>(Supported)</td>
<td>(Supported)</td>
<td>-</td>
</tr>
<tr>
<td>H 9</td>
<td>Second generation migrants enter jobs with lower status than natives.</td>
<td>-</td>
<td>-</td>
<td>(Supported)</td>
</tr>
</tbody>
</table>

- not tested, (): partly supported

time and part-time jobs. Better education expectedly decreases the duration of waiting times. However, the ethnicity coefficient is not significant anymore and decreases only to a small extent when education is included in the model. The demographic and structural indicators that we included in step 2 of the model already explained the disadvantages of second generation migrants with regard to labour market entrance timing. The models on duration of waiting time until permanent or temporary contracts do not support hypothesis 1 either.

The third hypothesis is accepted in the models on duration of waiting time and in the logistic regression on occupational status. The significant effect of poor written language proficiency is the reason why second generation migrants with a Turkish background wait longer to obtain a first job and obtain first jobs with temporary contract less quickly. Although the variable might serve as a proxy for Turkish second generation migrants to a certain extent, it explains why these migrants face special disadvantages. This finding has important policy implications: investment in further language support programmes might be extremely fruitful for preventing ethnic inequality in school-to-work transitions that otherwise might have long-lasting societal consequences.

The results on duration of waiting time until jobs with permanent confirm the fourth hypothesis: higher occupational status of the father increases a young person's chance to enter jobs with a permanent contract quickly. The father's networks or information prove useful for school-to-work transitions of young people. Fathers' job socio-economic status does, however, not facilitate short durations of school-to-work transitions to temporary or
in general to full- or part-time jobs. Moreover, high job position of the father have no significant influence on the chances of young people to enter jobs with higher occupational status. Intergenerational transmission works as a safety net for school-to-work transitions because it prevents young people to enter the jobs which are most risky.

We do not find ethnic penalties in the empirical models. All disadvantages for second generation migrants can be explained by their group composition. Nevertheless, we do find differential effects of certain skills or educational attainment for second generation migrants, that can be due to unobserved factors or discrimination. In line with job search theory we assumed in hypothesis 8 that second generation migrants have to wait longer to enter first jobs. It is confirmed for second generation migrants with Turkish background. The effect is, however, later explained through worse language skills of this group. Hypothesis 9 predicted that second generation migrants enter jobs with lower status. The data confirmed it for second generation migrants with Italian, Spanish and Greek background. The effect is, however, later explained through worse educational attainment of this group.

Summary of results on duration of waiting time until full-time and part-time jobs

In more detail, findings concerning the duration of waiting times show that Turkish second generation migrants have to wait longer to find first jobs, while we find no significant differences for the other ethnic groups. Ethnicity coefficients stay relatively stable even after the inclusion of educational certificates into the model. One of the main findings is that the inclusion of written language proficiency explains ethnic penalties. This means that disadvantages for Turkish second generation migrants with regard to their waiting time are related to their lower language proficiency. The results confirm that ethnic inequality at labour market access is due to lack of resources. We do not find results pointing to discriminatory effects with regard to the duration of the waiting time. Work experience significantly decrease durations of waiting times, while needing more time to complete a certain level of education and labour market entrance after 1993 increases it.

We find positive ethnic specific effects of apprenticeship completion for second generation migrants with Turkish, Spanish, Greek, and Italian background. Elementary education benefits second generation migrants with Turkish background.

Our results indicated that the longer a person is waiting for a job the less likely s/he is to obtain a job. Especially Turkish second generation migrants who do not enter jobs immediately or after 1 month face the largest disadvantages in the first 2 to 6 months of job search. We find that the signal of Turkish second generation migrant ethnicity decreases with time. This result is in line with job search theory and signaling and screening theory.
They predict that second generation migrants gain information on job offers, thus their information deficit diminishes with time. Moreover, employers learn about the actual skills of second generation migrants with time and are less prone to discriminate. The fact that there are fewer native applicants for certain job positions on the market because they were hired in previous application rounds also increases second generation migrants’ chances.

Summary of results on duration of waiting time until first jobs with permanent and temporary contracts

In the analyses of duration of waiting time until temporary and permanent first job contracts, we looked at the two groups of second generation migrants jointly. We find that second generation migrants have significantly lower chances to enter temporary jobs quickly, while they are not less likely to enter permanent contracts. The disadvantages are later explained by differences in written language proficiency between natives and second generation migrants. Thus, types of contracts do not seem to be factors that produce ethnic inequality in school-to-work transitions at the German labour market.

While intermediate education decreases the chance to enter permanent positions quickly, it helps entering temporary job fast. Furthermore, completion of elementary education or the Abitur increase the risk to enter first jobs with temporary contracts, but have no influence on permanent positions. The fact that we find significant positive returns to elementary education for second generation migrants underlines the necessity to look at other indicators of quality of first labour market positions. The temporary jobs second generation migrants enter may be very different from those of natives. It might be the case that second generation migrants decrease their reservation wage by entering permanent jobs in lower segments of the labour market. Moreover, the results show that apprenticeship completion does not facilitate access to permanent positions. When we split up the model into those with permanent and temporary contracts, we find an effect of father’s occupational position. The higher the father’s occupational status, the significantly more likely is a person to enter a permanent job quickly.

Skills play an important part in school-to-work transitions. Work experience helps to enter permanent positions fast, while it decreases chances to enter temporary jobs. Work experience signals an applicant’s ability to employers. Persons who have already gained experience in a job might not be willing to accept temporary jobs. Moreover, the better their language proficiency, the more likely is a person to experience a transitions into permanent and temporary jobs. Language skills are important for jobs with both types of contracts.

The results indicate that second generation migrants cannot profit from work experi-
ence especially when entering permanent first position. Their work experience decreases their chances to enter permanent jobs quickly. This is a strong disadvantage for second generation migrants. We have seen before that work experience was important for quick entrance into permanent positions. Several explanations are possible. Second generation migrants may not get access to the work experience young people can profit from. Second generation migrants might also gain work experience that is not transferable, or employers do not reward their work experience the same way like natives’. Elementary education, however, increases Turkish second generation migrants’ chances to enter permanent jobs. Thus, there seem to be certain segments in the labour market which do offer chances for permanent employment of second generation migrants.

Summary of results on job positions of first jobs

Second generation migrants with Italian, Spanish or Greek background have lower chances to enter first jobs with above median occupational status. Differences in occupational status of first jobs are explained by the composition of the second generation migrants with regard to their lower educational level. In contrast, Turkish second generation migrants are not significantly more or less likely to enter higher occupational status jobs. This finding resembles cross sectional results that did not find significantly different ISEI occupational status for old and young Turkish second generation migrants in Germany (Euwals, Dagevos, Gijsberts, and Roodenburg, 2007b).

Second generation migrants do not seem to have different preferences concerning jobs on the ISEI scale that are not mediated by educational level. As second generation migrants have been born in Germany, this is not surprising.

Women are significantly more likely to enter above median socio-economic status jobs (significant at the 0.1% level). This effect is somewhat counter-intuitive and might be due to a sample selection effect. Our sample might include those women with higher occupational status to an overproportional extent because we excluded persons without significant first jobs (see above). We did not account for a possible selectivity bias. Moreover, gender disadvantages in terms of occupational status might not be visible at school-to-work transitions but set in later (for further discussion see Section 6.6). Labour market entrance in times of worsening economy (after 1993) decrease chances for young persons to enter first jobs with higher occupational status.

Persons with Abitur certificates are more likely to enter job with higher occupational status. Moreover, intermediate and apprenticeship education are also associated with higher chances to enter higher occupational status jobs. Their influence turns insignificant after language proficiency and work experience have been introduced into the model. More work
experience and better German written language proficiency significantly increase chances to enter first jobs with higher occupational status. The missing value of father’s occupational status, however, significantly decreases chances to enter first jobs with higher occupational status.

Also in this model we find significant differential returns for second generation migrants concerning work experience. While work experience did not help second generation migrants to enter permanent positions, it facilitates access to jobs with higher occupational status for second generation migrants of all ethnic groups. Thus, we do not find disadvantages with regard to occupational status, but with regard to access to less risky jobs. Moreover, second generation migrants can profit from elementary education in terms of quick access to permanent positions. In contrast, Turkish second generation migrants seem to have less chances to enter higher occupational status positions when they completed elementary education. Elementary education (“Hauptschule”) may indeed have a stigmatizing effect especially for Turkish second generation migrants.

5.6 Limitations and outlook

With hazard or transition rate models a broad variety of model specification problems can occur (Blossfeld and Rohwer, 2002). First of all, not all variation in school-to-work transitions can be explained by observed or measured differences in survey data. School-to-work transitions labour market chances may be partly determined by some invariant (ex ante) personal characteristics, observed by firms and workers but not in the data or by the researcher. As we argued above, this is the reason why we include duration of waiting time in the analyses: individual unemployment durations might be a good proxy for unobserved individual heterogeneity, which is an important issue for any analysis. Omitting relevant variables or including irrelevant but correlated variables can bias estimates of covariate effects. As covariates are usually correlated, parameter estimates depend on the specific set of covariates in the model. Changing the set of covariates in a transition rate model will very often lead to changes in the time-dependent shape of the transition rate. In contrast to regression models, the transition rate is a description of the residuals. A change in the distribution of the residuals then becomes a change in the time-dependent shape of the transition rate. A population’s transition rate might be the result of different transition rates in subpopulations (Blossfeld and Rohwer, 2002, 256).

Some approaches of hazard rate models address unobserved heterogeneity by including an additional random term into the hazard function (Box-Steffensmeier and Jones, 2004). They are called frailty models or mixture models. The basic approach is the quite arbitrary
process of splitting an error term into two components. It only makes sense to include this additional error term if justified by available strong theoretical and empirical reasons, which "[...] is almost never the case" (Blossfeld and Rohwer, 2002, 263). Generally, approaches to account for unobserved heterogeneity are seen as critical because reliable assumptions about what has not been observed are hard to make. The most promising strategy to cope with unobserved heterogeneity is to look for more appropriate data (Blossfeld and Rohwer, 2002). In a further step one could try to account for unobserved heterogeneity by including a frailty term. Discussion on the sensitivity of the results would enhance knowledge about the robustness of the estimation results presented above. It would not necessarily improve the analysis.

For many respondents starting and ending times of the waiting time are located before the observed period in the GSOEP. These left censored cases are not included in the analysis. Moreover, persons whose waiting time is partly left censored (because the transition out of the education system is not identified in the observed period), also have to be considered as left censored.17 Effects of the unknown past episodes cannot be taken into account (Blossfeld and Rohwer, 2002, 40). This is a problem as in the analysis transition rates possibly depend on the duration in the origin state.

When including TVCs simultaneity and endogeneity problems have to be considered. Pregnancy (and later changes in number of children) may be an endogenous factor in the empirical models presented above. Endogeneity occurs when an independent variable is correlated with the error term in a regression. In these cases, feedback process between dependent and independent variables occur and there is two-way causality: not experiencing an event has an impact on the predictor and/or the other way around. For instance a woman might not want a job because she is pregnant. Or she might (not) want to start working because her partner found/lost a job. Alternatively, a person might invest in education because s/he has not found a job. By excluding month before maternity leave and between education spells from the waiting time and looking at significant first jobs, we tried to avoid some of these problems. However, we do not have information on partner's occupational status.18 In general, endogeneity correlations may arise in case of measurement error or when important variables that determine both the predictor variable and the residuals are missing. In the latter case the higher-level residuals and the correlated

---

17 The GSOEP offers retrospective information on the age at first job. In former versions of sample construction we used this variable. However, for about 10% of respondents the variable contained missing information. Therefore, we decided to identify the transition out of the education system first.

18 In GSOEP data information on partner's is available if they live in the same household as the respondent. We did not use this information as it contains too many missing values. As described above the large majority in our sample is not married. Moreover, our sample consists of young persons who are less likely to live in the same household with their partner.
predictor variables are said to be endogenous and the model is misspecified (Browne and Rasbash, 2004). As a consequence, the usual interpretation of the likelihood function is not possible. Determination of endogeneity or exogeneity are theoretical issues and cannot be satisfactorily resolved with statistical methods. Moreover, not using TVCs although they are theoretically important, that is misspecifying the model, is an equally serious problem as it biases event history parameters (Blossfeld and Rohwer, 2002).

We decided for a simple classical approach concerning missing values. We substituted missings by the group mean and include a dummy variable for missing vs. non missing values at the same time. This approach follows the idea that a missing value may predict the variable of interest well (Tabachnick and Fidell, 1996, 65). Furthermore, we try to minimize the missings problem by creating a restrictive sample. We did not conduct any backward filling of variables in the data set for the event history part to avoid wrong causal conclusions (see Kalter, 2006). We deleted cases, whose year of birth is missing. Moreover, concerning the month of birth the missing at random assumption is made. Accordingly the missing values in the variable 'gebmonat' have been substituted by a discrete uniform random variable with equal chance of outcome between 1 and 12.

The literature mainly distinguishes between classical and modern approaches for coping with missing values. The classical approaches include the most frequent approaches: listwise or pairwise deletion, weighting, and mean or group-mean substitution. The modern approaches comprise imputation and model based techniques (Lüdtke, Robitzsch, Trautwein, and Köller, 2007). The choice of the approach depends on the patterns of missing values and the techniques of later applied analysis. Generally, the classical approaches are frequently used. Their application, however, is connected to the strict assumption of missing completely at random and can lead to a considerable loss of cases. In contrast, the modern imputation or model based approaches correct for selectively missing values under the missings at random (MAR) assumption and – though based on this assumption – are known to be more reliable and efficient. However, they do not always offer an appropriate solution as they rely on the MAR assumption and assume a multivariate normal distribution (Lüdtke, Robitzsch, Trautwein, and Köller, 2007; Schafer and Graham, 2002).

In further steps of the analysis the meaning of the missing category of father’s ISEI scores should be further tested. It might turn out that persons with lower ISEI scores might be less likely to answer the question. Alternatively, the missings might simply indicate single mother households because fathers died. Thus, the missing category might have a meaning.

The distribution of ISEI scores for natives and second generation migrants is right skewed. Due to this distribution we did not calculate OLS regression on occupational status scores. Further analysis could contrast our findings with OLS regression results.
Chapter 6

Second generation migrants in the Netherlands

This chapter presents empirical findings on ethnic inequality in school-to-work transitions of second generation migrants in the Netherlands. First we explain why we chose to analyse school-to-work transitions additionally in the Netherlands. Then, the chapter mainly follows the same structure as chapter 5. It begins with introducing the data set and sample construction. Afterwards, we describe model specification and show descriptive statistics. Finally, we present multivariate results: 1) a logistic regression model on chances to enter the labour market, 2) a Cox proportional hazard model on duration of waiting times until jobs with full- and part-time contracts, 3) a Cox proportional hazard model on duration of waiting times until jobs with full- and part-time contracts including the distinction of ethnic groups, 4) a Cox proportional hazard model on duration of waiting times until jobs with permanent contract, and 4) an ordinary least square (OLS) regression model on first incomes.

The reasons for analysing school-to-work transition of second generation migrants in the Netherlands in addition to Germany are twofold. First of all, the Netherlands offer the possibility to compare ethnic inequality in school-to-work transitions across two large groups of second generation migrants: descendants of Postcolonial and labour migrants. Besides, due to the long history of immigration many second generation migrants have already entered the labour market during the last decades.

Second, the analyses aims at contributing to a debate on the differential effectiveness of national institutional arrangements. We argued above that diverging policies are not likely to produce cross-country differences in school-to-work transitions. Because institutional influences are to a certain extent similar, Germany and the Netherlands offer themselves for fruitful comparison. Both countries exhibit a close link between education and the
labour market and occupational labour markets (see Chapter 3).

6.1 Data and sample

The empirical analysis is based on three data sets provided by Statistics Netherlands. The joint data set comprises VOCL’89 and VOCL’93 data, SVD data for the two cohorts, and SSB job and employment data. First, we use two cohorts of a school cohort survey “Voortgezet Onderwijs Cohort Leerlingen” (VOCL 1989 and 1993). The interviews took place in the school year 1989/1990 and 1993/1994 respectively. The students were on average age twelve at the time of the interview and in their first year of secondary education (“voortgezet onderwijs”). They decided with which secondary school track they will proceed. At the beginning of surveying a list with questions was addressed to their parents (Traag, Valk, Velden, Vries, and Wolbers, 2004). Within each VOCL cohort, we initially have a random sample of about 19,000 students. The exclusion of those who drop out of school or change schools and do not enter schools which are in the sample afterwards, however, reduces sample size. The VOCL’89 cohort is reduced to 12,938 cases (Traag, Valk, Velden, Vries, and Wolbers, 2004, 8).

Second, we linked a follow-up school leaver survey ‘schoolverlatersonderzoek’ (SVD) collected about 12-18 months after leaving school to the two cohort samples. The combined data set of VOCL and SVD data initially consists of 27,325 persons. 4.73% of these individuals are second generation migrants. 824 persons have a Turkish or Moroccan and 467 a Postcolonial second generation migration background.

We limit our analysis to persons in secondary education tracks. Persons within the second cohort were at about age 12 in the year 1993 and at about age 24 at the end of the observed period. Therefore, they were not old enough to have completed tertiary education and have entered the labour market before 2005. Including persons who completed tertiary education would, thus, bias the data. Moreover, migrants are to an overproportional percentage streamed into lower tracks. Thus, we delete those who follow(ed) HBO and WO education. Moreover, schools could choose to register BBO students as students or labour market entrants. The registration of these students was, thus, inconsistent (see appendix, Chapter 9). To avoid a positive employment bias in the data, we exclude those students who follow BBO apprenticeships but are registered as entering the labour market. This reduces the sample by 56.1% and 15,322 observations in total. We excluded 415 second generation migrants with Turkish or Moroccan background. The sample of this group is reduced by -50.4%. Besides, we exclude 260 second generation migrants with Postcolonial background (-55.7%). Among the deleted observations are 14,647 natives (-56.3%). The numbers indicate that natives’ observations are excluded to an overproportional extent as
more natives enter tertiary education tracks than second generation migrants. This leaves us with a sample of 12,003 persons: 11,387 natives, 409 second generation migrants with Turkish or Moroccan and 207 with Postcolonial background.

We lose another 2,485 cases who did not state whether they worked (or not) at the time of the SVD interview. Persons with second generation migration background drop out to an overproportional extent: while 19.3% natives did not answer this question, this is the case for 44.7% of the respondents with Turkish and Moroccan and 50.7% with Postcolonial background. After excluding persons with any missings in dependent or independent variables, we end up with 8,394 persons in the sample.

The sample for the duration models, however, is smaller. To avoid bias, we limit the duration of waiting time to 24 months. In SVD data, persons are supposed to be interviewed about their current job status 12-24 months after leaving the education system. Nevertheless, we find persons with longer waiting times in the data. We exclude them because respondents with waiting times longer than 24 months cannot be considered as right censored cases. They could have quit significant first jobs until the interview, on which the data does not provide information. Moreover, in our analyses we are rather interested in persons with comparably fast entrants. Our final sample consists of 4,924 natives and 55 second generation migrants who entered a first job (who experienced an event).

**SSB: definition and operationalisation of first incomes**

We added income and occupation specific information of the Dutch administrative data set (SSB) for the years 1999-2005 to this new-built data set. The data set includes information on duration of waiting time and labour market careers until the time of the interview (including contracts and types of first jobs).

We calculated individual’s average daily gross real incomes for those who are employed after leaving school. To do this we first identified the year in which the person was employed according to SVD data. We added all personal incomes (in one or more jobs) during the year of the SVD interview and divided it by the sum of work days worked in all these jobs. Finally, we multiplied this number with price indices. Moreover, we estimated incomes of persons for whom we did not have information on first year labour market incomes (see appendix, Chapter 9).

The sample consists of 8,779 persons for whom we have information on average real gross daily income for the year of the SVD interview and of 8,150 of them stated in the SVD data that they are working. About 98.5% of them are natives, 1% Turkish or Moroccan and 0.5% Postcolonial second generation migrants (including only the cases with information on all other relevant variables included in the models). We did not include persons for whom we have registered income information at the time of the SVD interview, but who
stated that they are not working.

The strength of the combined data set is, first of all, that it allows to distinguish students’ ethnicities by country of origin of both parents. Moreover, the data includes detailed longitudinal information on individuals, parents, school careers, and labour market status after school-to-work transitions. There are measures of language proficiency and the two skill indicators performance motivation and school perception. The large sample size also allows to have regional indicators in the analysis. To our knowledge there is no other Dutch data set that allows to distinguish a sufficient number of second generation migrants and includes longitudinal information with regard to school-to-work transitions.

6.2 Model specification

The empirical models proceed stepwise. Table 6.1 depicts the specification of independent variables in each step of the models. Step 1 of our models presents gross or overall disadvantages for second generation migrants and gives an idea about the character and extent of ethnic stratification. In a second step, we introduce structural and demographic composition variables: the percentage of migrant population, migrant work participation per region, whether the location of residence is citylike or not, the regional annual unemployment rate, gender, and cohort. The inclusion of these variables eliminates composition effects with regard to these factors. When they are controlling for, we can show the remaining effects of education, skills and social background in the later steps. The variables are measured in the year of the SVD interview because we do not have information on the region of residence when individuals leave the education system.

Educational qualifications enter the model in step 3. We distinguish between five different levels of education: 1) individualised classes (reference category), 2) lower vocational education LBO, 3) intermediate general education MAVO, 4) mainly school-based second cycle vocational education MBO and 5) firm- and school-based apprenticeships BBO (see Section 3.3.2 for explanation of the certificates). The third category MBO in theory comprises also those who want to move on to tertiary education. However, this applies only to about a third of the persons. Persons with tertiary education are not included in the data later. Moreover, we include a variable with six categories indicating the level of mother’s education in years of education.

Apart from educational levels, compositional differences in terms of skills between natives and migrants may account for ethnicity effects on first labour market outcomes. Therefore, we add performance motivation and school perception as skill variables in step four. Additionally we include CITO scores on scholastic language skill performance measured at age 12 of pupils. The CITO language test variable correlates highly (0.8) with
### Table 6.1: Specification of independent variables: empirical part on the Netherlands

<table>
<thead>
<tr>
<th>Step</th>
<th>Independent variables</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ethnic background</td>
<td>At least one parent from labour migrant recruitment countries (Turkish or Moroccan) reference: natives At least one parent from colonies (Surinam, Aruba or NL Antilles)</td>
</tr>
<tr>
<td>2</td>
<td>Gender</td>
<td>Dummy: 1=FEMALE, 0=Male</td>
</tr>
<tr>
<td></td>
<td>Labour market entrance cohort</td>
<td>Dummy variable with 1=1993 and 0=1989</td>
</tr>
<tr>
<td></td>
<td>% of migrant work participation</td>
<td>Net percentage of working migrants in the region of residence at the year of the SVD interview</td>
</tr>
<tr>
<td></td>
<td>% migrant population</td>
<td>Percentage of total migrant population in the region of residence at the year of the SVD interview</td>
</tr>
<tr>
<td></td>
<td>Regional unemployment rates</td>
<td>Annual unemployment rates of the region of residence at the year of the SVD interview</td>
</tr>
<tr>
<td></td>
<td>City character of community</td>
<td>City character of community of residence measured on a scale from 1 (citylike) to 5 (not citylike) at the year of the SVD interview</td>
</tr>
<tr>
<td>3</td>
<td>Highest educational certificate</td>
<td>Reference: 1) Individualised classes 2) LBO: lower vocational education 3) MAVO: intermediate general education 4) MBO: mainly school-based second cycle vocational education 5) BBO/BBL: firm- and school-based apprenticeships</td>
</tr>
<tr>
<td></td>
<td>Educational level of mother</td>
<td>6 categories: 1) no education, 2) up to 6 years education, 3) -10 y., 4) -14 y., 5) -17 y., and 6) -19 y.</td>
</tr>
<tr>
<td>4</td>
<td>Performance motivation</td>
<td>Measured on a scale 1-11 (high)</td>
</tr>
<tr>
<td></td>
<td>School perception</td>
<td>Measured on a scale 1-4 (very good)</td>
</tr>
<tr>
<td></td>
<td>CITO language test score</td>
<td>Measured on a scale 1-60 (very good)</td>
</tr>
<tr>
<td>5</td>
<td>Occupation mother</td>
<td>Dummy variable indicating employment of mothers: 1=working, 0=not working</td>
</tr>
<tr>
<td></td>
<td>Occupation mother missing</td>
<td>Dummy variable indicating missing values with 1=missing and 0=not missing</td>
</tr>
<tr>
<td></td>
<td>Occupation father</td>
<td>Dummy variable indicating employment of fathers: 1=worker, 0=not working</td>
</tr>
<tr>
<td></td>
<td>Occupation father missing</td>
<td>Dummy variable indicating missing values with 1=occupation father missing and 0=not missing</td>
</tr>
<tr>
<td>6</td>
<td>Interaction terms</td>
<td>Ethnicity * % migrant population, ethnicity * migrant work participation, ethnicity * MBO, ethnicity * BBO</td>
</tr>
</tbody>
</table>
CITO overall test scores. The eleven items of the school perception scale describe a pupil's appreciation of going to school and his/her attitude towards school.\(^1\) Performance motivation measures the motivation to go to school on a 4-item-scale (see appendix, Chapter 9, for a detailed description).

Parental occupational status is included in the fifth step. We include occupational position of fathers and mothers. To test differential effects we introduce interaction terms of percentage of migrant population and work participation and ethnicity in step 6. Moreover, we test whether there are differential effects for second generation migrants if they completed second cycle vocational education (MBO) or apprenticeships (BBO) in these models.

### 6.3 Frequencies

Table 6.2 depicts frequencies of the sample of the duration models. The sample size is presented in the first line of the table. The remaining lines in the table depict group percentages of the independent variables in our models. Group percentages include only persons who entered a first job. We exclude persons with missing cases in one of the independent variables, their values are not depicted in the table. Our sample for the duration models includes 4,924 natives and 55 second generation migrants. The second generation migrants consist of 39 with Turkish and Moroccan background and of 16 with Postcolonial background.\(^2\) Due to the low case numbers we group second generation migrants in one group in the models. We test hypothesis 7 on differences between ethnic groups only for the model on duration of waiting time until jobs with full- or part-time contract.

While 89.7% of natives are working at the time of the SVD interview, all second generation migrants (with Turkish, Moroccan, Surinamese, Dutch Antillean or Arubean background) do. The sample of second generation migrants is nearly balanced with regard to gender (49.1% women), while there are less women among natives (45.3% women). Moreover, natives are more frequently in the first cohort who are about 12 years old in 1989 (51.8%). Second generation migrants are overrepresented in the later cohort including persons who are about 12 years old in 1993 (56%). Besides, second generation migrants more frequently live in citylike communities: while only 9.6% of natives live in citylike areas, 22.4% of second generation migrants do. Most second generation migrants have two migrant parents (69.8%). The parental composition confirms that interethnic relationships

---

\(^1\)The scale consists of eleven items that measure agreement with sentences like “I would rather work than go to school”, “You don’t learn anything at school” and “There is no sense in going to school” (also see appendix, Chapter 9).

\(^2\)These values exclude any missings and persons without event.
### Table 6.2: VOCL/SVD/SSB: frequencies

<table>
<thead>
<tr>
<th>Variable</th>
<th>Natives</th>
<th>2nd gen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample N</td>
<td>4.924</td>
<td>55</td>
</tr>
<tr>
<td><strong>Percentages</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working (at time of SVD interview)</td>
<td>89.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Females</td>
<td>45.3</td>
<td>49.1</td>
</tr>
<tr>
<td>Cohort 1993</td>
<td>48.2</td>
<td>56.0</td>
</tr>
<tr>
<td>Very citylike community</td>
<td>9.6</td>
<td>22.4</td>
</tr>
<tr>
<td>Two migrant parents</td>
<td>0.0</td>
<td>69.8</td>
</tr>
<tr>
<td>Ref: individualised classes</td>
<td>4.7</td>
<td>1.8</td>
</tr>
<tr>
<td>LBO</td>
<td>11.2</td>
<td>16.4</td>
</tr>
<tr>
<td>MAVO</td>
<td>21.8</td>
<td>18.2</td>
</tr>
<tr>
<td>MBO</td>
<td>56.0</td>
<td>43.6</td>
</tr>
<tr>
<td>BBO</td>
<td>6.3</td>
<td>20.0</td>
</tr>
<tr>
<td><strong>Education mother:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no education or up to six years</td>
<td>24.8</td>
<td>69.9</td>
</tr>
<tr>
<td>“1=missing”</td>
<td>0.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Mean performance motivation</td>
<td>3.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Mean school perception</td>
<td>3.1</td>
<td>3.2</td>
</tr>
<tr>
<td>Mean CITO language test score</td>
<td>31.7</td>
<td>27.6</td>
</tr>
<tr>
<td>Occupation father: not working</td>
<td>9.8</td>
<td>53.5</td>
</tr>
<tr>
<td>“1=missing”</td>
<td>2.3</td>
<td>27.6</td>
</tr>
<tr>
<td>Occupation mother: not working</td>
<td>69.8</td>
<td>75.0</td>
</tr>
<tr>
<td>“1=missing”</td>
<td>1.2</td>
<td>8.6</td>
</tr>
</tbody>
</table>
are more widespread among Postcolonial migrants (values for ethnic groups not depicted here) than among those from Turkey or Morocco (van Niekerk, 2007b). The variables ethnicity and parental composition correlate by 0.6.

Second generation migrants are overrepresented among LBO and BBO graduates: 16.4% of second generation migrants completed LBO, while 11.2% of natives did. Second generation migrants completed firm-based apprenticeships more frequently than natives (20.0% and 6.3%). Slightly less second generation migrants (18.2%), however, completed MAVO education than natives (21.8%). Also fewer second generation migrants (43.6%) graduated from secondary education MBO than natives (56.0%). The large majority of second generation migrants’ mothers received no education or up to six years of education (69.9%). This applies to 24.8% of natives’ mothers.

Despite lower educational certificates second generation migrants do not perceive school less well than natives. In fact second generation migrants perceive school slightly more favourably. Moreover, they are as motivated to perform at school as natives. Expectedly, language proficiency measured by mean CITO language test scores is lower among second generation migrants compared to natives: second generation migrants’ CITO mean value is 4.1 points lower than that of natives. Unemployment is much larger among fathers of second generation migrants (53.5%) compared to natives’ fathers (9.8%). Their mothers’ unemployment also exceeds that of natives’ mothers, the difference is 5.2 percentage points.

6.4 Results

This section presents the empirical results on access to the labour market, duration of waiting time and quality of first jobs for the Netherlands. It begins with descriptives on waiting times and cumulative hazard curves. Afterwards, we describe findings of a logistic regression model, a Cox proportional hazards model, a Cox proportional hazard competing risk model, and an ordinary least square regression model. We analyse four different indicators as dependent variables to look at ethnic inequality in school-to-work transitions in the Netherlands: 1) employment yes/no, 2) duration of waiting time until current jobs, 3) duration of waiting time until current job with temporary/permanent contracts, and 4) income at first job.

Like in the empirical chapter on Germany, we use the Stata commands cluster and robust for all empirical calculations. By including the Stata command robust we use robust variance estimation and calculate robust standard errors, which relax the assumption about the independence of error terms. Moreover, we account for spatial dependence within the Dutch regions by using the Stata command cluster.
The Dutch data structure is quite different from the GSOEP data one on which the analysis for Germany is based on. It consists of combined survey data for two cohorts as we explained above. It is, however, no longitudinal panel data on school-to-work transitions. We constructed the necessary information for our analyses like duration of waiting time from certain variables as described above. Monthly information was, however, not available (see appendix, Chapter 9). We did not have time varying information on number of children or household income like in the GSOEP. Therefore, we did not include time varying covariates in the models. Moreover, we did not include the duration of the waiting time in the OLS model on income or the logistic regression on employment chances due to the large restrictions in the operationalisation of the variable.

Logistic regression on employment about 12 months after leaving school: yes/no

Table 6.3 depicts marginal effects for the chance to be employed at the time of the SVD interview (about 12-24 months after leaving the education system). Expectedly, getting a foothold in the labour market is difficult for second generation migrants in the Netherlands. We find comparably large disadvantages for the chance to get a job for second generation migrants with Turkish, Moroccan or Postcolonial background in the Netherlands. The ethnicity coefficient is significantly negative at the 10% level in steps 1 to 4 of the model, but it fails to reach significance after social background is included in the model in step 5. Minimum wages might be a barrier to the hiring of second generation migrants in the Netherlands. Previous research has shown that employers tend to hire native labour market entrants when they can choose between native and immigrant candidates (see Crul and Doornink, 2003; Crul, 2004).

While the ethnicity coefficient size increases in step 2 after the inclusion of group composition variables, it hardly decreases when introducing education and skill variables in steps 3 and 4. Arguably, the chance to have a job soon after leaving the education system is lower for second generation migrants even if they have comparable education and skill characteristics like native born labour market entrants. Education and language proficiency of second generation migrants account less for ethnic inequality at access to the labour market than assumed. In step 5 we include social background and the coefficient for second generation migrants almost halves. The result reflects that parents of second generation migrants are more often unemployed than natives’ parents. Step six includes interaction terms the ethnicity coefficient depicts a conditional effect. Therefore, we do not interpret it in step 6.

Expectedly, young women have lower chances to enter employment than men. The coefficient becomes significant after education is controlled for. This indicates that even if
Table 6.3: Logistic regression on employment 12 months after school: yes/no

<table>
<thead>
<tr>
<th></th>
<th>STEP 1</th>
<th>STEP 2</th>
<th>STEP 3</th>
<th>STEP 4</th>
<th>STEP 5</th>
<th>STEP 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.gen (d)</td>
<td>-0.159**</td>
<td>-0.177***</td>
<td>-0.165**</td>
<td>-0.163**</td>
<td>-0.082</td>
<td>-0.526*</td>
</tr>
<tr>
<td>Females (d,ref.males)</td>
<td>-0.002</td>
<td>-0.013**</td>
<td>-0.013**</td>
<td>-0.012**</td>
<td>-0.012**</td>
<td></td>
</tr>
<tr>
<td>Cohort 1993 (d,ref.1989)</td>
<td>-0.004</td>
<td>0.007</td>
<td>0.008</td>
<td>0.010</td>
<td>0.009</td>
<td></td>
</tr>
<tr>
<td>Work particip. migrants</td>
<td>0.001</td>
<td>0.002</td>
<td>0.002</td>
<td>0.002</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>% migrant pop.</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>Reg. unemployment</td>
<td>-0.017***</td>
<td>-0.009***</td>
<td>-0.009***</td>
<td>-0.009**</td>
<td>-0.009**</td>
<td></td>
</tr>
<tr>
<td>Less citylike area</td>
<td>0.008*</td>
<td>0.006</td>
<td>0.006</td>
<td>0.006*</td>
<td>0.006*</td>
<td></td>
</tr>
<tr>
<td>Two migrant parents (d)</td>
<td>0.005</td>
<td>-0.004</td>
<td>-0.005</td>
<td>-0.042</td>
<td>-0.039</td>
<td></td>
</tr>
</tbody>
</table>

Ref. individ. classes

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LBO (d)</td>
<td>0.005</td>
<td>0.004</td>
<td>0.003</td>
<td>0.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAVO (d)</td>
<td>0.011</td>
<td>0.010</td>
<td>0.010</td>
<td>0.011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBO (d)</td>
<td>0.077***</td>
<td>0.075***</td>
<td>0.073***</td>
<td>0.073***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BBO (d)</td>
<td>0.046***</td>
<td>0.046***</td>
<td>0.045***</td>
<td>0.049***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s education</td>
<td>-0.016**</td>
<td>-0.016**</td>
<td>-0.017**</td>
<td>-0.017***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s educ. miss. (d)</td>
<td>-0.039</td>
<td>-0.036</td>
<td>-0.018</td>
<td>-0.008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CITTO language test</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance motivation</td>
<td>0.008</td>
<td>0.008</td>
<td>0.008</td>
<td>0.008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School perception</td>
<td>0.003</td>
<td>0.002</td>
<td>0.002</td>
<td>0.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father working(d,ref.n.w.)</td>
<td></td>
<td>0.011</td>
<td>0.011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occ. father missing(d)</td>
<td>-0.071***</td>
<td>-0.072***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother working(d,ref.n.w.)</td>
<td></td>
<td>-0.009</td>
<td>-0.010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occ. mother missing (d)</td>
<td>-0.065</td>
<td>-0.067</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work particip. * 2.gen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.006**</td>
<td></td>
</tr>
<tr>
<td>% migrants * 2.gen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.008**</td>
<td></td>
</tr>
<tr>
<td>MBO * 2.gen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.042*</td>
<td></td>
</tr>
<tr>
<td>BBO * 2.gen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.100</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.0057</td>
<td>0.0518</td>
<td>0.0523</td>
<td>0.0568</td>
<td>0.0574</td>
<td>0.0583</td>
</tr>
<tr>
<td>N</td>
<td>8394</td>
<td>8394</td>
<td>8394</td>
<td>8394</td>
<td>8394</td>
<td>8394</td>
</tr>
</tbody>
</table>

Marginal effects for discrete change of dummy variable from 0 to 1, p<0.05=*, p<0.01=**, p<0.001=***
6.4. RESULTS

women have comparable educational certificates they are disadvantaged at labour market entrance. Young people might also function as a buffer on the Dutch labour market: the higher the regional unemployment rate at the region of residence when interviewed for SVD survey, the significantly less likely are young people to be employed. Cohort, working migrant population, migrant population in the region of residence, and parental composition have no significant impact on employment chances. The less citylike the community of residence is the more likely seems a person to be employed. The coefficients are, however, only significant in step 2, 5 and 6 of the model. City character might measure the financial background of a person. Those who can afford to move to a suburb are more likely to be employed.

Expectedly, higher levels of education increase employment chances. Compared to pupils who attended education in individualised classes, those who followed second cycle vocational education MBO and apprenticeship BBO tracks have higher chances to be employed at the time of the SVD interview. This result is significant at the 0.1% and consistent through all steps of the model. Firm- and employer based vocational training has indeed a bridge character to the labour market in the Netherlands. Networks and employer contacts gained during the training might indeed help to find an employment. The larger size of the MBO coefficient indicates, however, that persons who followed MBO education were even more likely to enter employment as compared to those with BBO education. The results on education might also capture age effects. Those with higher levels of education are older when they enter the labour market and could have obtained more work experience. Moreover, the more years of education her/his mothers completed, the less likely a person is to be in employment about 12 months after leaving the education system. The finding supports the idea that persons with higher educated mothers are less likely to be employed because they search for a better match.

Unexpectedly, CITO language test score, performance motivation and school perception have no significant influence on the chance to be employed after leaving the education system. The indicators measured at age 12 do not have explanatory power for school-to-work transitions. Former versions of the model showed that language proficiency also had no ethnicity specific influence. These findings concerning language test scores are counter-intuitive because PISA reading scores indicated that there are differences in language scores between natives and second generation migrants in the Netherlands (see Section 3.3.3). Maybe the fact that pupils repeated the test for the VOCL survey affected the test results. Moreover, language proficiencies at age 12 might not be correlated with later language proficiencies because persons have improved or worsened their language skills in the years after the CITO test (see Section 7.3 for further discussion of this effect). Motivation and school perception might change with life circumstances and school contexts. The result could hint towards chances in the Dutch education system to get additional
language training. Additionally, educational levels might capture individuals’ levels of language proficiency to a certain extent. Most importantly, the effect might be due to the fact that school drop outs could not be included into the sample. As a result only those persons who are better able to speak Dutch stayed in the sample and no effect can be found due to this variance reduction.

Missing information on occupational status of the father significantly decreases the probability to be employed. The negative sign indicates that missing information might relate to information that is less favourable at labour market access. Therefore, it could indicate single mother households. We do not find significant effects of employment status of fathers or mothers or missing information on mothers’ employment status.

Our results show that second generation migrants are significantly more likely to be employed if ethnic communities are better integrated into the workforce. In contrast, larger percentages of migrants in the region of residence decrease individuals’ chances to be employed. Thus, not the pure size of the community matters for labour market chances of second generation migrants, but its quality. Employed migrants might offer jobs for second generation migrants or help them to find jobs. The effects are, however, very small. Furthermore, we find that second generation migrants employment chances benefit especially when they graduate from MBO. We do not find differential effects of BBO education for second generation migrants.

Descriptives on duration of labour market entrance

This section presents descriptives and sample construction details on duration of waiting time in the Dutch data. Mean waiting times in the Dutch data are about 6-10 months longer than in Germany. This difference is due to the different structure of the data. While we constructed a school leaver data set for Germany, the Dutch data provides information for the time of the SVD interview. The interview was 12-24 months after leaving the education system (see Section 6.1).

| Table 6.4: VOCL/SVD/SSB descriptive statistics: waiting times |
|-------------------|---------|---------|---------|
|                   | Tk/Mo   | Postcolonial | Natives |
| Mean waiting time | 14.2    | 15.6     | 14.8    |
| Median waiting time | 16.5    | 16       | 16      |
| Shortest waiting time | 1       | 1        | 1       |
| Longest waiting time | 24      | 23       | 24      |
| Events observed    | 39      | 16       | 4,924   |
6.4. RESULTS

Table 6.4 depicts mean and median waiting times by ethnicity. Differences in waiting times are not large, but natives seem to enter first significant jobs somewhat earlier than second generation migrants. The same order emerges if the duration of waiting time is not limited to a maximum of 24 months.

Cox proportional hazard model on duration of waiting time until early jobs with any type of contract

The results in Table 6.5 depict marginal effect of coefficients of the Cox proportional hazard model on duration of waiting time until first jobs with any type of contract. The results show a negative coefficient for second generation migrants (step 1). This indicates that they face disadvantages in the sense that they have lower chances to enter employment in a certain time interval. Another interpretation is that they have to wait longer to enter jobs with any type of contract (see Section 5.3).\(^3\) However, this finding is only true as long as the group composition of second generation migrants is not taken into account. After group composition indicators are included in step 2, however, ethnicity turns insignificant. Disadvantages for second generation migrants with regard to the duration of waiting time are related to their group composition.

Results of the second step of the model show that persons in the second cohort – those who are at about age twelve in 1993 – are more likely to enter employment quickly. The finding supports the argument that young peoples’ labour market chances are affected by the overall labour market situation. The first cohort started entering the labour market in 1993 (at about age 16) during the mini recession of 1994. In contrast, there was an economic boom in 1998 when the later cohort began entering the labour market. This result confirms previous findings on the effect of economic circumstances on unemployment (Tesser and Dronkers, 2007, 381). The fact that increasing unemployment rates in the region of residence decrease chances to enter jobs quickly confirms this (step 2). However, the effect turns insignificant after education is taken into account in step 3, which might be due to low case numbers when we cluster for regions. Moreover, women have to wait longer to enter first jobs. The effect turns significant only after social background is included in the model (step 4).

Persons who live in regions where the migrant population is larger are significantly more likely to enter jobs quickly. Also in the Netherlands, migrants concentrate in cities. Thus, individuals might find jobs faster simply because the demand of labour and job offer rates are higher in cities. The percentage of working migrants in the region also has a positive

\(^3\)A negative coefficient indicates a decreasing hazard rate as a function of the covariate. Similarly to decreasing hazard rates the survival time is increasing. Hence, negative coefficients hint towards longer waiting times.
Table 6.5: Cox proportional hazard model on duration of waiting time until early jobs with any type of contract

<table>
<thead>
<tr>
<th></th>
<th>STEP 1</th>
<th>STEP 2</th>
<th>STEP 3</th>
<th>STEP 4</th>
<th>STEP 5</th>
<th>STEP 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.gen (d, ref. natives)</td>
<td>-0.170*</td>
<td>-0.126</td>
<td>-0.211</td>
<td>-0.222</td>
<td>-0.253</td>
<td>-2.078***</td>
</tr>
<tr>
<td>Females (d, ref. males)</td>
<td>-0.009</td>
<td>-0.069</td>
<td>-0.069*</td>
<td>-0.072*</td>
<td>-0.072*</td>
<td></td>
</tr>
<tr>
<td>Cohort 1993 (d, ref. 1989)</td>
<td>0.114*</td>
<td>0.232*</td>
<td>0.242*</td>
<td>0.253*</td>
<td>0.241*</td>
<td></td>
</tr>
<tr>
<td>Work particip. migrants</td>
<td>0.002</td>
<td>0.004</td>
<td>0.004</td>
<td>0.005</td>
<td>0.004</td>
<td></td>
</tr>
<tr>
<td>% reg. migrant pop.</td>
<td>0.011*</td>
<td>0.014*</td>
<td>0.015*</td>
<td>0.015*</td>
<td>0.015*</td>
<td></td>
</tr>
<tr>
<td>Reg. unemployment</td>
<td>-0.033**</td>
<td>0.004</td>
<td>0.003</td>
<td>0.004</td>
<td>0.003</td>
<td></td>
</tr>
<tr>
<td>Less citylike area</td>
<td>0.075*</td>
<td>0.098*</td>
<td>0.102*</td>
<td>0.107*</td>
<td>0.103*</td>
<td></td>
</tr>
<tr>
<td>Two migrant parents (d)</td>
<td>-0.150</td>
<td>-0.238</td>
<td>-0.242</td>
<td>-0.195</td>
<td>0.015</td>
<td></td>
</tr>
</tbody>
</table>

Ref: individ. classes

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LBO (d)</td>
<td>0.179</td>
<td>0.187</td>
<td>0.182</td>
<td>0.180</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAVO (d)</td>
<td>0.263*</td>
<td>0.276**</td>
<td>0.281*</td>
<td>0.276**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBO (d)</td>
<td>0.517***</td>
<td>0.531***</td>
<td>0.551***</td>
<td>0.538***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BBO (d)</td>
<td>0.251</td>
<td>0.259</td>
<td>0.261</td>
<td>0.274</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s education</td>
<td>-0.070*</td>
<td>-0.071*</td>
<td>-0.077*</td>
<td>-0.074*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s educ. missing (d)</td>
<td>0.685</td>
<td>0.708</td>
<td>0.716</td>
<td>0.873</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CITO language test</td>
<td>0.000</td>
<td>0.000</td>
<td>-0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance motivation</td>
<td>0.054</td>
<td>0.055</td>
<td>0.057</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School perception</td>
<td>-0.034</td>
<td>-0.035</td>
<td>-0.038</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father working (d, ref. n.w.)</td>
<td>0.135</td>
<td>0.131</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occ. father missing (d)</td>
<td>0.138</td>
<td>0.127</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother working (d, ref. n.w.)</td>
<td>-0.016</td>
<td>-0.016</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occ. mother missing (d)</td>
<td>0.192</td>
<td>0.192</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work particip. * 2.gen</td>
<td>0.114**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% migrants * 2.gen</td>
<td>0.021</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBO * 2.gen</td>
<td>0.224</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BBO * 2.gen</td>
<td>-0.376</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-3.79e+04</td>
<td>-3.79e+04</td>
<td>-3.79e+04</td>
<td>-3.79e+04</td>
<td>-3.79e+04</td>
<td></td>
</tr>
<tr>
<td>LR Chi Square</td>
<td>3.606179</td>
<td>231.424</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>4956</td>
<td>4956</td>
<td>4956</td>
<td>4956</td>
<td>4956</td>
<td>4956</td>
</tr>
</tbody>
</table>

*(d) for discrete change of dummy variable from 0 to 1, p<0.05=* , p<0.01=**, p<0.001=***
influence, but the coefficient fails to reach significance. Again, those who live in less citylike areas tend to find jobs faster. It seems, indeed, that the city character of the community does not measure whether someone lives in a city or in a rural area, but whether someone lives in wealthier area. The variable seems to indicate that those who can afford to live in a better off area, like for instance a suburb, find jobs faster. In that case the variable rather measures financial background. Moreover, the results do not show significant effects for migrants with two migrant parents.

Persons who completed second cycle vocational education (MBO) have a higher chance to enter employment with any contract, that is they enter jobs earlier as compared to those with individualised education. The same is true for those who graduated from intermediate general education MAVO. The influence of MBO, however, is larger than that of MAVO. In contrast to Germany, firm and school-based apprenticeships (BBO) do not significantly affect individuals’ duration of waiting time in the Netherlands. Lower vocational education (LBO) has also no significant influence. The results again seem to indicate that persons with more educated mothers seem to wait longer for a better match. Higher levels of mother’s education significantly increase the waiting times of individuals. Missing information on educational level of mothers has no significant influence. Furthermore, better CITO language test scores, performance motivation and school perception do not significantly influence the timing of labour market entrance. The same applies to the social background indicator of parental occupational status. This social background indicator has been measured at age 12 of the respondents. However, the labour market status of the parents might have changed since then. The occupational status at the time of labour market entrance when contacts or information are actually needed should be more useful. Unfortunately, case numbers do not allow to distinguish between occupational status of parents other than employed or not employed.

Second generation migrants are more likely to quickly enter jobs when they live in regions with more employed migrants. The interaction of percentage of employed migrants with second generation migrants is positive and significant at the 1% level. Thus, larger migrant networks with useful information flow might indeed provide information on job opportunities. Moreover, employers might have more experience with hiring persons with migration background in these regions and discriminate less. Moreover, co-ethnic networks might foster fast employment accesses for second generation migrants in these regions.

Table 6.6 presents marginal effect coefficients of the Cox proportional hazard model on duration of waiting time until first jobs with any type of contract in which we distinguish between ethnic groups. We carefully interpret the results as case numbers of ethnic groups are low.
Table 6.6: Cox proportional hazard model on duration of waiting time until early jobs with any type of contract and differentiation by ethnic groups

<table>
<thead>
<tr>
<th></th>
<th>STEP 1</th>
<th>STEP 2</th>
<th>STEP 3</th>
<th>STEP 4</th>
<th>STEP 5</th>
<th>STEP 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.gen Tk/Mo (d)</td>
<td>-0.192*</td>
<td>-0.184</td>
<td>-0.348</td>
<td>-0.369</td>
<td>-0.369</td>
<td>0.178</td>
</tr>
<tr>
<td>2.gen Postcolonial (d)</td>
<td>-0.112</td>
<td>-0.106</td>
<td>-0.160</td>
<td>-0.168</td>
<td>-0.204</td>
<td>-0.387</td>
</tr>
<tr>
<td>Females (d, ref. males)</td>
<td>-0.009</td>
<td>-0.009</td>
<td>-0.009</td>
<td>-0.072*</td>
<td>-0.073</td>
<td></td>
</tr>
<tr>
<td>Cohort 1993 (d, ref. 1989)</td>
<td>0.114*</td>
<td>0.233*</td>
<td>0.243*</td>
<td>0.253*</td>
<td>0.248*</td>
<td></td>
</tr>
<tr>
<td>Work particip. migrants</td>
<td>0.002</td>
<td>0.004</td>
<td>0.004</td>
<td>0.005</td>
<td>0.004</td>
<td></td>
</tr>
<tr>
<td>% reg. migrant pop.</td>
<td>0.011*</td>
<td>0.015*</td>
<td>0.015*</td>
<td>0.015*</td>
<td>0.014*</td>
<td></td>
</tr>
<tr>
<td>Reg. unemployment</td>
<td>-0.033**</td>
<td>0.004</td>
<td>0.003</td>
<td>0.004</td>
<td>0.004</td>
<td></td>
</tr>
<tr>
<td>Less citylike area</td>
<td>0.075*</td>
<td>0.008*</td>
<td>0.102*</td>
<td>0.107*</td>
<td>0.106*</td>
<td></td>
</tr>
<tr>
<td>Two migrant parents (d)</td>
<td>-0.100</td>
<td>-0.115</td>
<td>-0.110</td>
<td>-0.009</td>
<td>-2.113**</td>
<td></td>
</tr>
<tr>
<td>Ref: individ. classes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LBO (d)</td>
<td>0.178</td>
<td>0.186</td>
<td>0.181</td>
<td>0.175</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAVO (d)</td>
<td>0.263*</td>
<td>0.276**</td>
<td>0.281*</td>
<td>0.276*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBO (d)</td>
<td>0.517***</td>
<td>0.531***</td>
<td>0.551***</td>
<td>0.542**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BBO (d)</td>
<td>0.251</td>
<td>0.259</td>
<td>0.261</td>
<td>0.268</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother's education</td>
<td>-0.070*</td>
<td>-0.071*</td>
<td>-0.076*</td>
<td>-0.074*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother's educ. missing (d)</td>
<td>0.697</td>
<td>0.721</td>
<td>0.727</td>
<td>0.911</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CITO language test</td>
<td>0.000</td>
<td>-0.000</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance motivation</td>
<td>0.054</td>
<td>0.055</td>
<td>0.056</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School perception</td>
<td>-0.034</td>
<td>-0.036</td>
<td>-0.036</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father working (d, ref. n.w.)</td>
<td>0.136</td>
<td>0.132</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occ. father missing (d)</td>
<td>0.166</td>
<td>0.138</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother working (d, ref. n.w.)</td>
<td>-0.017</td>
<td>-0.018</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occ. mother missing (d)</td>
<td>0.192</td>
<td>0.209</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work particip. * TK/MO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.089</td>
<td></td>
</tr>
<tr>
<td>Work particip. * postcol.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.040</td>
<td></td>
</tr>
<tr>
<td>% migrants * TK/MO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.127*</td>
<td></td>
</tr>
<tr>
<td>% migrants * postcol.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.363**</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-3.79e+04</td>
<td>-3.79e+04</td>
<td>-3.79e+04</td>
<td>-3.79e+04</td>
<td>-3.79e+04</td>
<td></td>
</tr>
<tr>
<td>LR Chi Square</td>
<td>3.606179</td>
<td>231.424</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>4956</td>
<td>4956</td>
<td>4956</td>
<td>4956</td>
<td>4956</td>
<td></td>
</tr>
</tbody>
</table>

*(d) for discrete change of dummy variable from 0 to 1, p<0.05=*, p<0.01=**, p<0.001=***
We find gross disadvantages for second generation migrants with Turkish or Moroccan background (step 1). Turkish and Moroccan migrants have to wait longer to enter jobs with any type of contract when their group composition is not taken into account. The coefficient for Postcolonial second generation migrants fails to reach significance. Thus, the disadvantages we saw in the previous model seem to be due to Turkish and Moroccan migrants rather than Postcolonial migrants. After control variables are included in step 2, we do not find significant effects of Turkish or Moroccan ethnicity. Their disadvantages are explained by their composition with regard to the factors included in the second step of the model.

We do find differences in ethnicity specific effects in this model compared to the previous ones. Turkish, Moroccan and Postcolonial second generation migrants are more likely to quickly enter jobs in regions where more persons with a migration background live. The interaction of percentage of foreigners with both groups of second generation migrants is positive and significant (at the 5 and 1% level). In contrast, the results of the previous model indicated more employed migrants in the region of residence increase quick entrance chances for second generation migrants.

The remaining results of this model resemble those of the previous model. Those who are about age twelve in 1993 are more likely to enter employment quickly. Moreover, increasing unemployment rates within a region have a significant negative influence (step 2). Larger percentages of migrants in the region of residence significantly increase the chance to enter jobs quickly. Those who live in less city like areas tend to find jobs faster. Persons who graduated from intermediate general education (MAVO) or especially from second cycle vocational education (MBO) tracks have a higher chance to enter employment fast. Higher levels of mother’s education significantly increase the waiting times of individuals.

**Duration of waiting time until jobs with permanent contract**

Table 6.7 depicts marginal effects coefficients of the Cox proportional hazard model on duration of waiting time until first jobs with permanent contracts. In contrast to the model on jobs with any type of contract, we find ethnic penalties for second generation migrants (with Turkish, Moroccan or Postcolonial background). Second generation migrants have to wait longer to enter jobs with permanent contracts in steps 1, 2, 4, and 5 of the model (significant at the 0.1% level). If second generation migrants have lower chances to access permanent positions ethnic inequality is produced. Permanent positions are less risky and less exposed to business cycles as we have argued in Section 3.4. Hindered access to permanent positions at the beginning of the career, thus, might function as a permanent dividing line between second generation migrants and natives in further labour market careers.
### Table 6.7: Duration of waiting time until early jobs with permanent contracts

<table>
<thead>
<tr>
<th></th>
<th>STEP 1</th>
<th>STEP 2</th>
<th>STEP 3</th>
<th>STEP 4</th>
<th>STEP 5</th>
<th>STEP 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 gen (d, ref. natives)</td>
<td>-0.431***</td>
<td>-0.385*</td>
<td>-0.502</td>
<td>-0.585*</td>
<td>-0.652*</td>
<td>-1.460*</td>
</tr>
<tr>
<td>Females (d, ref. males)</td>
<td>-0.148**</td>
<td>-0.212*</td>
<td>-0.256**</td>
<td>-0.273**</td>
<td>-0.272**</td>
<td></td>
</tr>
<tr>
<td>Cohort 1993 (d, ref. 1989)</td>
<td>-0.001</td>
<td>0.036</td>
<td>0.051</td>
<td>0.053</td>
<td>0.052</td>
<td></td>
</tr>
<tr>
<td>Work particip. migrants</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td></td>
</tr>
<tr>
<td>% migrant population</td>
<td>0.018**</td>
<td>0.022**</td>
<td>0.026**</td>
<td>0.027**</td>
<td>0.027**</td>
<td></td>
</tr>
<tr>
<td>Reg. unemployment</td>
<td>-0.063***</td>
<td>-0.058***</td>
<td>-0.066***</td>
<td>-0.069***</td>
<td>-0.069***</td>
<td></td>
</tr>
<tr>
<td>Less citylike area</td>
<td>0.080*</td>
<td>0.097**</td>
<td>0.113**</td>
<td>0.120**</td>
<td>0.119**</td>
<td></td>
</tr>
<tr>
<td>Two migrant parents (d)</td>
<td>-0.168</td>
<td>-0.242</td>
<td>-0.269</td>
<td>-0.216</td>
<td>-0.078</td>
<td></td>
</tr>
</tbody>
</table>

Ref. individ. classes

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LBO (d)</td>
<td>0.144</td>
<td>0.116</td>
<td>0.110</td>
<td>0.114</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAVO (d)</td>
<td>0.198</td>
<td>0.202</td>
<td>0.207</td>
<td>0.208</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBO (d)</td>
<td>0.295*</td>
<td>0.294</td>
<td>0.308*</td>
<td>0.304*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BBO (d)</td>
<td>0.101</td>
<td>0.088</td>
<td>0.085</td>
<td>0.087</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s education</td>
<td>-0.046</td>
<td>-0.054</td>
<td>-0.057</td>
<td>-0.057</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s educ. missing (d)</td>
<td>0.663</td>
<td>0.765</td>
<td>0.800</td>
<td>0.794</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CITO language test</td>
<td>0.009</td>
<td>0.009</td>
<td>0.009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance motivation</td>
<td>0.048</td>
<td>0.050</td>
<td>0.052</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School perception</td>
<td>0.003</td>
<td>0.003</td>
<td>0.002</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father working (d, ref. n.w.)</td>
<td></td>
<td></td>
<td></td>
<td>0.143</td>
<td>0.140</td>
<td></td>
</tr>
<tr>
<td>Occ. father missing (d)</td>
<td></td>
<td></td>
<td></td>
<td>0.197</td>
<td>0.190</td>
<td></td>
</tr>
<tr>
<td>Mother working (d, ref. n.w.)</td>
<td></td>
<td></td>
<td></td>
<td>-0.038</td>
<td>-0.037</td>
<td></td>
</tr>
<tr>
<td>Occ. mother missing (d)</td>
<td></td>
<td></td>
<td></td>
<td>0.159</td>
<td>0.145</td>
<td></td>
</tr>
<tr>
<td>Work particip. * 2 gen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.053</td>
<td></td>
</tr>
<tr>
<td>% migrant pop. * 2 gen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.040</td>
<td></td>
</tr>
<tr>
<td>MBO * 2 gen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.024</td>
<td></td>
</tr>
<tr>
<td>BBO * 2 gen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.188</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-3.35e+04</td>
<td>-3.35e+04</td>
<td>-3.35e+04</td>
<td>-3.35e+04</td>
<td>-3.35e+04</td>
<td>-3.35e+04</td>
</tr>
<tr>
<td>LR Chi Square</td>
<td>133.3551</td>
<td>526.103</td>
<td>954.146</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Events</td>
<td>3560</td>
<td>3560</td>
<td>3560</td>
<td>3560</td>
<td>3560</td>
<td>3560</td>
</tr>
</tbody>
</table>

*(d) for discrete change of dummy variable from 0 to 1, p<0.05=* , p<0.01=**, p<0.001=***
As expected within the Dutch so called 1.5 breadwinner model, females have lower chances to enter permanent jobs. Findings of the previous model seemed to indicate that women's chances to enter employment are also lower in general. Besides, higher regional unemployment rates decrease the chances for both, natives and second generation migrants, to enter permanent employment fast. This finding shows that when the economic situation is poor, employers tend to hire young people who enter the labour market on a non-permanent basis. Thus, young people serve as buffers at the labour market. As we have argued before, this can significantly affect future careers of young people who are especially vulnerable in a negative way.

Moreover, a larger percentage of migrant population in the region of residence and a less citylike community significantly increase chances to enter permanent employment (significant at the 1% level). Both results are similar to what we found in the previous model. The finding concerning the migrant population underlines the previous interpretation that this value characterizes communities in which labour market chances for young people without tertiary qualifications are better. These communities can even provide labour market entrants with quick access to permanent positions. We do not find significant effects of cohorts, parents composition or percentage of employed migrants in the region of residence.

Persons who completed mainly school-based second cycle vocational education (MBO) enter permanent positions significantly quicker compared to those who attended individualised classes. The result is less significant (at the 5% level) than in the previous model and insignificant in step 4. In contrast, lower vocational education (LBO), intermediate general education (MAVO) or apprenticeship (BBO) education are no decisive factors concerning respondents' chances to enter permanent positions quickly. Thus, firm and employer-based vocational training BBO lacks a smoothening function on the Dutch labour market. It may increase chances to enter employment fast, but it does not help young people to access permanent positions.

Moreover, the mothers' level of education and employment status of parents have no significant influence on waiting times until first permanent positions. The same applies to language proficiency, performance motivation and better perception of schools at age 12. Furthermore, the results show no differential returns to education for second generation migrants in the Netherlands with regard to permanent positions. There are also no specific effects of migrant percentage or migrant work participation in the region of residence in this model.
Table 6.8: OLS: Income at early career

<table>
<thead>
<tr>
<th></th>
<th>STEP 1</th>
<th>STEP 2</th>
<th>STEP 3</th>
<th>STEP 4</th>
<th>STEP 5</th>
<th>STEP 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.gen (d, ref. natives)</td>
<td>0.122</td>
<td>0.033</td>
<td>0.043</td>
<td>0.041</td>
<td>0.050</td>
<td>1.162</td>
</tr>
<tr>
<td>Females (ref. males)</td>
<td>-0.152***</td>
<td>-0.215***</td>
<td>-0.214***</td>
<td>-0.214***</td>
<td>-0.213***</td>
<td></td>
</tr>
<tr>
<td>Cohort 1993 (ref. 1989)</td>
<td>-0.047*</td>
<td>0.016</td>
<td>0.017</td>
<td>0.018</td>
<td>0.019</td>
<td></td>
</tr>
<tr>
<td>Work particip. migrants</td>
<td>0.004</td>
<td>0.007*</td>
<td>0.007*</td>
<td>0.007*</td>
<td>0.008*</td>
<td></td>
</tr>
<tr>
<td>% migrant population</td>
<td>0.007</td>
<td>0.005**</td>
<td>0.005**</td>
<td>0.005**</td>
<td>0.005**</td>
<td></td>
</tr>
<tr>
<td>Reg. unemployment</td>
<td>-0.049***</td>
<td>0.001</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Less citylike area</td>
<td>0.018**</td>
<td>0.008</td>
<td>0.008</td>
<td>0.008</td>
<td>0.008</td>
<td></td>
</tr>
<tr>
<td>Two migrant parents</td>
<td>0.089</td>
<td>0.142</td>
<td>0.138</td>
<td>0.139</td>
<td>0.131</td>
<td></td>
</tr>
<tr>
<td>Ref. individ. classes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LBO</td>
<td>0.012</td>
<td>0.034</td>
<td>0.034</td>
<td>0.034</td>
<td>0.030</td>
<td></td>
</tr>
<tr>
<td>MBO</td>
<td>0.435***</td>
<td>0.454***</td>
<td>0.453***</td>
<td>0.451**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAVO</td>
<td>-0.003</td>
<td>0.010</td>
<td>0.009</td>
<td>0.009</td>
<td>0.006</td>
<td></td>
</tr>
<tr>
<td>BBO</td>
<td>0.507***</td>
<td>0.519***</td>
<td>0.518***</td>
<td>0.508***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s education</td>
<td>0.003</td>
<td>0.004</td>
<td>0.002</td>
<td>0.002</td>
<td>0.002</td>
<td></td>
</tr>
<tr>
<td>Mother’s educ. missing</td>
<td>0.185</td>
<td>0.188</td>
<td>0.193</td>
<td>0.193</td>
<td>0.172</td>
<td></td>
</tr>
<tr>
<td>CITO language test</td>
<td>-0.004*</td>
<td>-0.004*</td>
<td>-0.004*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance motivation</td>
<td>-0.003</td>
<td>-0.003</td>
<td>-0.004</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School perception</td>
<td>0.015</td>
<td>0.015</td>
<td>0.015</td>
<td>0.014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother working (ref.n.w.)</td>
<td>0.010</td>
<td>0.010</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occ. father missing</td>
<td>-0.006</td>
<td>-0.002</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother working (ref.n.w.)</td>
<td>0.009</td>
<td>0.009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occ. mother missing</td>
<td>-0.066</td>
<td>-0.066</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work particip. * 2.gen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.026</td>
<td></td>
</tr>
<tr>
<td>% migrants * 2.gen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.013</td>
<td></td>
</tr>
<tr>
<td>MBO * 2.gen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>BBO * 2.gen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.218</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.0567</td>
<td>0.0741</td>
<td>0.2634</td>
<td>0.2644</td>
<td>0.2648</td>
<td>0.2660</td>
</tr>
<tr>
<td>N</td>
<td>6497</td>
<td>6497</td>
<td>6497</td>
<td>6497</td>
<td>6497</td>
<td>6497</td>
</tr>
</tbody>
</table>

p<0.05=*, p<0.01=**, p<0.001=***
OLS: Income at early career

Table 6.8 depicts an ordinary least square regression on income.\(^4\) Income data refers to registered work during the first year in the labour market. With this model we want to test whether second generation migrants can obtain comparable incomes in their early career like natives. Thus, persons without any income are not included in the model.\(^5\)

Second generation migrants ethnicity has no significant effect on income. On the one hand, one could argue that Dutch minimum wages might help to avoid income disadvantages of second generation migrants. There are even findings, however, according to which some groups of low-skilled employed Turks even outperform employed natives in terms of income (Euwals, Dagevos, Gijsberts, and Roodenburg, 2007a). Findings including tertiary educated show that Moroccan and Turkish second generation migrants hold worse paid jobs than other second generation migrant groups (e.g. Crul, 2000). On the other hand, the results might simply reflect the selection effects in our data. We do not include persons without registered jobs and do not account for the fact that certain persons manage to attain registered jobs.

Expectedly, women are more likely to enter jobs with lower income. First year average real incomes of females are lower than males'. The effect is comparatively large (-0.152) and significant at the 0.1% level. The effect is not simply caused by part-time work as daily income refers to full-time equivalents in the data. The results indicate that the gender wage gap is already there at the very beginning of labour market careers. Individuals of the second cohort, who enter the labour market later obtain significantly lower incomes, until their educational level is taken into account (step 2). The effect turns positive and insignificant in step 3 of the model. This finding could indicate a cohort composition effect in the sense that there are more low qualified persons in the second cohort than in the first. Moreover, work participation and percentage of migrant population seem to increase income at the beginning of the career, but the effect turns significant only after the inclusion of educational level. The result might have been caused by an inconsistent mediation (MacKinnon, Krull, and Lockwood, 2000, 175), where a mediation effect exists even though there was no significant relationship between the independent and dependent variable in the first place. Nowadays, there is a relative pronounced concentration of immigrants in the four largest cities (Amsterdam, Rotterdam, the Hague, and Utrecht) in the Western part of the Netherlands (OECD, 2008b, 54). Large work participation and large percentage of migrant population characterise these areas. They obviously offer good job chances for labour market entrants in terms of quick access, permanent contracts and

\(^4\)Income refers to the natural log of gross average daily real income in the year of the employment at the SVD interview (see Chapter 9 for detailed description of operationalisation of the dependent variable).

\(^5\)See Section 6.6 for discussion of selection effects.
Higher regional unemployment rates have a significant negative effect on income in step 2. This could support the interpretation that young people are used as buffers at the labour market. They seem to receive less income when the economic situation worsens. However, the effect turns positive and insignificant in the succeeding step after education level is controlled for. Having two migrant parents does not have a significant effect.

As expected, completion of second cycle vocational education (MBO) or apprenticeships (BBO) significantly contributes to the explained variance of incomes at labour market entrance. The adjusted \( R^2 \) increases strongly from step 2 to step 3, from 0.0741 to 0.2634. BBO education has the largest positive impact on income (0.518 in step 5) and is significant at the 0.1% level. BBO education comprises persons who follow firm-based apprenticeships and who are paid by their employers. Thus, receiving an income before finishing education might contribute to the large positive effect of BBO education on first year incomes. Also MBO education correlates with higher average income at the first year of the labour market. The large effects of education also capture age related minimum income effects. Minimum income increases with age, especially between age 16 and 21 (see Section 3.4). Persons with more years of education, therefore, earn more.

The higher a person’s CITO language test score, the lower is the income s/he can attain at the beginning of the career. This is a counter-intuitive finding. It could, however, hint towards previous findings mentioned above according to which some low-skilled second generation migrants – persons with lower language proficiency – outperform natives in terms of income. Performance motivation and perception of schools have no significant effects.

LBO and MAVO education, education of the mother, and employment status of parents have no significant influence on income. Education of the mother does not significantly influence income at the beginning of the labour market career. Moreover, we do not find differential returns to education for second generation migrants or specific effects of (employed) migrant population in their residence community.

### 6.5 Summary of results for the Netherlands

For the Netherlands we tested all hypotheses but hypothesis 2. Table 6.9 depicts whether the data supported the hypotheses on ethnic inequality in school-to-work transitions in the Dutch institutional context. Hypothesis 1 relates to a composition effect with regard to human capital. The data does not fit the predictions of the hypotheses for duration of waiting time. Second generation migrant ethnicity turns insignificant already when group composition factors in terms of gender, labour market entrance period, community of resi-
Table 6.9: Results concerning hypotheses for the Netherlands

<table>
<thead>
<tr>
<th>No.</th>
<th>Hypotheses</th>
<th>Access to employment</th>
<th>Duration of waiting time</th>
<th>Duration until permanent contracts</th>
<th>First income</th>
</tr>
</thead>
<tbody>
<tr>
<td>H 1</td>
<td>Higher levels of education reduces the negative effect of second generation ethnicity on duration of waiting times.</td>
<td>–</td>
<td>Not supported</td>
<td>Not supported</td>
<td>–</td>
</tr>
<tr>
<td>H 3</td>
<td>Better language proficiency reduces the negative effect of second generation ethnicity on duration of waiting times.</td>
<td>–</td>
<td>Not supported</td>
<td>Not supported</td>
<td>–</td>
</tr>
<tr>
<td>H 4</td>
<td>Employment of fathers reduce the duration of waiting times.</td>
<td>–</td>
<td>n.s.</td>
<td>n.s.</td>
<td>–</td>
</tr>
<tr>
<td>H 5</td>
<td>Higher percentages of migrants within region of residence decrease the duration of second generation migrants' waiting times.</td>
<td>–</td>
<td>Supported</td>
<td>n.s.</td>
<td>–</td>
</tr>
<tr>
<td>H 6</td>
<td>Higher network participation of migrants in the region of residence decreases the duration of second generation migrants' waiting times.</td>
<td>–</td>
<td>n.s.</td>
<td>Supported</td>
<td>–</td>
</tr>
<tr>
<td>H 7</td>
<td>Second generation migrants with Turkish or Moroccan background have longer waiting times than those with Surinamese, Netherlands Antillean or Arubean background.</td>
<td>–</td>
<td>(Supported)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>H 8</td>
<td>Second generation migrants have longer waiting times than natives.</td>
<td>–</td>
<td>(Supported)</td>
<td>Supported</td>
<td>–</td>
</tr>
<tr>
<td>H 9</td>
<td>Second generation migrants enter jobs with lower status than natives.</td>
<td>–</td>
<td>–</td>
<td>(Supported)</td>
<td>–</td>
</tr>
<tr>
<td>H 10</td>
<td>In the Netherlands second generation migrants have lower chances to be employed than natives.</td>
<td>(Supported)</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

–: not tested, n.s.: not significant, (): partly supported
idence and labour markets in the region of residence are taken into account.

Hypothesis 3 is not supported by the data in the Netherlands. Better language proficiency does not decrease the influence of ethnicity in the models. Except for the significant influence on income (see below), language proficiency has no significant influence in any of the models. The results hint towards a measurement problem or variance reduction. Moreover, the employment status of fathers at age 12 does not influence the duration of waiting time either. Consequently, hypothesis 4 is not supported by the data. Parental occupational status might also have changed since measurement. The parental occupational status at the time when contacts or information are actually needed should be a more appropriate indicator.

Hypotheses 5 and 6 referred to second generation migrant specific social capital effects. The results support hypothesis 6: larger percentages of working migrants in the region significantly increase the chances of a quick transit from school to jobs with full- or part-time contracts for all second generation migrants. Hypothesis 5 is also confirmed by the data for separate second generation migrant groups: we find an ethnicity specific effect of larger percentages of migrant population in the region in the model on duration of waiting time until any type of contract for both groups of second generation migrants.

Hypothesis 7 addresses differences between groups of second generation migrants in the Netherlands and is supported by the data. Second generation migrants with Turkish or Moroccan background have longer waiting times than those with Surinamese, Netherlands Antillean or Arubean background until jobs with full- or part-time contracts. The effect is later explained by the inclusion of other factors into the analyses.

Based on job search theory we assumed to find different outcomes for second generation migrants and natives and derived hypotheses 8, 9 and 10. Hypothesis 8 is supported with regard to the duration until permanent positions: second generation migrants need longer to enter these jobs. Turkish and Moroccan second generation migrants wait longer to enter first jobs with full- or part-time positions, as long as other factors are not controlled for in the analyses. Hypothesis 9 is accepted by the data. Second generation migrants with Postcolonial background are likely to enter jobs with lower status, i.e. with permanent contracts, than natives. We do not find disadvantages of second generation migrants with regard to first incomes. The fact that second generation migrants have significantly lower chances to be employed supports hypothesis 10. The effect is explained in step 5 of the model when the occupational status of parents is controlled for. The fact that second generation migrants’ parents more often had missing information on their occupational status explains disadvantages at labour market entrance for their children.
6.5. **SUMMARY OF RESULTS FOR THE NETHERLANDS**

**Summary of results on labour market access**

Getting a foothold in the labour market is difficult for second generation migrants in the Netherlands. We find comparably large disadvantages for the chance to have a job for second generation migrants with Turkish, Moroccan or Postcolonial background in the Netherlands. Arguably, the chance to have a job soon after leaving the education system is lower for second generation migrants even if they have comparable education and skill characteristics like native born labour market entrants. Minimum wages might be a barrier to the hiring of second generation migrants in the Netherlands. Previous research has shown that employers tend to hire native labour market entrants when they can choose between native and immigrant candidates (see Crul and Doornmik, 2003; Crul, 2004). The ethnicity coefficient fails to reach significance after social background is included in the model. This reflects the fact that parents of second generation migrants are more often unemployed than natives’ parents.

Young women have lower chances to enter employment than men. The coefficient turns significant after education is controlled for. This indicates that even if women have comparable educational certificates they are disadvantaged at labour market entrance. Young people might also function as a buffer on the Dutch labour market: the higher the regional unemployment rate at the region of residence when interviewed for the SVD survey, the significantly lower is the chance of young people to be employed. Moreover, the less city-like the community of residence is, the more likely seems a person to be employed. City character seems to measure the financial background of a persons. Then, those who can afford to move to a suburb are more likely to be employed.

Expectedly, higher levels of education increase employment chances. Those who followed second cycle vocational education MBO and dual apprenticeship BBO tracks have higher chances to be employed at the time of the SVD interview. Firm- and employer based vocational training indeed facilitates access to the labour market in the Netherlands. Networks and employer contacts gained during the training might indeed help to find employment. Persons who followed upper secondary MBO education were even more likely to enter employment as compared to those with BBO education. The results on education might also capture age effects. Those with higher levels of education are older when they enter the labour market and could have obtained more work experience. Moreover, the more years of education their mothers completed, the less likely are persons to be in employment about 12 months after leaving the education system. The finding supports the idea that persons with higher educated mothers search for a job that better matches with their skills.

The results indicate that skills measured at age 12 – CITO language test score, performance motivation and school perception – do not explain school-to-work transitions. The finding is counter-intuitive but the fact that they have been measured at age 12 might
explain the effect. These skills may simply have changed. Missing information on occupational status of the father significantly decreases the probability to be employed. The negative sign indicates that missing information might relate to information that is less favourable at labour market access.

Our results show that second generation migrants are somewhat more likely to be employed if ethnic communities are better integrated into the workforce. In contrast, migrants are slightly less likely to be employed when they live in regions with larger percentages of migrants. Thus, not the pure size of the community matters for labour market chances of second generation migrants, but its quality. Employed migrants might offer jobs for second generation migrants or help them to find jobs. Furthermore, we find that especially second generation migrants’ employment chances profit when they graduate from upper secondary education MBO. There are no differential effects of BBO education for second generation migrants.

Summary of results on duration of waiting time until full-time and part-time jobs

Second generation migrants face no significant disadvantages concerning the duration of labour market entrances in the Netherlands. Their initial disadvantages turned insignificant after regional characteristics were taken into account. The disadvantages seem to exist for Turkish and Moroccan migrants only, but not for Postcolonial migrants. Group composition of second generation migrants with Turkish and Moroccan background is more disadvantaging for school-to-work transitions. The results indicate the necessity to distinguish between ethnic groups when analysing school-to-work transitions.

The finding supports the argument that young peoples’ labour market chances are affected by the overall labour market situation. Quick school-to-work transitions were possible for those who tried to enter the labour market after 1996. The first cohort started entering the labour market in 1993 (at about age 16) during the mini recession of 1994. In contrast, there was an economic boom in 1998 when the later cohort began entering the labour market. This result confirms previous findings on the effect of economic circumstances on employment chances (Tesser and Dronkers, 2007, 381). Expectedly, increasing unemployment rates in the region of residence decrease chances to enter jobs quickly. However, the effect turns insignificant after education is taken into account, which might be due to low case numbers when we cluster for regions. Moreover, women have to wait longer to enter first jobs, but the effect turns insignificant when social background is included in the analysis.

Persons who live in regions where the migrant population is larger are significantly more likely to enter jobs quickly. Also in the Netherlands, migrants concentrate in cities. Thus,
individuals might find jobs faster simply because the demand of labour and job offer rates are higher in cities. The percentage of working migrants in the region also has a positive influence, but the coefficient fails to reach significance. Again, those who live in less city like areas tend to find jobs faster. It seems, indeed, that the city character of the community does not measure whether someone lives in a city or in a rural area, but whether someone lives in wealthier areas. The variable seems to indicate that those who can afford to live in a better off area, like for instance a suburb, find jobs faster. The variable then rather measures financial background.

Persons who ran through second cycle vocational education MBO and intermediate general education MAVO have a higher chance to enter employment with any contract fast. The influence of MBO, however, is larger than that of MAVO. In contrast to Germany, firm and school-based apprenticeships do not significantly affect individuals’ duration of waiting time in the Netherlands. The results again indicate that persons with more educated mothers seem to wait longer for a better match. Language proficiency, performance motivation and school perception measured at age 12 do influence the timing of labour market entrance.

Second generation migrants are likely to quickly enter jobs when they live in regions with more employed migrants. Larger migrant networks with useful information flows might indeed provide information on job opportunities. Moreover, employers might have more experience with hiring persons with migration background in these regions and discriminate less. Co-ethnic networks might foster fast employment accesses for second generation migrants in these regions. In contrast, we find that all groups of second generation migrants are more likely to quickly enter jobs in regions where more persons with a migration background live when we distinguish between ethnic groups. The results have to be interpreted carefully as they are based on low case numbers, though.

Summary of results on duration of waiting time until permanent jobs

Second generation migrants have to wait longer to enter jobs with permanent contracts. Lower access chances to permanent positions produce ethnic inequality. Permanent positions are less risky and less exposed to business cycles as we have argued above. Hindered access to permanent positions at the beginning of the career can function as a permanent dividing line between second generation migrants and natives in further labour market careers.

As expected within the Dutch so called 1.5 breadwinner model, females have lower chances to enter permanent jobs. Again, higher regional unemployment rates decrease the chances for both, natives and second generation migrants, to enter permanent employment
fast. Thus, when the economic situation is poor, employers tend to hire young people who enter the labour market on a non-permanent basis. Young people who are especially vulnerable serve as buffers at the labour market. As we have argued before, wrong starts can significantly impede successful future labour market careers of young people.

Moreover, larger percentages of migrant population in the region of residence and a less citylike community significantly increase chances to enter permanent employment. The finding underlines that larger percentages of migrant population in the region of residence are related to a structural characteristic of a community which increases labour market chances for young people without tertiary qualifications. These communities can even provide labour market entrants with quick access to permanent positions.

Persons who completed second cycle vocational education (MBO) enter permanent positions significantly quicker than those who completed individualised classes. Firm and employer-based vocational training BBO lacks a smoothing function on the Dutch labour market with regard to entrance into permanent positions.

**Summary of results on income**

Second generation migrants face no disadvantages concerning income when transiting from school to work. Dutch minimum wages might help to avoid income disadvantages of second generation migrants. The results might, however, be due to selection effects in our data as we do not include persons without registered jobs and do not account for the fact that certain persons manage to attain registered jobs (see following section).

Women are likely to enter first jobs with lower incomes. The gender wage gap already exists at the beginning of labour market careers. Moreover, work participation and percentage of migrant population seem to increase income at the beginning of the career, but the effects turn significant only after the inclusion of educational level. There is a pronounced concentration of immigrants in the four largest cities (Amsterdam, Rotterdam, the Hague, and Utrecht) in the Western part of the Netherlands (OECD, 2008b, 54). Large work participation and a high percentage of migrant population characterise these areas. They seem to offer good job chances for labour market entrants in terms of quick access, permanent contracts and income.

The educational level explains how well young people transit from school to work also in terms of income. Higher regional unemployment rates have a significant negative effect on income in step 2. This could support the interpretation that young people are used as buffers at the labour market. They seem to receive less income when the economic situation worsens. However, the effect turns positive and insignificant in the succeeding step after education level is controlled for. Furthermore, individuals of the second cohort,
who enter the labour market later obtain significantly lower income, until their educational level is taken into account.

As expected MBO and BBO education significantly contribute to the explained variance of incomes at labour market entrance. Persons who follow firm- and school-based apprenticeships (BBO) are likely to receive higher incomes. Receiving an income before finishing education might contribute to the large positive effect of BBO. Also second cycle vocational education MBO correlates with higher average income at the first year of the labour market. The large effects of education also capture age related minimum income effects. As minimum income increases with age, person with more years of education earn more.

The data indicates that persons with better language proficiency receive lower incomes. The results is surprising but could hint towards previous findings according to which some low-skilled second generation migrants – persons with lower language proficiency – outperform natives in terms of income (cf. Euwals, Dagevos, Gijsberts, and Roodenburg, 2007a).
6.6 Limitations and outlook

Our aim was to look at second generation migrants’ chances to attain a comparable level of income to natives. Therefore, we purposely leave out individuals who did not earn any income when estimating the factors influencing the amount of incomes. As a consequence, however, the sample might be non-randomly selected. Only the more able ones or those with favourable characteristics might enter the labour market. In a further step of the analysis, it might be useful to apply a two-step Heckman correction procedure to account for sample selection and get unbiased estimations (Heckman, 1976, 1979). It is debatable, though, whether this method would lead to robust results. We would include the sample selection correction because we assume that the error terms of the selection equation (on having a job) and the outcomes (the income) are highly correlated and there is a high degree of censoring. Nevertheless, in these cases the Heckman correction has been shown to be inefficient. Moreover, a high correlation between exogenous variables in the selection equation and in the outcome equation are likely and might make the Heckman estimator unrobust as it becomes collinear with the other regressors (Puhani, 2000).

Due to data restrictions mentioned above, the analysis does not include those who did not attain any educational certificate. Therefore, we are likely to underestimate the effects of ethnicity and language proficiency. Second generation migrants are more likely to drop out of school. Further analysis should try to estimate the effects of not having the possibility to include this group into the sample. Additional analysis on the characteristics that influence sample drop out chances could be helpful. Moreover, we did not distinguish between ethnic groups of second generation migrants in all models because case numbers are very small in the Dutch data. Nevertheless, the results indicated that the distinction between ethnic groups can better explain mechanisms of ethnic inequality in school-to-work transitions. Further analyses should conduct sensitivity tests of the empirical results on duration of waiting times until first jobs with permanent contracts.
Chapter 7

Turkish second generation migrants in Germany and the Netherlands

In contrast to Germany, the Netherlands implemented systematic integration policies since the 1980s (anti-discrimination, voting right, immigration, family reunion, see Chapter 3). One might argue that these policies shaped group compositions of first generation migrants (and therefore also of second generation migrants) within Germany and the Netherlands differently. Stricter integration laws might have selected immigrants skill-wise positively in Germany (Euwals, Dagevos, Gijsberts, and Roodenburg, 2007a). If policies had influenced group composition in a certain way one would expect similar effects to show regarding different indicators of labour market integration (cf. Crul, 2007). However, this is not the case for Turkish second generation migrants in the Netherlands and Germany (Heath and Cheung, 2007). Thus, cross-country differences in structural integration do not seem to be influenced by group composition due to different policies, policies or national integration models do not seem to matter for structural integration. Instead institutional designs of the education system and the labour market are important. Therefore, we want to test the country comparative hypotheses we generated based on institutional designs in this chapter. This chapter looks at the duration of labour market entrance as an indicator of school-to-work transitions.

We chose to compare Turkish second generation migrants in Germany and the Netherlands because they form the largest group of immigrants in these countries as well as in many European countries. The group comprises nearly four million (including naturalised and second generation persons) people in Europe (Crul, 2007). More than 60% of this group live in Germany. Moreover, the group of Turkish second generation migrants is supposed to contrast sharply with natives. They are a group with a traditional muslim background and their socioeconomic background is comparatively low. Integration of this
group is often considered to be difficult (Crul and Vermeulen, 2003; Crul, 2004, 970).

It has already been argued that the social and cultural backgrounds of Turkish migrants in Germany and the Netherlands are similar (Euwals, Dagevos, Gijsberts, and Roodenburg, 2007a,b). The Netherlands signed a labour migrants recruitment agreement in 1964 and Germany in 1961. The peak of Turkish labour migration was between 1971 and 1973. After the immigration stop following the oil crisis, Turkish migration increased during the 1980s and 1990s. At that time the in-between generation reached marriage age and began choosing spouses from Turkey. Today about three hundred thousand persons from Turkey live in the Netherlands and more than two million in Germany (Crul and Schneider, 2005). Most of these migrants from Turkey who came to Germany and the Netherlands even originate from the same regions or villages: small villages in central Turkey or along the Black Sea coast, only few came from larger cities (Crul and Vermeulen, 2003). Moreover, the fact that second generation migrants are almost exclusively children from labour migrants facilitates the comparison. Living conditions of Turkish communities within European countries and Germany and the Netherlands are also comparable. Turkish migrants are concentrated in bigger cities and a limited number of neighbourhoods (Crul and Vermeulen, 2003, 981).

7.1 Data and sample

For the country comparative analysis we have two data sets that include detailed longitudinal data on school-to-work transitions and allowed the application of the same definition of second generation migrants in both countries: the GSOEP data for Germany and the combination of VOCL, SVD and SSB data for the Netherlands (see Chapters 5 and 6). The data sets on which we base our empirical analysis were collected independently from each other. Therefore, sampling methods varied across the longitudinal data sets. Consequently, many differences occurred. First, both samples were gathered at slightly different moments of time. While GSOEP covers the time span between 1984 and 2007, the Dutch data is available for the period between 1994 and 2005 only.

Second, those who did not attain any formal educational certificate are not included in the Dutch data set because they could not be distinguished from those who dropped out of the sample due to other reasons. In the German data set persons with inadequately completed education are included and form part of the reference group for other educational levels.

Third, due to the restriction to two cohorts persons in the Dutch sample are younger than in the German one. Persons who were at about age 12 in 1989 are maximally 29 in 2005. Fourth, while we have detailed monthly information on beginning of first jobs in the GSOEP, we had to use the beginning of the current job as a proxy in the Dutch data.
Due to this incomplete evidence, we will make comparisons only with great caution. Only those findings with substantial and clear differences will be described.

7.2 Results: Turkish second generation migrants in Germany and the Netherlands

This section presents empirical results on ethnic inequality in school-to-work transition of Turkish second generation migrants in Germany and the Netherlands. First, we present a Cox proportional hazard model on duration of waiting time until full-time and part-time employment for each country. Afterwards, we compare the results. The models proceed stepwise similar to the model in the previous two chapters. In all models we compare Turkish second generation migrants with natives. Although the composition of natives is likely to differ between both countries, ethnic inequality in school-to-work transitions that matters for second generation migrants in both countries in comparison to natives.

Turkish second generation migrants in Germany: Cox model on duration of waiting time until jobs with any contract

Table 7.1 depicts the coefficients of a Cox proportional hazard model including TVCs for Turkish second generation migrants and natives. The results resemble those of chapter 5. Compared to the model including second generation migrants with Italian, Spanish and Italian background, the size of all coefficients changed to a small extent. The size of the coefficients did hardly change. There are two differences between the models which are related to work experience. First of all, work experience has a positive effect for natives and second generation migrants in step 5 of this model, which it did not have when the other group of second generation migrants was included. Second, we do not find an ethnicity specific effect of work experience in this model. Thus, Turkish second generation migrants can profit to the same extent from work experience like natives in this model.

Turkish second generation migrants in the Netherlands: Cox model on duration of waiting time until jobs with any contract

Table 7.2 depicts marginal effects coefficients of a Cox proportional hazard model on duration of waiting time until first full- or part-time jobs. The results show that Turkish second generation migrants do not have significant disadvantages with regard to duration of waiting time compared to natives. The coefficient of the Turkish second generation
Table 7.1: Turkish second generation migrants in Germany: Cox model on duration of waiting time until jobs with any contract including TVCs

<table>
<thead>
<tr>
<th></th>
<th>STEP 1</th>
<th>STEP 2</th>
<th>STEP 3</th>
<th>STEP 4</th>
<th>STEP 5</th>
<th>STEP 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>main</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 gen Turkish (ref. natives)</td>
<td>-0.359**</td>
<td>-0.282*</td>
<td>-0.265*</td>
<td>-0.250*</td>
<td>0.010</td>
<td>0.442</td>
</tr>
<tr>
<td>Females (ref. males)</td>
<td>-0.007</td>
<td>-0.021</td>
<td>-0.016</td>
<td>-0.013</td>
<td>-0.001</td>
<td></td>
</tr>
<tr>
<td>LM entrance &gt;=1993</td>
<td>-0.259***</td>
<td>-0.268***</td>
<td>-0.346***</td>
<td>-0.353***</td>
<td>-0.348***</td>
<td></td>
</tr>
<tr>
<td>Ref: inadequately compl.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>0.063</td>
<td>0.052</td>
<td>0.052</td>
<td>0.017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td>0.191**</td>
<td>0.184**</td>
<td>0.178**</td>
<td>0.153*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprenticeship</td>
<td>0.263***</td>
<td>0.267***</td>
<td>0.255***</td>
<td>0.222***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abitur</td>
<td>0.374***</td>
<td>0.378***</td>
<td>0.362***</td>
<td>0.342***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education mother</td>
<td>-0.020</td>
<td>-0.033</td>
<td>-0.025</td>
<td>-0.036</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father isei</td>
<td>0.003</td>
<td>0.003</td>
<td>0.003</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father isei missing</td>
<td>-0.146***</td>
<td>-0.154***</td>
<td>-0.151***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience</td>
<td></td>
<td></td>
<td></td>
<td>0.033**</td>
<td>0.036***</td>
<td></td>
</tr>
<tr>
<td>Language proficiency</td>
<td></td>
<td></td>
<td></td>
<td>0.318***</td>
<td>0.290***</td>
<td></td>
</tr>
<tr>
<td>Elementary * TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.365**</td>
<td></td>
</tr>
<tr>
<td>Intermediate * TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.269</td>
<td></td>
</tr>
<tr>
<td>Apprenticeship * TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.436***</td>
<td></td>
</tr>
<tr>
<td>Abitur * TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.278</td>
<td></td>
</tr>
<tr>
<td>Work experience * TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.064</td>
<td></td>
</tr>
<tr>
<td>Unemployment rate * TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.076**</td>
<td></td>
</tr>
<tr>
<td>Gender*TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.188</td>
<td></td>
</tr>
<tr>
<td>t</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. children</td>
<td>-0.004</td>
<td>-0.004</td>
<td>-0.003</td>
<td>-0.003</td>
<td>-0.003</td>
<td></td>
</tr>
<tr>
<td>Household income</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Reg. unemployment rate</td>
<td>-0.001</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.001</td>
<td></td>
</tr>
<tr>
<td>Age (entrance wt)</td>
<td>-0.000*</td>
<td>-0.000*</td>
<td>-0.000*</td>
<td>-0.000*</td>
<td>-0.000*</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-8464.054</td>
<td>-8446.942</td>
<td>-8439.070</td>
<td>-8436.047</td>
<td>-8433.521</td>
<td>-8431.463</td>
</tr>
<tr>
<td>LR Chi Square</td>
<td>8,797848</td>
<td>625,3712</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>1270</td>
<td>1270</td>
<td>1270</td>
<td>1270</td>
<td>1270</td>
<td>1270</td>
</tr>
</tbody>
</table>

p < 0.05 = *, p < 0.01 = **, p < 0.001 = ***
### Table 7.2: Turkish second generation migrants in the Netherlands: Cox model on duration of waiting time until jobs with any contract

<table>
<thead>
<tr>
<th></th>
<th>STEP 1</th>
<th>STEP 2</th>
<th>STEP 3</th>
<th>STEP 4</th>
<th>STEP 5</th>
<th>STEP 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 gen Turkish (d, ref. natives)</td>
<td>-0.142</td>
<td>0.958</td>
<td>1.079</td>
<td>1.157</td>
<td>1.192</td>
<td>1.205</td>
</tr>
<tr>
<td>Females (d, ref. males)</td>
<td>-0.016</td>
<td>-0.075</td>
<td>-0.076*</td>
<td>-0.079*</td>
<td>-0.079*</td>
<td></td>
</tr>
<tr>
<td>Cohort 1993 (d, ref. 1989)</td>
<td>0.110*</td>
<td>0.227*</td>
<td>0.238*</td>
<td>0.249*</td>
<td>0.247*</td>
<td></td>
</tr>
<tr>
<td>Work particip. migrants</td>
<td>0.002</td>
<td>0.004</td>
<td>0.004</td>
<td>0.004</td>
<td>0.004</td>
<td></td>
</tr>
<tr>
<td>% migrant pop.</td>
<td>0.011*</td>
<td>0.014*</td>
<td>0.015*</td>
<td>0.015*</td>
<td>0.015*</td>
<td></td>
</tr>
<tr>
<td>Reg. unemployment</td>
<td>-0.032***</td>
<td>0.003</td>
<td>0.003</td>
<td>0.004</td>
<td>0.004</td>
<td></td>
</tr>
<tr>
<td>Less citylike area</td>
<td>0.074*</td>
<td>0.006*</td>
<td>0.100*</td>
<td>0.104*</td>
<td>0.104*</td>
<td></td>
</tr>
<tr>
<td>Two migrant parents (d)</td>
<td>-0.747</td>
<td>-0.991</td>
<td>-1.039</td>
<td>-1.063</td>
<td>-2.134**</td>
<td></td>
</tr>
<tr>
<td>Ref. individ. classes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary/LBO (d)</td>
<td>0.179</td>
<td>0.188</td>
<td>0.183</td>
<td>0.177</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate/MAVO (d)</td>
<td>0.262*</td>
<td>0.276**</td>
<td>0.281*</td>
<td>0.276*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper secondary/MBO (d)</td>
<td>0.509***</td>
<td>0.525***</td>
<td>0.545***</td>
<td>0.583***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprenticeship/BBO (d)</td>
<td>0.262</td>
<td>0.271</td>
<td>0.275</td>
<td>0.279</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother's education</td>
<td>-0.067*</td>
<td>-0.068*</td>
<td>-0.074*</td>
<td>-0.073*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother's educ. missing (d)</td>
<td>0.891</td>
<td>1.027</td>
<td>1.063</td>
<td>1.198</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CITO language test</td>
<td>0.000</td>
<td>-0.000</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance motivation</td>
<td>0.058</td>
<td>0.059</td>
<td>0.058</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School perception</td>
<td>-0.037</td>
<td>-0.038</td>
<td>-0.038</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father working (d, ref. n.w.)</td>
<td>0.136</td>
<td>0.136</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occ. father missing (d)</td>
<td>0.144</td>
<td>0.136</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother working (d, ref. n.w.)</td>
<td>-0.013</td>
<td>-0.014</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occ. mother missing (d)</td>
<td>0.143</td>
<td>0.160</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work particip. * TK</td>
<td>0.214</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% migrants * TK</td>
<td>0.101</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBO * TK</td>
<td>1.008</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BBO * TK</td>
<td>0.898</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-3.77e+04</td>
<td>-3.77e+04</td>
<td>-3.77e+04</td>
<td>-3.77e+04</td>
<td>-3.77e+04</td>
<td></td>
</tr>
<tr>
<td>LR Chi Square</td>
<td>2.169762</td>
<td>204.3131</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Events</td>
<td>4930</td>
<td>4930</td>
<td>4930</td>
<td>4930</td>
<td>4930</td>
<td></td>
</tr>
</tbody>
</table>

*p < 0.05 =*, *p < 0.01 =**, *p < 0.001 =***
migrants is insignificant in all steps of the model. The low case numbers of Turkish second generation migrants might be responsible for this result.

The remaining findings resemble those of the model including other groups of second generation migrants (see Table 6.5). Therefore, we will just describe the significant effects here. Women are less likely to enter first jobs fast. The effect turns significant after skill variables are taken into account in step 4. Persons who are at about age 12 in 1993 are more likely to enter employment quickly. The overall labour market situation influences young people’s school-to-work transitions. Increasing unemployment rates in the region of residence decrease chances to enter jobs quickly (only in step 2). Persons who live in regions where the migrant population is larger are significantly more likely to enter jobs quickly because the demand of labour and job offer rates are higher in cities where migrants concentrate. Moreover, those who live in less city like areas – persons who can afford to move to a suburb for instance – tend to find jobs faster. Persons who completed MBO or MAVO education have higher chances to enter employment with any contract fast. The influence of upper secondary education (MBO) is largest. Persons with more educated mothers seem to wait longer for a better match as higher levels of mother’s education significantly increase the waiting times of individuals.

Comparison of models on duration of waiting time until first full- or part-time jobs

We do not find significant effects for Turkish second generation migrants in the Netherlands or Germany. Females have to wait longer to enter the labour market in both countries, but the coefficient fails to reach significance in Germany. Moreover, the effect turns significant in the Netherlands only after language proficiency and skills are included in the model (step 4).

The period of labour market entrance matters in Germany and the Netherlands. The economic situation seems to be the decisive factor in this context. While young persons who enter the labour market after 1993 need longer to enter a job, young people in the Netherlands who enter the labour market after 1996 need less time to enter. Germany’s unemployment rates increased at that time, while the Netherlands went through a mini boom after 1996 and unemployment decreased. Thus, economic situations seem to have a direct effect on duration of school-to-work transitions of young people. Moreover, increasing regional unemployment rates decrease the chance to enter the labour market fast in the Netherlands, but the effect is only significant in step 2.

In the Dutch data those who did not complete any education could not be included (see Chapter 6), they are included in the German data though. Nevertheless, the results show that compared to the respective reference categories, especially intermediate educa-
7.3. SUMMARY OF COMPARATIVE RESULTS

In this chapter we addressed ethnic inequality in school-to-work transitions of Turkish second generation migrants in Germany and the Netherlands. We looked at duration of waiting time until first jobs with full- and part-time jobs as an indicator of school-to-work transitions. The aim was to test whether institutional designs of similar vocational training and employers perception of these tracks influence its effect on duration of waiting time until first jobs. Moreover, we wanted to find out whether ethnic inequality in this indicator of school-to-work transitions is different in Germany and the Netherlands.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Duration of waiting time until first job</th>
</tr>
</thead>
<tbody>
<tr>
<td>H 2</td>
<td>Completion of dual apprenticeships reduces duration of waiting times more in Germany than in the Netherlands</td>
</tr>
</tbody>
</table>

Table 7.3: Country comparative hypothesis

Table 7.3 depicts whether the empirical results confirm the country comparative hypoth-

1The remaining significant are similar to those described in the models above, they will not be repeated here.
esis. The data confirmed hypothesis 2. While completion of dual apprenticeships increased
the chance for quick labour market entrance in Germany, we did not find significant effects
of BBO completion in the Netherlands on the duration of waiting time until first jobs with
full- or part-time employment. This is an important finding, as dual apprenticeships are
seen as an important gateway to the labour market for young people. Arguably, the effect
of a certain type of vocational training cannot be transferred from one institutional context
to another. Rather the perception of employers and the structure of labour markets seem
to matter for whether the dual vocational training is rewarded at school-to-work transitions
or not. Moreover, age is not included in the Dutch model, but education might include
age effects because higher minimum wages apply to young people who are older at labour
market entrance.

Turkish second generation migrants in Germany are less likely to enter jobs fast (step
1-5), while there are no significant effects for this group in the Netherlands. Females seem
to have to wait longer to enter the labour market in both countries. While the coefficient
fails to reach significance in Germany, the effects turns significant in the Netherlands only
when language proficiency and skills are controlled for. In former versions of the models
we tested ethnicity specific gender effects with interaction terms. They were later left out
because we did not find any significant ethnicity specific gender effect. The finding might
be due to the fact that second generation migrants women who are not willing to enter
the labour market are excluded from the Dutch sample because they are school drop-outs.
In Germany, we might exclude them via the restrictions we used to identify first jobs and
excluding months before maternity leaves. Moreover, non-existing gender disadvantages
for second generation migrants could be due to the fact that they gain higher educational
attainments than their male counterparts in most OECD countries. However, this should
be tested in other analysis with larger case numbers.

The period of labour market entrance matters in Germany and the Netherlands. The
economic situation seems to be the decisive factor in school-to-work transitions. While
young persons who enter the labour market after 1993 need longer to enter a job, young
people in the Netherlands who enter the labour market after 1996 need less time to enter.
Germany's unemployment rates increased at that time, while the Netherlands went through
a mini boom after 1996 and unemployment decreased. Thus, economic situations seem to
have a direct effect on duration of school-to-work transitions of young people.

In the Dutch data those who did not complete any education could not be included (see
chapter 6), while they are included in the German data. Nevertheless, the results show
that compared to the respective reference categories upper secondary and intermediate
education decrease the waiting times until first jobs. Upper secondary education (Abitur
and MBO education respectively) are one of the strongest factors decreasing the waiting
in both countries.

While better written language proficiency significantly facilitates quick labour market entrances in Germany, this does not seem to be the case in the Netherlands. The finding for the Netherlands is counter-intuitive as one would expect language proficiency of an applicant to be important for employers during their hiring decision. The different results could be due to the fact that language skills of respondents are measured differently and at a younger age in the Dutch data than in GSOEP. The variable might not be a good measure for respondents in the Netherlands. It is highly correlated with the overall CITO test scores that also did not show a significant effect. The distribution of CITO language test scores is similar in all completed educational levels. We might have low variance in the variable with regard to education levels because we could not include school drop-outs in the Dutch data. The educational level might, thus, already capture language proficiency to a certain extent. Moreover, all of the pupils had already practiced the test because children had to repeat it for the survey. On the other hand, the GSOEP indicator is based on a self-evaluation and might also not completely and exclusively reflect real individual language proficiency.
Chapter 8

Conclusions

In this thesis we looked at ethnic inequality of second generation migrants when they transit from school to work. In a country comparative perspective we analysed persons who obtained up to secondary education, a group in which second generation migrants are overrepresented in. We proposed that two issues are important in this context. First, we thought that it was necessary to look at different indicators of school-to-work transitions. We argued that the timing and quality of of school-to-work transitions are interrelated. Therefore, we looked at both indicators separately and jointly. Second, we argued that the institutional influence had been underestimated in research on ethnic inequality in school-to-work transitions. In our analysis we specifically considered, how firm- and school-based apprenticeships affect school-to-work transitions of second generation migrants in different institutional conditions. A crucial contribution of this thesis was to look at these issues based on two longitudinal data sets that included all the necessary information for Germany and the Netherlands. Extensive data formatting was necessary to render the analysis of the Dutch data possible. Information on two cohorts in the three data sets had never been combined in this form nor for a similar analysis before.

This chapter briefly resumes the comparative logic of the thesis. Moreover, it recapitulates the theoretical rationales that guided the analysis. Finally, we will summarise the results and critically discuss the analysis.

We looked at ethnic inequality in school-to-work transitions in an in-depth analysis for each of the two countries. In addition, we compared the timing of labour market entrance at the two countries. This was possible as the institutional contexts of Germany and the Netherlands are similar with regard to school-to-work transitions. The education systems of both countries are early selecting, highly vertically and horizontally standardised and stratified. Both countries have extensive vocational training systems at the upper-secondary level. Moreover, the labour markets in both countries are occupationalised. The
close link between education and the labour market renders education extremely important for school-to-work transitions. However, while Germany has a dual apprenticeship system, the vocational training system in the Netherlands offers both, dual apprenticeships and school-based vocational training. The comparative interest of this thesis was to look at the influence of firm- and school-based apprenticeships – dual apprenticeships – in otherwise similar school-to-work transition contexts. Thus, we study a causally decisive difference in otherwise relatively similar objects. With comparing Germany and the Netherlands we chose a case oriented difference-in-similarity design (see Ragin, 1978).

Additionally, we argued that it is important to distinguish between ethnic groups to analyse ethnic inequality in school-to-work transitions. We were able to look at ethnic groups separately in both countries and compared Turkish second generation migrants in both countries. The countries offered themselves for comparison because they both recruited labour migrants from Turkey with similar social background since the beginning of the 1960s. We defined second generation migrants as persons who have at least one migrant parent and have been born in Germany or the Netherlands respectively. In Germany we grouped second generation migrants from Italy, Spain and Greece. We compared these group to second generation migrants from Turkey and natives. Germany recruited labour migrants from all second generation migrant countries, but Turkey is not yet a EU member state. Thus, Turkish second generation migrants have not had the right of free movement. In the Netherlands, we distinguished between the largest groups of labour migrants and Postcolonial migrants due to the different immigration histories: 1) Turkish and Moroccan and 2) Arubean, Netherlands Antillean and Surinamese second generation migrants.

The present analysis focused on ethnic inequality in school-to-work transitions because the entrance into the labour market can shape later labour market careers (Gangl, 2003). To analyse ethnic inequality in school-to-work transitions we look at four indicators because we want to test whether institutional mechanisms work differently with regard to various indicators of school-to-work transitions. As indicators of school-to-work transitions we analysed access to the labour market, duration of entering the labour market and the quality of the transition. We additionally look at the duration of waiting time until first jobs with certain types of contracts, as the time young migrants need to enter employment may influence the kind of jobs they chose (Franz, Inkmann, Pohlmeier, and Zimmermann, 1997; Kalter and Granato, 2002). Moreover, permanent jobs are less risky and depend less on business cycles. Second generation migrants’ chances to access permanent positions, therefore, are an important indicator of ethnic inequality.

In the German context we analysed the duration of school-to-work transitions, the duration until entrance into permanent and temporary first jobs and access to jobs with higher occupational status. In the Netherlands, we analysed access to the labour market, the
duration of school-to-work transitions, the duration until entrance into permanent jobs, and first incomes.

We developed two sets of hypotheses (see Table 8.1 for a summary of the hypotheses). The first set of hypotheses – hypotheses 1, 2 and 3 – related to factors that are characteristic for second generation migrant groups: composition factors. These hypotheses argued that ethnic inequality exists because second generation migrant groups are to an overproportional extent composed of certain characteristics that are unfavourable for school-to-work transitions. We related human capital theory to second generation migrant groups. In accordance with the screening, signaling and queuing hypotheses second generation migrant groups were supposed to be disadvantaged because: 1) employers screen for levels of education of job applicants, 2) their lower level of education signals lower productivity to employers and 3) due to their ethnicity employers queue them after natives when they apply for a job. Thus, second generation migrant groups were supposed to be disadvantaged when they enter the labour market because they lack relevant resources (e.g. Kalter, Granato, and Kristen, 2007; Spence, 1973; Becker, 1964; Thurow, 1975). Then, second generation migrant groups might face less inequality if their educational level is better (Hypothesis 1). Moreover, language proficiency is necessary in any jobs. Therefore, ethnic inequality should be even more reduced if second generation migrants are able to speak the host country language well (Hypothesis 3).

Dual apprenticeships are known to facilitate school-to-work transitions. We assumed, however, that this was less the case in the Netherlands than in Germany. The majority completes school-based vocational training in the Netherlands and employers value this kind of vocational training as much as completion of dual apprenticeship. Thus, those who complete a dual apprenticeship should have shorter durations of waiting time in Germany than in the Netherlands (Hypothesis 2).

There are good reasons to assume that first generation migrants can support their children less at labour market entrance than natives. First generation migrants who came to Germany and the Netherlands were negatively skill-wise selected. Moreover, they might have been less willing to invest in education because they were initially supposed to return to their home countries soon (Granato and Kalter, 2001; Dustmann, 1994b; Van Tubergen, 2006). Nevertheless, fathers with jobs or higher labour market positions should have occupational networks which offer more information flow and provide their descendants with more important information for job search or on labour markets. Higher job positions of the father, thus, should be more helpful for second generation migrants and natives. In line with intergenerational transmission we assumed that higher occupational status of the father reduces the duration of labour market entrance (Hypothesis 4).

We were able to test hypotheses on social contexts for the Netherlands. Second gen-
Table 8.1: Summary of hypotheses

<table>
<thead>
<tr>
<th>Theory</th>
<th>No.</th>
<th>Hypotheses</th>
<th>Germany</th>
<th>the Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Human capital</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H 1</td>
<td></td>
<td>Higher levels of education reduce the negative effect of second generation</td>
<td>Not supported</td>
<td>Not supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ethnicity on duration of waiting times.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H 2</td>
<td></td>
<td>Completion of dual apprenticeships reduce the duration of waiting times</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>more in Germany than in the Netherlands.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H 3</td>
<td></td>
<td>Better written and spoken language proficiency reduce the negative effect</td>
<td>Supported in both models</td>
<td>Not supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of second generation ethnicity on duration of waiting times.</td>
<td>on duration of waiting time</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Intergen. transm.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H 4</td>
<td></td>
<td>Higher job positions of fathers reduce the duration of waiting times.</td>
<td>Supported for duration of</td>
<td>Not supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>waiting time until jobs with</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>permanent contract</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Social capital</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H 5</td>
<td></td>
<td>Larger percentages of migrants in the region of residence decrease</td>
<td>–</td>
<td>Supported in the model on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the duration of second generation migrants' waiting times.</td>
<td></td>
<td>duration of waiting time until</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>any type of contract for all 2.gen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>migrant groups</td>
</tr>
<tr>
<td>H 6</td>
<td></td>
<td>Larger network participation of migrants in the region of residence</td>
<td>–</td>
<td>Supported in the model on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>decreases the duration of second generation migrants' waiting times.</td>
<td></td>
<td>duration of waiting time until</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>any type of contract for all 2.gen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>migrant groups</td>
</tr>
<tr>
<td>H 7</td>
<td></td>
<td>2.gen migrants with Turkish or Moroccan background have longer waiting</td>
<td>–</td>
<td>Supported, the effect is later</td>
</tr>
<tr>
<td></td>
<td></td>
<td>times than those with Surinamese, Dutch Antillean or Arabian background.</td>
<td></td>
<td>explained by group composition</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Discrimination</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H 8</td>
<td></td>
<td>Second generation migrants have longer waiting times than natives.</td>
<td>Supported for Turkish 2.gen</td>
<td>Supported for the duration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>migrants, the effect is later</td>
<td>until permanent positions,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>explained by their worse</td>
<td>Turkish and Moroccan 2.gen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>language proficiency</td>
<td>migrants wait longer to enter</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>first jobs with any contract, the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>effect is explained by group</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>composition</td>
</tr>
<tr>
<td>H 9</td>
<td></td>
<td>Second generation migrants enter jobs with lower status than natives.</td>
<td>Confirmed for 2.gen migrants with</td>
<td>Postcolonial 2.gen migrants are</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Italian, Spanish and Greek</td>
<td>more likely to enter jobs with</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>background, the effect is later</td>
<td>with with permanent contracts</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>explained by their worse</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>educational level</td>
<td></td>
</tr>
<tr>
<td>H 10</td>
<td></td>
<td>In the Netherlands second generation migrants have lower chances to be</td>
<td>–</td>
<td>Supported, the effect is due to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>employed than natives.</td>
<td></td>
<td>parental occupational status</td>
</tr>
</tbody>
</table>

- : not tested
eration migrants depend to a larger extent on their social context and the community when entering the labour market than natives because they lack language proficiency and host country specific knowledge (Portes, 1998; Borjas, 1992; Van Tubergen, 2006). Larger quantities of migrants in a region are supposed to be helpful because they support formal and informal migrant networks that foster useful connections and strategies for successful job search and job opportunities. Furthermore, more active and visible migrants in the labour market lead to higher acceptance by employers, colleagues and customers. Prejudices against migrants may be diminished if employers are used to working with people from different cultural backgrounds. Therefore, we assumed that higher percentages of migrants and larger work participation of migrants in the region of residence decrease the duration of waiting time for second generation migrants (Hypotheses 5 and 6).

The second set of hypotheses related to distribution factors. These factors are called distribution factors because they lead to 1) second generation migrants entering different jobs compared with natives or 2) employers selecting second generation migrants into different jobs compared with natives. Both factors can work independent of group compositions and lead to ethnic inequality for second generation migrants when they transit from school to work. In line with error and taste discrimination (Arrow, 1973c; Becker, 1971; Kogan, 2007; Phelps, 1972; Van Tubergen, 2006) we assumed that natives perceive Postcolonial second generation migrants more favourably in the Netherlands due to their longer migration history. We hypothesised that second generation migrants with Turkish or Moroccan background need longer to enter the labour market in the Netherlands than Postcolonial second generation migrants (Hypothesis 7).

Furthermore, based on job search theory second generation migrants have higher search costs as they may lack specific knowledge and social capital with respect to the labour market of the host society. Additionally, they may fear discrimination in the labour market even if it does not actually exist (McCall, 1970; Kalter and Granato, 2002; Kogan, 2007). This increases their job search costs and decreases their subjective probability to find a job. Consequently, they are willing to accept a worse job sooner than natives. Moreover, second generation migrants chances to price themselves into the labour market are limited by minimum wages in the Netherlands. They cannot lower their reservation wage at a certain job status. Thus, we assumed that second generation migrants have lower chances to enter any job in the Netherlands. Thus, second generation migrants were supposed to have longer durations of labour market entrances, enter first jobs with lower status and have lower chances to be employed (Hypotheses 8, 9 and 10).

Table 8.1 summarizes the hypotheses and depicts whether they were supported in the
German and Dutch institutional contexts. We tested hypotheses 1, 3, 4, 8, and 9 in Germany and all hypotheses for the Netherlands except for the country comparative hypothesis 2.

Hypothesis 1 relates to a composition effect with regard to human capital. It is not supported by any of the models on duration of waiting time in the German context. In the Netherlands, this hypothesis was not supported in any of the duration models either. We do not find ethnic penalties for second generation migrants in Germany or the Netherlands. The composition of the group with regard to gender, labour market entrance period, community of residence and regional labour markets already explained the disadvantages of second generation migrants. Nevertheless, we do find that educational attainment of second generation migrants is differently rewarded especially at the German labour market (see below). This effect may be due to unobserved factors or discrimination.

The country comparative hypothesis 2 is supported by the data. Dual apprenticeships have a bridge character to the labour market and are an important gateway to the labour market for young people only in Germany. Arguably, the effect of a certain type of vocational training cannot simply be transferred from one institutional context to another. This is a crucial finding because it points to the necessity to include employers perceptions and the structure of labour markets to assess whether dual apprenticeships are rewarded at school-to-work transitions or not.

Like hypothesis 3 predicted, the composition with regard to written language proficiency reduces the negative effect of second generation ethnicity on duration of waiting times in both models on duration of waiting time in Germany. In contrast, the hypothesis 3 is not supported in any of the duration models for the Netherlands. Language proficiency at age 12 has no explanatory power for school-to-work transitions taking place at least four years later. Individuals' language skills changed during the years after the CITO test.

Hypothesis 4 was supported in the German context only. Social background had a significant impact on school-to-work transitions in Germany. We found that the higher the father's jobs position, the more likely is a person to enter permanent employment fast. Thus, the information and contacts of fathers support how their children transit from school to work. In contrast, employment of fathers or mothers did not significantly influence the timing of labour market entrance in the Netherlands. The indicator was measured much earlier than at school-to-work transitions. The parental occupational status at the time when contacts or information are actually needed should be a more appropriate indicator.

With hypotheses 5 and 6 we tested the influence of social contexts in the Netherlands exclusively. The results showed that the more migrants lived in the region of residence of second generation migrants, the faster all groups of second generation migrants entered first jobs with any type of contract. Moreover, larger work participation of migrants in the region of residence also shortened labour market entrances specifically for Turkish, Moroc-
can and Postcolonial second generation migrants.

The fact that second generation migrants with Turkish or Moroccan background had to wait longer to enter a first job than those with Surinamese, Netherlands Antillean or Arubean background supported hypothesis 7. Nevertheless, the effect was due to different group compositions of Turkish and Moroccan second generation migrants.

Hypothesis 8 predicted that second generation migrants have longer waiting times than natives. We found that this indeed applied to Turkish second generation migrants in Germany. Our analysis showed that this seems to be the case because they were less able to write German than natives. Moreover, the hypothesis could be confirmed for Turkish and Moroccan second migrants in the Netherlands when they enter permanent positions. This effect was also due to the groups’ composition.

The fact that second generation migrants indeed entered jobs with lower status than natives in both countries confirmed hypothesis 9. We found this to be true for second generation migrants with Italian, Spanish and Greek background. The effect was, however, due to their worse educational levels. Furthermore, Postcolonial second generation migrants were more likely to enter jobs with with permanent contracts in the Netherlands. Hypothesis 10 was found to be true—second generation migrants had lower chances to be employed than natives in the Netherlands. The effect was due to occupational status of their parents. Occupational status of the parents is crucial for entering the labour market, but did not matter for the timing of school-to-work transitions.

In the following we will briefly sum up the main findings of the in-depth analyses of ethnic inequality in school-to-work transitions in Germany and the Netherlands. In this summary we will focus exclusively on the most important factors regarding school-to-work transitions (for a complete discussion of empirical findings see Sections 5.4, 6.4 and 7.2). For Germany we will focus on the following seven factors: 1) ethnicity, 2) language proficiency, 3) education, 4) work experience, 5) unemployment rates, 6) labour market entrance period, and 7) ethnicity specific effects.

**Entering first full-time and part-time jobs in Germany**

Turkish second generation migrants need longer to find first jobs in Germany, while other ethnic groups on the average need as much time as natives. Their ethnic inequality at the timing of labour market entrance is due to their lack of relevant resources: they are less able to write German than natives. Especially Turkish second generation migrants need longer to find a job if unemployment rates increase in the region where they live. Generally, young people who entered the labour market after 1993 in times when the economy
worsened had to wait longer to find a job. Second generation migrants seem to gain the ‘wrong’ work experience. In contrast to natives, both groups, second generation migrants from Turkey or the other three Mediterranean countries, need longer to enter the labour market faster even if they have work experience.

Attaining a higher level of education helps to enter the labour market fast. The higher the level of education that individuals attained, the better it is for their fast labour market entrance. Second generation migrants with Turkish, Spanish, Greek, and Italian background, however, can especially profit from completing a dual apprenticeship. Moreover, second generation migrants with Turkish background are able to enter the labour market fast if they attain elementary education.

The longer a person is waiting for a job the less likely s/he is to obtain a job. Especially Turkish second generation migrants who do not enter jobs immediately or after 1 month face the largest disadvantages in the first 2 to 6 months of job search. Turkish second generation migrants face less disadvantages after the first months of waiting because their information deficit diminishes. Furthermore, employers learn about their actual skills and are less prone to discriminate. Additionally, fewer native applicants might be available for the specific job position in later rounds of hiring.

**Entering first jobs with permanent and temporary contracts in Germany**

Second generation migrants enter permanent jobs faster than natives, but they need more time to enter temporary jobs. This is a positive finding, since permanent job are less risky. Education hardly influences the chance to enter permanent positions. However, while intermediate education helps entering temporary job fast, it makes people wait longer to enter permanent positions.

Work experience signals an applicant’s ability to employers and, thus facilitates labour market entrance into permanent positions. It even decreases chances to enter temporary jobs. Moreover, language skills prove important for any job. Writing the host country language well increases chances to quickly find a permanent and a temporary job. However, second generation migrants with work experience face a strong disadvantage: they need longer to enter permanent first positions. Second generation migrants may not get similar work experience like natives or their work experience is not transferable. Moreover, it could be that employers do not reward their work experience the same way like natives’. However, elementary education increases the chance to enter permanent jobs especially for Turkish second generation migrants. Thus, there are segments in the labour market which do offer chances for permanent employment of second generation migrants.

Increasing unemployment rates in the region of residence make it harder for young people
to enter the labour market. Moreover, entering the labour market after 1993 made young people wait longer to find a permanent job. Young people face special disadvantages when the economy is worsening.

**Entering first jobs with higher occupational status in Germany**

Second generation migrants with Italian, Spanish or Greek background have lower chances to enter first jobs with higher occupational status than natives because they have lower levels of education. There are no disadvantages concerning occupational status for Turkish second generation migrants, a finding that has been mentioned before (Euwals, Dagevos, Gijsberts, and Roodenburg, 2007b).

The better educated are more likely to enter jobs with higher occupational status. Additionally, more work experience and better written German language proficiency increase chances to enter first jobs with higher occupational status. Second generation migrants can profit from work experience with regard to gaining access to higher occupational status jobs. However, Turkish second generation migrants have especially lower chances to enter higher occupational status positions when they completed elementary education. Elementary education ("Hauptschule") may indeed have a stigmatizing effect for Turkish second generation migrants.

In the following we will sum up the most important findings for the Netherlands. We will present the findings regarding the factors 1) ethnicity, 2) education, 3) unemployment rates, 4) work participation of migrants in the region of residence, 5) percentage of migrants in the region of residence, and 6) ethnicity specific effects.

**Access to the labour market in the Netherlands**

Getting a foothold in the labour market is difficult for second generation migrants in the Netherlands. We find comparably large disadvantages for the chance to have a job for second generation migrants with Turkish, Moroccan or Postcolonial background in the Netherlands. Arguably, the chance to have a job soon after leaving the education system is lower for second generation migrants even if they have comparable education and skill characteristics like native born labour market entrants. Minimum wages are a barrier to the hiring of second generation migrants in the Netherlands.

Young people also function as a buffer on the Dutch labour market: the higher the regional unemployment rate at the region of residence, the lower is their chance to be employed. Higher levels of education increase employment chances. Graduating from vocational education (MBO) or apprenticeships (BBO) facilitates labour market access
in the Netherlands. Networks and employer contacts gained during the training indeed help to find employment. However, persons who followed MBO education were even more likely to enter employment compared to those with BBO education. Especially second generation migrants with MBO degrees have a higher chance to be employed. Furthermore, more employed migrants in their region of residence might offer jobs to second generation migrants or help them to find jobs. Second generation migrants are more likely to be employed if ethnic communities are better integrated into the workforce. In contrast, migrants are less likely to be employed when they live in regions with larger percentages of migrants.

**Entering first full-time and part-time jobs in the Netherlands**

Second generation migrants need longer to enter the labour market in the Netherlands, this especially applies to Turkish and Moroccan second generation migrants. Their disadvantages are due to regional and demographic characteristics. The overall labour market situation also affects the timing of labour market entrances: those who tried to enter the labour market after 1996 when unemployment rates decreased in the Netherlands could enter faster. Moreover, increasing unemployment rates in the region of residence increase labour market entrance time. Persons who live in regions where the migrant population is larger are significantly more likely to enter jobs quickly. Migrants concentrate in cities, where job offer rates might be higher.

Persons who completed secondary (MBO) or intermediate (MAVO) education are likely to enter the labour market fast. Especially MBO education helps at labour market entrance. In contrast to Germany, firm and school-based apprenticeships do not significantly affect individuals’ duration of waiting time in the Netherlands. Second generation migrants are likely to quickly enter jobs when they live in regions with more employed migrants. Larger migrant networks with useful information flows provide information on job opportunities. Moreover, employers might have more experience with hiring persons with migration background in these regions and discriminate less.

**Entering permanent jobs in the Netherlands**

Second generation migrants need longer to enter jobs with permanent contracts that are less risky and less exposed to business cycles. Higher regional unemployment rates decrease the chances to enter permanent employment fast for both, natives and second generation migrants. When the economic situation is poor, employers tend to hire young people who enter the labour market on a non-permanent basis. Young people who are especially vulnerable serve as buffers at the labour market.
Moreover, a larger percentage of migrant population in the region of residence significantly increases chances to enter permanent employment. The finding underlines again that larger percentages of migrant population in the region of residence are related to structural characteristics of a community which increases labour market chances for young people. Persons who completed MBO educational tracks enter permanent positions significantly quicker compared to those who completed individualised classes.

**First income in the Netherlands**

Due to Dutch minimum wages second generation migrants face no disadvantages with regard to income when transiting from school to work, at least if they manage to enter the labour market (see above). Larger percentages of working migrants and larger migrant populations in the region of residence also have a positive effect on first incomes. Migrants concentrate in the four largest cities Amsterdam, Rotterdam, the Hague, and Utrecht in the Western part of the Netherlands (OECD, 2008b, 54), where young people can gain larger first incomes.

Individuals who completed secondary education (MBO) and firm- and school-based apprenticeships (BBO) are likely to receive higher first incomes. Receiving an income before finishing education might contribute to the large positive effect of BBO. The large effects of education also capture age related minimum income effects.

**Country comparative empirical findings**

Turkish second generation migrants in Germany are less likely to enter jobs fast. In contrast, there are no disadvantages for this group in the Netherlands. However, the period of labour market entrance matters in Germany and the Netherlands. The economic situation is decisive for school-to-work transitions. While young persons who enter the labour market after 1993 need longer to enter a job, young people in the Netherlands who enter the labour market after 1996 need less time to enter.

In contrast to Germany dual apprenticeships do not facilitate quick labour market entrance in the Netherlands. This is an important finding, as dual apprenticeships are an important gateway to the labour market for young people. Compared to the respective reference categories upper secondary and intermediate education decrease the waiting times until first jobs in both countries. Secondary education (Abitur and MBO education respectively) makes people enter the labour market fastest in both countries. While better written language proficiency significantly facilitates quick labour market entrances in Germany, this is not the case in the Netherlands with regard to language proficiency because it has been measured at age 12.
Implications for school-to-work transitions in Germany and the Netherlands

We derive core implications from the analysis of ethnic inequality in school-to-work transitions. They relate to 1) lack of resources, 2) labour market structures, (3) ethnic groups as targets, and (4) institutional designs in its context.

(1) Lack of resources
Second generation migrants enter apprenticeship positions less often than natives and are still concentrated in very few apprenticeships. With regard to school-to-work transitions it seems especially efficient to further support and facilitate second generation migrants’ access to apprenticeships in Germany. Orientation meetings that highlight opportunities for applications and campaigns that specifically target young migrants proved to be successful in this context. Based on the campaign “Berlin needs you!” (“Berlin braucht dich!”) the city Berlin increased the percentage of persons with migration background in public service apprenticeships by more than 4% percentage points between 2006 and 2008 (Berlin braucht Dich, 2007). Second generation migrants are underrepresented in the public sector in most European countries. Nevertheless, the public sector has an important role in the labour market integration of second generation migrants. It serves as a role model for the private sector. Public sector employment of second generation migrants increases their visibility in daily lives. By working in the public sector migrants can teach public institutions to better understand their needs (OECD, 2008b).

In spite of the fact that work experience facilitates school-to-work transitions in Germany, second generation migrants could not always profit from their work experience as much as natives. To bring second generation migrants in contact with employers more company fairs, internship and mentoring programmes seem to be useful measures (ibid.).

In the Netherlands, the access to vocational education MBO is especially important for school-to-work transitions. Moreover, drop-out rates are a severe problem for second generation migrants. Policy measures should, therefore, facilitate access to MBO and decrease drop-out rates during this education. More investment to improve the quality of MBO education is needed. Moreover, rigorous evaluations of youth training and employment programmes at the municipal level should identify successful labour market integration programmes that can be transferred to other regions (OECD, 2008a).

The inability to cater for the diversity of pupils in these tracks is a problem, especially if second generation migrant groups are indeed polarising in the Netherlands. As a link between the society and the groups that are at risk the students who successfully completed vocational education and entered the labour market could act as mentors and role models. Similar projects are tested at the moment in Amsterdam (Crul, 2008).
Second generation migrants grow up in a multilingual environment and, thus, lack some language proficiency. We find language proficiency to be important in Germany, but probably due to variance reduction not in the Netherlands (see above). Undoubtedly, language proficiency is a key competence. Although growing up in a multilingual environment can be an advantage, it also reflects second generation migrants’ limited exposure to the host-country language. This has important policy implications. First of all, it renders early language interventions like financial support for Kindergarten attendance and childcare facilities necessary. Additional investments in further language support programmes at higher ages should be extremely fruitful to prevent ethnic inequality in school-to-work transitions. Trainings that compensate the limited networks of second generation migrants and their less favourable social background by providing general knowledge about the function of the labour market, on how to apply for a job and how to succeed in recruitment interviews could be successful. Moreover, it might also be efficient to offer courses for parents of very young second generation migrants to enable them to support their children during labour market entrance. In addition to already available so-called “integration courses” need-tailored language courses at several steps of careers will be worthwhile. Language classes whose contents are oriented towards job contents seem beneficial for both, employers and employees. Investments in successful measures like those mentioned above are crucial to prevent young people from longlasting societal consequences of unfavourable labour market starts. However, further research is needed to properly evaluate several types of trainings.

(2) Labour market structures
Labour market discrimination of second generation migrants can exist, even though we could not show it with the methodologic approach applied in the present work. Anti-discrimination laws are important elements to tackle the issue, but are no sufficient means. Moreover, discrimination in times of economic downturn is an important issue. Young people and second generation migrants serve as buffers on the labour market. Some policy measures could try to cushion these effects. For instance, anonymous CVs are tested in some European countries, but there are no strong evaluations yet. Moreover, the diversification of recruitment channels and enhancement of employers awareness of second generation migrants and young peoples obstacles at school-to-work transitions might be useful. As young people are vulnerable at school-to-work transitions, policies should especially support their labour market entrances in times of economic downturn by increasing training or internship offers.

(3) Target ethnic groups
Although it may seem straightforward, the necessity to target ethnic groups specifically cannot be emphasised enough. The results show that policy measures have to take specific compositions of ethnic groups into account to be able to target them efficiently. Each group has its specific immigration history and composition with regard to educational level and social background. Moreover, communities are heterogeneous and educational levels of its members might polarise. Thus, it has to be further analysed how communities develop. To integrate whole groups, attention has to be paid to those who seem less easy to target. For instance, specific offers to more traditional communities are necessary.

Turkish second generation migrants are a special group in Germany and the Netherlands. Due to their large size and long immigration history they have a specific role in the host countries. Although it is necessary to emphasise in which areas the specific deficits of this ethnic group lie, a negative bias in their media representation and in the presentation of labour market outcomes of this group can easily lead to their further stigmatisation. More emphasis should be placed on success stories, the importance of group compositions and how to tackle these factors.

Based on a 20-item index the recently published study “Ungemutzte Potenziale” concluded that the integration of Turkish migrants is lowest in Germany (Woellert and Klingholz, 2009). Although the study presented this and other findings in a more differentiated way, this finding got most media attention. Success ranking of migrants in Germany, thus, might not be the appropriate way to facilitate structural integration of Turkish migrants.

(4) Institutional design in its context

The dual apprenticeship system works well in Germany. Firm- and school-based vocational training in the Netherlands, however, did not facilitate school-to-work transitions. This was the case despite the fact that institutional designs are very similar in Germany and the Netherlands with regard to school-to-work transitions. Thus, a feature that is successful in one institutional context, is not necessarily important in another one. Different social, economic, and historical contexts have shaped the educational system of each of the two countries and have to be accounted for (cf. Crul, 2007). Moreover, specific labour market structures and perceptions of employers are decisive factors.

In the discussion of school-to-work transitions the introduction of minimum wages is often asked for to balance low educational levels of labour market entrants. Our analysis hinted towards the fact that minimum wages indeed helped to avoid income inequality between second generation migrants and natives. Nevertheless, we have also seen that second generation migrants were much less likely to be employed in the Netherlands. This was the case even though we did not consider school drop-outs in the Netherlands. Thus, introducing minimum wages might not lead to the expected effects in the German institu-
tional context where second generation migrants already need longer to enter the labour market.

Suggestions for future work

The fact that we could not include school drop-outs in the Dutch data may have positively influenced the results of ethnic minorities and language proficiency in the Netherlands. The effect of completing any education might be larger in reality. Apprenticeship completion might also have a slightly more positive or negative effect than we found due to registration inconsistencies. Future surveys should, therefore, try to be very precise when they identify these groups and conduct dropout analyses.

We found negative effects of gender for the timing of school-to-work transitions in the Netherlands, but hardly any effect of gender in Germany. The result might be due to the fact that we could exclude waiting time months in Germany, in which women were actually not searching for a job. This emphasises the strong added value of monthly information for the analyses of school-to-work transitions.

The analysis has empirical and conceptual limitations. Empirically, we were limited to the extent to which we could analyse single groups of second generation migrants. Not being able to distinguish all ethnic groups and looking only at one ethnic groups (Turkish second generation migrants) in both countries, our analysis bears the risk to overemphasize a structurally less well integrated group with identifiable social problems and overlook success stories of immigrants (Thomson and Crul, 2007, 1026). The polarisation within ethnic groups is a phenomenon which we were not able to detect with our data. In a further step we would aim at calculating separate analyses for ethnic groups as well as men and women to get a clearer understanding of ethnic group mechanisms. Unfortunately, today's data sources do not provide case numbers of second generation migrants that allow these analyses.

We tested different indicators of school-to-work transitions including temporary and permanent contracts, income and occupational status to analyse ethnic inequality with regard to quality of first jobs. We were able to show that these indicators are important for school-to-work transitions. Another question for further research, however, is whether further indicators of quality of school-to-work transitions can be used. The type of contract might have a different meaning in different occupational sectors (cf. Schaeper, Kühn, and Witzel, 2002). Therefore, further analyses should look at occupation specific effects with regard to quality of jobs. As there is the close link between education and the labour market in Germany and the Netherlands analysis could differentiate and control for different tracks
of education for this purpose. Data limitations impeded this step for the present analysis. Furthermore, we have argued that entrance jobs impact later labour market careers. On the basis of our data further analyses could test whether this indeed applies to different ethnic groups of second generation migrants.

The effect of social capital and contacts for finding a job is a long-lasting debate in sociology. We found significant effects of the percentage of migrants and the percentage of working migrants on school-to-work transitions in the Netherlands and interpreted them as network effects. Analyses for single regions could, however, try to further disentangle the underlying mechanisms causing these effects.

We singled out very specific institutional effects of dual apprenticeships in the two compared countries. Analysis of institutional design and rewards of apprenticeships led to clear-cut hypothesis. Moreover, the control of structural conditions (e.g. regional unemployment rates, percentages of migrants in regions) helped to avoid bias by structural conditions in the analysis. This way we were able to unambiguously attribute differential findings for second generation migrants within Germany and the Netherlands to the specific distinguished institutional effect. We circumvented the challenge to find effects due to “institutional packages” and did not face the “small N problem” (Kogan, 2007). Thus, in-depth analysis are much better suited to detect specific effects in school-to-work transition than comparative analysis including a larger number of institutional contexts. Nevertheless, in a further step one could try to reproduce the findings in a sample including additional countries.

The thesis emphasised the importance of being precise about conceptualisations and operationalisation of school-to-work transitions. Leaving the education system, waiting times and job entrance processes are concepts that require exact definitions in any analysis. Different definitions lead to identification of different processes. Although we provided comprehensive reasoning for our definition and made many efforts to be precise, all definitions will remain somewhat subjective. For future research it is crucial to test implications of different school-to-work transition identification measures. The present thesis exploited the strength of the data sets as much as possible and could show the effects of dual apprenticeship completion in two institutional contexts.
Chapter 9

Appendix

In this chapter we present two empirical models based on GSOEP to underline the argument that there are time-varying covariates in the models on Germany: 1) a Cox proportional hazard model with time independent covariates, 2) a Cox proportional hazard model with time independent covariates including interactions with time and 3) a logistic discrete-time event history model. The findings largely support the results of the model presented above. The second section of the chapter gives more detailed information on variables in the Dutch data set and their operationalisation.

9.1 Second generation migrants in Germany

This section presents a Cox proportional hazard model on duration of waiting time until first job with any type of contract, a Cox proportional hazard model with time independent covariates including interactions with time and 3) a logistic discrete-time event history model.

Duration of waiting time until early jobs with any type of contract

The results in Table 9.1 depict the coefficients of the Cox proportional hazard model on duration of waiting time until first jobs with any type of contract (marginal effects).\(^1\) In this model all covariates are measured at the time of the event and no time-varying covariates are included. The Chi Square values are taken from a version of the model where we do not control for clustered data by German federal states because Stata does not calculate the value when we use the cluster command.

\(^1\)Please note that due to the fact that these are previous versions of the model, some of the independent variables and their operationalisation diverge from those in chapter 6.
Step 1 of the model gives an overview of the effects of ethnicity on the duration of waiting time until jobs with any kind of contract without including other covariates. The coefficients highlight significant negative effects for second generation migrants with Turkish and Greek background. This means without taking distribution and composition mechanisms into account, these groups need more time to enter first jobs or have a lower chance to enter employment as compared to natives respectively. Spanish second generation migrants also have a negative chance to enter employment, while Italian second generation migrants have a positive chance. However, both gross effects are not significant. In the second step, we find large gross disadvantages for Turkish (at the 0.1% level) and the remaining second generation migrants (at the 5% level) regarding the chances to enter full-time or part-time employment. The two ethnic groups have to wait longer to find a job with any type of contract. Looking at the gross effects of the ethnic groups separately shows that persons with Greek and Turkish ethnicities are responsible for this effect.

After control variables are included into the model in step 3 the gross effects regarding ethnicity are consistent. This means that the ethnicity effects are not due to composition effects with regard to age, gender, household income, regional unemployment rates, or number of children below age 16 in the household. However, the size of the coefficients halves in value. The negative influence of Turkish ethnicity is significant at the 5% level in this step, while that of the group of second generation migrants is significant at the 0.1% level. When we include education in the fourth step, the size of the ethnicity coefficients decreases slightly. Turkish second generation migrants face the largest ethnic penalties (-0.107) and the variable is significant at the 0.1% level. The latter is true for the remaining second generation migrants, but the size of the coefficient is lower (-0.046). The inclusion of educational certificates proves that ethnic penalties exist for these groups in Germany with regard to the timing of labour market entrance.

The introduction of social background variables in terms of ISEI scores of the father the size of the ethnic penalties and their significance remains stable (step 5). After the inclusion of skill variables in step 6 the ethnicity variables turn insignificant. Work experience and German language proficiency have a highly significant and positive influence. The more work experience a person has, the higher is her/his chance to enter a first job. The same is true for those, who evaluate their own language proficiency in writing German higher. The size of the coefficient indicates that the effect of written language proficiency is considerably larger than that of work experience. The skills and contacts that work experience provide as well as language proficiency explain ethnic penalties with regard to longer waiting times. The finding underlines the importance of completeness of a model and the importance of language proficiency skills and skill acquired through work experience.

Expectedly, females are likely to wait longer for a first job, but the effect is not significant.
The effect of children in the household might partly capture the female effect as still rather women than men are responsible for taking care of children in Germany. Increasing adjusted monthly net household income in Euro has a tiny positive effect, but no significant effect on the chance to enter employment. Expectedly, the higher regional unemployment rates, the longer it takes to find a job. The coefficient is significant at least at the 1% level in all model steps. Those who are older at the beginning of the waiting time enter first jobs later. While this effect might capture educational level in step 3, the effect stays stable when measuring the duration until accomplishment of a certain level of education in the following steps.

Expectedly, educational certificates have the strongest influence on timing of first labour market entrances. Compared to inadequately completed education, maturity certificates and apprenticeships (with maturity or intermediate education) increase the chance to enter employment quickly. Expectedly, apprenticeships smoothen labour market entrances in Germany. Although maturity certificates have a larger positive impact, apprenticeships are especially meaningful for second generation migrants.

Education of the mother or missing information on mother’s education have a negative (but not significant) influence on the waiting time. In contrast, the socio-economic status of fathers has a positive influence. The score does, however, not prove significant in any step of the model.

We include interaction terms in step 7 of the model to show specific ethnicity effects. We find only one differential return to education. All second generation migrants can especially profit from following elementary education. Moreover, work experience benefits Greek, Italian and Spanish second generation migrants to an overproportional extent.

Based on the scaled and nonscaled Schoenfeld residuals the Kaplan-Meier, Log(t) and Rank(t) tests indicated that the PH assumptions violated for step 3 of the model, but true for step 1, 2, 4, 5, 6 and 7. For step 3 two of the three tests contradicted the proportional hazard assumption and hint towards a time varying covariate. To account for the violated assumption in step 3, we included interaction terms of the duration time and the covariates for which the assumption was violated (duration time * Turkish 2nd gen, duration time * Greek/Italian/Spanish 2nd gen, duration time * number of children, duration time * household income, duration time * entrance age, duration time * unemployment).

Table 9.2 depicts step 3 of the Cox model including interactions for non proportionality. This approach has the advantage that it explicitly models the nature of the non proportionality. As a result the subsequent model is more accurately specified and there is greater validity in one’s overall results (Box-Steppensmeier and Zorn, 1998, 16). In the models with time interactions with Turkish second generation migrants, number of children, hh income, age, and unemployment rate we have note strong evidence of non proportionality.
in the variables. For instance each additional month of waiting decreases the hazard of Turkish second generation migrants by 2%. In this model we estimate that after the non-proportional effects of Turkish ethnicity are taken into account, the coefficient changes to a positive sign and reaches statistical significance at the 5% level. Turkish second generation migrants initially (in the first month) have a higher chance to enter employment, but the effect decreases over the period of time. We see similar results in the models interacting time with numbers of children, household income and unemployment rate variables. They hint towards a strong time dependence of these variables and underline nonproportionality. Moreover, they indicate that these variables influence hazards of persons who enter employment immediately differently from those who wait at least one month to find a job. In contrast, the interaction of Greek, Italian and Spanish second generation migrants and the main ethnicity effect fail to reach significance.

The full model (column 7) indicates that the influence of some of the covariates indeed varies over time. According to the findings the interaction terms of unemployment rates and household income with duration time are significant and negative (at the 0.1% and 5% level respectively) when all interactions are included. The results for the full model indicate that once nonproportionality of unemployment rates and household incomes is taken into account, the effects of the other three variables is small and statistically insignificant. It might be that the statistically significant result are rather due to correlation between the interaction terms and the dependent variable than any substantial amount of non proportionality. Because of the substantial collinearity between the variables and their time interactions and also between the interactions themselves, models that include a large number of such interactions run the risk of inflated standard errors (Box-Steffensmeier and Zorn, 1998, 18). Moreover, the values for the log-likelihood statistics (distributed as $\chi^2$) for each suggest that column 3 delivers the best model fit as compared to the direct-effects Cox model in Table 9.2, while the model fit is not improved in the full model. In the model of column three including the interaction of time and number of children the results with regard to effect sign and size mainly resemble those in table (except for females and age), but some covariates fail to reach significance.

Another way to deal with covariates which violate the assumption is to allow the basis rate to vary for these subgroups. We could not stratify the model by all the variables for which the assumption was violated because of low case numbers. Generally, Table 9.2 clearly suggests that the presence of some degree of non proportionality importantly affects the estimated influences of the variables. Moreover, due to the large number of ties (about 74% enter jobs after 1 month) we try other modellings. First of all, we include time-varying covariates in the Cox model. As most parametric models also rely on the proportional hazard assumption and impose more restrictions on the shape of the hazard
9.1. SECOND GENERATION MIGRANTS IN GERMANY

rate we do not model the log-logistic, log-normal or Weibull model. Instead we will present results on a discrete-time model in following section and compute a piecewise regression to detect changes in parameter values over duration time of time-independent covariates 5.4. In the following we will compare the results of the previous model with a discrete-time event history model.

9.1.1 Logit discrete-time event history model

The duration models presented so far relied on the assumption that waiting time until first jobs is a continuously measured variable. Job entrances actually take place at any day of a month. This means that although we analyse a more continuous process, our monthly data is discrete. Moreover, event occurrences amass at the discrete interval of one month. Discrete-time event history models can be estimated by a logit model. The model estimates the probability that an event will occur conditional on survival and covariates, to some time $t$ (Box-Steffensmeier and Jones, 2004, 70).

Table 9.3 depicts the results for a discrete-time event history model on the chance to enter full- or part-time employment. The model is based on month per person formatted data. To account for duration dependency exhibited in the data the model includes a time variable. Because several functional forms of baseline duration dependency are possible, we tested for different specifications. We estimated several models with linear, natural logarithmised, squared and cubed duration time and computed the likelihood ratio test against the null model. All likelihood ratio values suggested that models accounting for duration dependency will be preferable to models ignoring the dependency. We found that the model including the linear duration dependency provides a better fit than do the other transformations.\(^2\)

With few exceptions the results for the discrete-time model confirm the results of the TVC Cox model (Table 5.4). Second generation migrants with Turkish background are significantly less likely to enter first jobs in both models. One important difference is, though, that ethnic penalties for Turkish second generation migrants is not explained by the inclusion of work experience and written language proficiency in step 6 in the discrete-time model. Second generation with Greek, Italian or Spanish background are less likely to experience an event quickly. The values fail to reach significance in step 2, 5 and 6 of the discrete-time model, but are significant in the TVC Cox model in step 3 and 4. In addition to the TVC Cox model, step one of the model indicates that Greek and Spanish second generation migrants have lower chances to enter employment fast, while Italians have a

\(^2\)The log likelihood value was -3175.2005 and the Stata command lrtest depicted the largest LR Chi2 value (691.35) for linear duration dependency.
higher chance. However, we find no significant gross effects of Greek, Italian or Spanish second generation ethnicity.

Females and increasing numbers of children decrease the chance to enter jobs in both model, but being female has no significant effect in the discrete-time model, while the values are significant in step 3-5 in the TVC Cox model. The number of children significantly decreases the chance to enter employment in step 3 of the discrete-time model, while the effect points into the same direction but is not significant in the other model. Increasing household income has a small positive and increasing age a small negative significant effect in both models. Increasing regional unemployment rates significantly decrease the chance to enter employment in both models (the exception being the insignificant result in step 3 of the TVC Cox model).

All educational certificates have increase the chance to enter employment quickly. A higher certificate involves an even higher chance. This is the case in both models, but the values for elementary education is only significant in step 5 in the discrete-time model while they are significant in all steps in the TVC Cox model. Moreover, coefficients are larger in the TVC Cox model, where the table does not depict marginal effects. In both models, socio-economic status of fathers positively and higher education of mother's negatively influence chances of first employment. Both effects are not significant. Results of both models show that work experience and written language proficiency decrease the waiting time until first jobs. The size of the coefficients indicate that written language proficiency is much more important in this context than work experience. Moreover, work experience has no significant influence in the TVC Cox model (step 5). The interaction term findings confirm more positive returns to elementary education and less returns to work experience for both groups of second generation migrants. However, this model does not support that second generation migrants with Greek, Italian or Spanish parent(s) can particularly profit from apprenticeships.

Generally, the results of both models are very similar. The deviate concerning significance concerning gender, Greek/Italian/Spanish second generation migrants, no. of children in the household, and work experience, but not with regard to the sign of effects. Therefore, and because of the fulfilled proportional hazards assumption we conclude that the TVC Cox model provides reliable results.

9.2 Dutch data

This section present more information on the three data sets that the analyses for the Netherlands is based on. Moreover,
9.2. DUTCH DATA

9.2.1 VOCL/SVD/SSB data

Preceding surveys of Dutch school cohorts encountered large drop-outs and non-responses, particular of less educated parents and people with a migration history. However, in the cohorts after 1989 which we are using for the present analyses the problem of selective panel attrition diminished (Traag, Valk, Velden, Vries, and Wolbers, 2004).

By using register data for the years 2003 and 2004 we could have obtained information on people who exited the sample and were still in the education system in one of these years. Nevertheless, these additional cases are highly selective because students from the VOCL’93 cohort and those in higher education would be overrepresented. Therefore, we decided not to include them in our sample.

In the SVD data set, information on occupational status (ISEI) or the Erikson/Goldthorpe class scheme (EGP) have not been consistently collected. Therefore, we cannot include these indicators into our analysis.

The disappearance of a pupil from a school in the VOCL sample does not necessarily coincide with him/her leaving the education system. If a pupil moves to another region, changes schools or leaves the country, s/he is not followed and drops out of the survey. These cases might appear in the sample later again as they could be included into the sample of other schools. They are labelled as missing values ‘back in education’ or ‘did not exit’. These cases were included into our sample and we imputed their missing educational information in accordance to their last educational information available.

Moreover, we have no consistent information on apprentices. Schools which educated students within the apprenticeship system (BBO) could choose whether they assign their students as working or in education. If they did the latter, the students stayed within the survey. In contrast, when schools assigned students as having left the education system, they were included in the SVD sample of the following year. If we leave these persons within the sample, we would, thus, overestimate unemployment. As we have no reason to assume that schools systematically register their students in a different way, we include only those apprentices that were counted as being still in the education system. In a first step, we calculate the model with apprentices that were listed as “leerlingwezen” and results showed that whether including this possibly selective group does not affect our results to a large extent. The forms of individualised educational tracks included in our reference category are the following: vso, isk, bavo, ibo, ilto, ilno, ivbo, and iao.

Scholastic performance, performance motivation, and school perception variables have been measured in the first year of secondary education. School perception is measured at an eleven item scale with Cronbach’s Alpha of 0.75 (Traag, Valk, Velden, Vries, and
Wolbers, 2004). To give an example the first three items measure agreement with the following sentences: “In school you can learn many interesting things” (“Op school kun je veel interessante dingen leren”), “I would rather work than go to school” (“Ik zou liever werken dan naar school gaan”) and “If I could get a job that I wanted I would immediately leave school” (“Als ik een baan zou kunnen krijgen die ik graag zou willen, zou ik meteen van school gaan”).

Performance motivation is measured by means of agreement with the following four items: “I like to do my homework well, even if it takes efforts” (“Ik maak mijn schoolwerk graag goed, ook als me dat moeite kost”), “I seldom do my best at school” (“Ik doe weinig mijn best op school”), “During lessons I think of something else” (“Ik zit tijdens de les vaak aan iets anders te denken”) and “Teachers are satisfied with my school performance” (“De leraren zijn tevreden over mijn schoolprestaties”). Performance motivation measures both, intrinsic and extrinsic motivation. As circumstances change, performance motivation in the first year of secondary education of pupils is not likely to reflect the performance motivation at labour market entrance.

Scholastic performance is measured with a total score of three tests (Dutch, calculating and mathematics) which is conducted by a selection of CITO Entreetoets of the first secondary school year. The test consist of twenty multiple choice questions and Cronbach’s Alpha of these three tests is 0.76, 0.84, and 0.77 (Traag, Valk, Velden, Vries, and Wolbers, 2004). The total score ranges from 10 to 60. The CITO scholastic performance test in these data sets do not constitute the real test scores, but the CITO tests have been repeated with each student in our sample for our data.

We calculated the work participation based on the active population in the corresponding region. The definition of allochtones was introduced into Dutch official statistics in 1996 only. As CBS provides the percentage of migrant population per regions before 1996 we filled backwards the values from 1996 for 1994 and 1995. We use the year of the SVD interview as the reference point for these indicators, i.e. at about one year after leaving school, to reflect the labour market situation. The data does not include individual information (e.g. on the region of residence) for the time between leaving school and the SVD interview. If a person moved to a certain region to improve his/her chances for finding a job, we capture this best by including the regional labour market indicators for the time of the SVD interview.

9.2.2 Operationalisation

In the SVD data we use the information on the year and month of leaving the education system as the starting point of the waiting time. The SVD entrance date marks the
9.2. **DUTCH DATA**

beginning of the waiting time. The first job for which a beginning date is available within our data is either the current job (at the time of the SVD interview) or the job respondents were employed in at least one year before they entered their current jobs. Thus, the month and year of current jobs in which respondents work for more than 12 hours at the time of the interview or of a job they had before in which they worked minimum one year and more than 12 hours represents the end of the waiting time.

We added one month to each individual waiting time. Thereby, persons who entered jobs immediately after school are included in the sample and we do not hurt the proportional hazard assumption. If a person started in the job while he or she was still in the education system, we also use the time of leaving the education system as the starting time of the waiting time. Unfortunately, we cannot use this information as an indicator for work experience. Because the information is only available for those who have a job at the time of the interview, we would have selective missing cases.

The whole procedure leaves us with a duration of waiting time in month, which does not necessarily constitute an exclusive period of job search. Interviewees could have traveled or worked before the beginning of the previous/current job. As the data lacks monthly information on occupational position and on the number of jobs until the time of the interview and their beginning dates we do not analyse duration until first jobs but at one of respondent’s first jobs. However, jobs which individuals possibly had until the identified job is rather short as the SVD interview takes part 12-24 months after leaving school.

The date of SVD interviews varied because initially respondents should be interviewed more often than once. Therefore, we have double information (two interviews) on some persons within the sample. We used the earlier interview date as our reference point and dropped information of second interviews. Most of the interviews of whom we used the information have been conducted in year two after the last year in school.

SVD data is available for the years 1999-2005. Thus, information on income at the SVD interview year is missing for individuals who entered the labour market before 1999. The exclusion of these people would not have allowed for an analysis of second generation migrants’ wages. To be able to run the analyses anyhow, we estimated them. To obtain real average daily gross wages of persons who entered the labour market before 1999, we used the information of persons whose incomes were observed from their first labour market year onwards. We estimated group specific real wage increases of these persons with fully observed income information. To do this we used the following strategy. First of all, we estimated groups specific income increases for the first six years in the labour market for the full information persons. We calculated the increases specifically for groups by taking gender, ethnicity and education into account. Second, we estimated the income of persons with unobserved information using the values of the observed income information sample.
We calculated their first income information backwards until the year of their labour market entrance using the values for the similar group with regard to gender, ethnicity and education of the observed income sample. Third, we adjust the backward income estimation by increase real wage price indices of the corresponding years. We obtained adjusted overall wage increases online from Statistics Netherlands for the year 2000.
### Table 9.1: Cox proportional hazard model on duration of waiting time until first job with any type of contract

<table>
<thead>
<tr>
<th></th>
<th>STEP 1</th>
<th>STEP 2</th>
<th>STEP 3</th>
<th>STEP 4</th>
<th>STEP 5</th>
<th>STEP 6</th>
<th>STEP 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>TK (d)</td>
<td>-0.325***</td>
<td>-0.143*</td>
<td>-0.107***</td>
<td>-0.111**</td>
<td>-0.061</td>
<td>0.029</td>
<td></td>
</tr>
<tr>
<td>HE (d)</td>
<td>-0.102*</td>
<td>-0.052***</td>
<td>-0.046***</td>
<td>-0.044***</td>
<td>0.012</td>
<td>-0.153*</td>
<td></td>
</tr>
<tr>
<td>IT (d)</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES (d)</td>
<td>-0.186</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.gen TK (ref.nat.)</td>
<td>-0.324***</td>
<td>-0.084*</td>
<td>-0.046*</td>
<td>-0.044***</td>
<td>0.012</td>
<td>-0.153*</td>
<td></td>
</tr>
<tr>
<td>2.gen It/He/Es</td>
<td>-0.016</td>
<td>-0.021</td>
<td>-0.022</td>
<td>-0.034</td>
<td>-0.021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Females (ref.males)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. children in hh</td>
<td>-0.047***</td>
<td>-0.026**</td>
<td>-0.028***</td>
<td>-0.046***</td>
<td>-0.043***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HH income</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reg. unempl.</td>
<td>-0.013**</td>
<td>-0.009***</td>
<td>-0.010**</td>
<td>-0.016**</td>
<td>-0.014**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (wt entrance)</td>
<td>-0.001***</td>
<td>-0.001***</td>
<td>-0.001***</td>
<td>-0.002***</td>
<td>-0.002***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ref: Inad.compl.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary (d)</td>
<td>-0.009</td>
<td>-0.007</td>
<td>-0.025</td>
<td>-0.006*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate (d)</td>
<td>0.046</td>
<td>0.031</td>
<td>0.005</td>
<td>0.025</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprenticeship</td>
<td>0.0068*</td>
<td>0.0075*</td>
<td>0.103*</td>
<td>0.005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maturity (d)</td>
<td>0.112**</td>
<td>0.120**</td>
<td>0.179*</td>
<td>0.152*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educ.mother</td>
<td>-0.016</td>
<td>-0.019</td>
<td>-0.027</td>
<td>-0.050</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educ.mother:miss</td>
<td>-0.002</td>
<td>-0.004</td>
<td>-0.021</td>
<td>-0.027</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father isei</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father isei:miss</td>
<td>0.012</td>
<td>0.017</td>
<td>0.013</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience</td>
<td>0.024***</td>
<td>0.026***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wr.lang.prof.</td>
<td>0.179***</td>
<td>0.147***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary*TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate*TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprenticeship*TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maturity*TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elem.*It/He/Es</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intern.*It/He/Es</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprentice*It/He/Es</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maturit.*TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elem.*It/He/Es</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intern.*It/He/Es</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apprentice*It/He/Es</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maturit.*TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work exp.*TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work exp.*It/He/Es</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unempl.*TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unempl.*It/He/Es</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender*TK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender*Es/It/He</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Log likelihood: -9843.199, -9843.656, -9833.274, -9823.048, -9823.552, -9817.794, -9815.286
LR Chi Square: 21,220, 22,371, 46,703, 67,586, 108,351, 115,244, 148,382
Events/failures: 1449, 1449, 1449, 1449, 1449, 1449, 1449

*(d) for discrete change of dummy variable from 0 to 1, * p<0.05, ** p<0.01, *** p<0.001
Table 9.2: Cox proportional hazard model including interactions with time

<table>
<thead>
<tr>
<th></th>
<th>1: Turkish</th>
<th>2: HE/IT/ES</th>
<th>3: No. child</th>
<th>4: HH income</th>
<th>5: Age</th>
<th>6: Unempl.</th>
<th>7: Full model</th>
</tr>
</thead>
<tbody>
<tr>
<td>2: gen TK(d)</td>
<td>0.100*</td>
<td>-0.157***</td>
<td>-0.191</td>
<td>-0.047</td>
<td>-0.007</td>
<td>0.006</td>
<td>-0.026</td>
</tr>
<tr>
<td>2: gen other(d)</td>
<td>-0.058***</td>
<td>0.070</td>
<td>-0.061</td>
<td>-0.017</td>
<td>-0.008</td>
<td>-0.039*</td>
<td>-0.030</td>
</tr>
<tr>
<td>Females(d)</td>
<td>-0.016</td>
<td>-0.011</td>
<td>0.000</td>
<td>0.007</td>
<td>-0.015</td>
<td>-0.008</td>
<td>-0.008</td>
</tr>
<tr>
<td>No. children</td>
<td>-0.035***</td>
<td>-0.018***</td>
<td>0.160***</td>
<td>0.002</td>
<td>-0.003</td>
<td>-0.012</td>
<td>-0.003</td>
</tr>
<tr>
<td>HH income</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000*</td>
<td>0.000**</td>
<td>0.000</td>
<td>-0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Reg. unempl.</td>
<td>-0.013**</td>
<td>-0.014***</td>
<td>-0.022**</td>
<td>-0.013*</td>
<td>-0.002*</td>
<td>0.015***</td>
<td>0.012***</td>
</tr>
<tr>
<td>Age(entrance wt)</td>
<td>-0.001**</td>
<td>-0.001**</td>
<td>0.000</td>
<td>0.000</td>
<td>0.001</td>
<td>-0.000</td>
<td>0.001</td>
</tr>
<tr>
<td>time*TK</td>
<td>-0.028**</td>
<td></td>
<td>0.006</td>
<td>0.007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>time* HE/IT/ES</td>
<td></td>
<td>-0.020</td>
<td></td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>time* no. children</td>
<td></td>
<td></td>
<td>-0.040***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>time* hh income</td>
<td></td>
<td></td>
<td>-0.000***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>time* age</td>
<td></td>
<td></td>
<td>-0.001***</td>
<td></td>
<td>-0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time* unempl. rate</td>
<td></td>
<td></td>
<td>-0.020***</td>
<td></td>
<td>-0.006***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-9814.858</td>
<td>-9821.767</td>
<td>-9725.443</td>
<td>-9582.955</td>
<td>-9152.612</td>
<td>-9361.805</td>
<td>-9126.829</td>
</tr>
<tr>
<td>LR Chi Square</td>
<td>1201.117</td>
<td>810.9863</td>
<td>550.8394</td>
<td>20809.9</td>
<td>37773.16</td>
<td>9162.94</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>1492</td>
<td>1492</td>
<td>1492</td>
<td>1492</td>
<td>1492</td>
<td>1492</td>
<td></td>
</tr>
</tbody>
</table>

(d) for discrete change of dummy variable from 0 to 1, * p<0.05, ** p<0.01, *** p<0.001
Table 9.3: Logit discrete-time model on duration of waiting time (until full-/part-time jobs)

<table>
<thead>
<tr>
<th></th>
<th>STEP 1</th>
<th>STEP 2</th>
<th>STEP 3</th>
<th>STEP 4</th>
<th>STEP 5</th>
<th>STEP 6</th>
<th>STEP 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waiting time</td>
<td>-0.009***</td>
<td>-0.009***</td>
<td>-0.008***</td>
<td>-0.008***</td>
<td>-0.008***</td>
<td>-0.007***</td>
<td>-0.007***</td>
</tr>
<tr>
<td>TK (d)</td>
<td>-0.059***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HE (d)</td>
<td>-0.011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT (d)</td>
<td>0.007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES (d)</td>
<td>-0.036</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 gens TK (d, ref. nat)</td>
<td>-0.059***</td>
<td>-0.057***</td>
<td>-0.065***</td>
<td>-0.062***</td>
<td>-0.036***</td>
<td>-0.022</td>
<td></td>
</tr>
<tr>
<td>2 gens IT/HE/ES (d)</td>
<td>-0.011</td>
<td>-0.019*</td>
<td>-0.024*</td>
<td>-0.020</td>
<td>0.004</td>
<td>-0.031</td>
<td></td>
</tr>
<tr>
<td>Females (ref. males)</td>
<td>-0.006</td>
<td>-0.014</td>
<td>-0.013</td>
<td>-0.012</td>
<td>-0.009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. children in hh</td>
<td>-0.013*</td>
<td>-0.010</td>
<td>-0.010</td>
<td>-0.009</td>
<td>-0.010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hh income</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reg. unempl.</td>
<td>-0.007***</td>
<td>-0.007***</td>
<td>-0.007***</td>
<td>-0.007***</td>
<td>-0.007***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age at wt entrance</td>
<td>-0.000*</td>
<td>-0.000***</td>
<td>-0.001***</td>
<td>-0.000***</td>
<td>-0.000***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ref: inad.compl.

Elementary (d) | 0.022 | 0.024* | 0.021 | 0.003 |
Intermediate (d) | 0.058* | 0.059* | 0.054* | 0.043 |
Apprenticeship (d) | 0.112*** | 0.113* | 0.107** | 0.006*** |
Maturity (d) | 0.153*** | 0.151*** | 0.151*** | 0.148*** |
Educ. mother | -0.014 | -0.015 | -0.014 | -0.016 |
Educ. mother miss (d) | -0.010 | -0.012 | -0.011 | -0.019 |
Father isei | 0.001 | 0.001 | 0.000 |        |
Father isei miss (d) | 0.006 | 0.005 | 0.002 |        |
Work experience | 0.012*** | 0.018*** |        |        |
Written lang. prof. | 0.041** | 0.039** |        |        |
Elementary*TK | 0.112* |        |        |        |
Intermediate*TK | 0.064 |        |        |        |
Apprenticeship*TK | -0.004 |        |        |        |
Maturity*TK | -0.013 |        |        |        |
Elementary*IT/HE/ES | 0.053* |        |        |        |
Intermediate*IT/HE/ES | 0.038 |        |        |        |
Apprenticeship*IT/HE/ES | 0.078 |        |        |        |
Maturity*IT/HE/ES | 0.013 |        |        |        |
Work exp.*TK | -0.020*** |        |        |        |
Work exp.*IT/HE/ES | -0.032*** |        |        |        |
Unempl. rate*TK | -0.006 |        |        |        |
Unempl.*IT/HE/ES | 0.002 |        |        |        |
Gender*TK | -0.002 |        |        |        |
Gender*IT/HE/ES | 0.001 |        |        |        |

Log likelihood | -3173.877 | -3175.201 | -3148.032 | -3105.969 | -3104.483 | -3094.365 | -3083.073 |
LR Chi Square | 358.7643 | 380.1105 | 1045.111 |         |         |         |         |
N | 6917 | 6917 | 6917 | 6917 | 6917 | 6917 | 6917 |

(d) for discrete change of dummy variable from 0 to 1, * p<0.05, ** p<0.01, *** p<0.001
Bibliography


CRUL, M., AND J. SCHNEIDER (2005): “Integration of Turkish second-generation men and women in Germany and the Netherlands. The impact of differences in vocational
and academic tracking systems,” in *SSRC Working Group on Education and Migration*, London.


