# Ethnic Inequalities at Labour Market Entry in Belgium and Spain 

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## Editorial Note:

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#### Abstract

While the labour market integration of immigrant youth has increasingly received attention in recent years, due to the lack of appropriate data comparative studies are scarce until now and theoretical reasons for persistence of ethnic disadvantages often remain unclear. In this paper we try to enhance the understanding of ethnic inequalities making use of a new dataset made available by Eurostat, the European Union Labour Force Survey (EULFS) 2000 ad hoc module on school-to-work transitions. Using longitudinal information on labour market entry and event history techniques we try to disentangle several mechanisms leading to ethnic disadvantages and to compare their empirical relevance between Belgium and Spain. Most importantly, it can be shown that non-EU youth are disadvantaged with respect to higher status jobs in both countries. While in Belgium this seems to be mainly due to inferior educational qualifications and labour market discrimination, in Spain in addition to labour market discrimination a notable self-selection process seems to take place. Besides this central finding the paper contains detailed analyses on access to medium and lower status jobs as well as on the general transition patterns from school to work in both countries.


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## 1 Introduction

Immigrants and their descendants constitute a substantial proportion of population in nearly all European Union countries. As occupational attainment has proved to be a key factor of their integration into a host society, the success of immigrants in the labour market is one of the most important topics of political and public discussions and, therefore, one of the most central tasks for scientific research. Although great strides have been made towards understanding immigrant structural assimilation in several countries, current state of research is far from being satisfactory. On the one hand, comparative quantitative studies are scarce until now, on the other hand the basic theoretical mechanisms accounting for ethnic inequalities in the labour market often remain rather unclear, although many analyses are very valuable from a descriptive point of view.

Mainly, both limitations are due to the lack of appropriate data. To study ethnic inequalities in labour markets large unbiased samples of immigrant population are necessary. Therefore, data sets stemming from the official statistical sources are in principal well suited all the more as they usually contain detailed information on the situation and the performance in the labour market. However, it is often questionable whether the information gathered in different countries is really comparable. Furthermore, these data sets usually do not contain information on variables that are relevant for a theoretical understanding of the situation of ethnic minorities, like social origin or host-country-specific skills and knowledge.

In this paper we try to enhance understanding of ethnic inequalities in the labour market making use of a new dataset made available by Eurostat, the European Union Labour Force Survey (EULFS) 2000 ad hoc module on school-to-work transitions. This dataset provides a core set of substantively important variables on school-to-work transitions and is linked to the general EULFS, valuable for large-sample sizes and standardized survey design. The peculiarity of the module is that - besides containing measures for social origin - it endows with a longitudinal perspective on individual's labour market entry by offering measures of the incidence of job search periods and their duration, duration and occupation of the first job which all together allow assessing processes and labour market dynamics at the early career stages. The focus on the time dependent experiences of young immigrants (aged 15-35) during the initial years of their employment careers and particularly on their first significant job provides some direct and indirect tests of important mechanisms of ethnic inequalities which are not possible with other data sets. In addition to that, the data allow a comparative analysis of ethnic inequalities in two countries, Belgium and Spain, different in the context of immigration.

In Section 2 we briefly describe past research on country specific school-to-work transitions and processes of immigrant integration. General theoretical mechanisms which may account for ethnic inequalities in the labour market are further pursued. Then, data, methods and variables are described in detail (Section 3). The following section (4) provides results of the event history analysis of the entry into the first significant job in Belgium and Spain. Major findings are summarized and discussed in Section 5.

## 2 Theory and past research

### 2.1 School-to-work transitions and ethnic inequalities in Belgium and Spain

## School-to-work transitions: institutional settings

It was found elsewhere (Allmendiger 1989; Mueller/Shavit 1998; Hannan et al 1999) that institutional settings, and particularly educational and training systems and their link to labour market entry, greatly influence individual transitions from education to a working life. Both Belgium and Spain have been classified as countries with a school-based training in the recent OECD publications (Clasquin et al 1998; OECD 1998). Due to the rapid expansion of the Spanish university system (lannelli/SoroBonmati 2000; Köhler 1999), the proportion of young people with tertiary education in Spain increased and reached similar levels as in Belgium. Nevertheless, Spain still outnumbers Belgium in the proportion of the least educated youth (OECD 1999). Relatively loose link between education and work in both countries is manifested in high unemployment rates among young school graduates. According to the OECD (1998) in 199630 per cent of Belgian youth were unemployed one year after leaving education, while almost half of Spanish youth were unemployed with women and lesseducated being particularly disadvantaged (see also Planas 1999). Furthermore, unlike in other European countries where education protects against unemployment, in Spain and in the rest of Southern Europe the relative advantage of education is far lower. Reyneri (2001) claims that a lot of the Spanish jobless are educated youths, who have high professional and social aspirations and are able to wait in order to enter highly qualified and rewarding jobs.

## Belgium: Persistence of ethnic inequalities

Like other Western European countries Belgium used to import foreign labour from the Mediterranean countries, mostly Italy as well as from Turkey and Morocco, to meet demands of the booming economy up until the early 1970s. After the oil crisis the entry of third-country nationals has been limited to family members of those settled in the country earlier or to asylum seekers and refugees. Belgium with a number of EU institutions and other international organisations' headquarters attracts EU and other nationals from the Western countries, which are as a rule highly educated and qualified. The integration of Turkish, Moroccan and to certain degree Italian immigrants and their offspring however causes concern, since these communities are not only marked by the greatest educational disadvantage and residential segregation, but also by the highest rates of unemployment, alongside with more substantial over-representation in unskilled manual work (Phalet 2002; SOPEMI 2000; Cruz 1999; Ouali/Rea 1999).

Ouali and Rea (1999) summarizing previous research, point out to the differences between indigenous population and ethnic minorities in the access to jobs. The dominant pattern among Belgians and EU foreigners is rapid integration and stabilization in conventional employment, i.e. long-term contracts, shortly after leaving education, while young people of non-EU origin, as a rule, face long-term unemployment. For ethnic minorities the main problem is not an entry into the stabile
employment career but rather finding a first job, the situation being extremely worrisome for a large majority of young ethnic minority women, who do not manage to find their first jobs during the two years after leaving education. According to Neels (2000), Moroccan and Turkish school-leavers tend to take up blue-collar occupations after leaving school. Their educational attainment, particularly among Moroccan youth, however allows them to seek white-collar employment in clerical and service jobs.

Ouali and Rea (1999) offer a three-fold explanation to the persistence of ethnic inequalities in Belgium. One reason is the reproduction of socio-economic positions of their parents by the second-generation Moroccan and Turkish immigrants and as the result emergence of a new underclass. The authors' (ibid.) second claim is that marked change of professional status from manual, usually held by the first generation immigrants, to non-manual, more common to their children, is rather caused by the industrial reorganization and does not necessarily mean improvement in the social position of the second-generation immigrants, since the latter are still over-represented in the low-skilled jobs even if in the service sector. Another explanation can be found in the ethnic stratification and the duality of the labour market with immigrants being pushed to its lower segments (Piore 1971, 1979; Massey et al 1993). Finally, difficulties in immigrant structural assimilation can be attributed to the 'hierarchisation' of the occupational inclusion and discrimination on the basis of ethnic origin, with EU member state nationals being preferred over stigmatised 'Muslim' foreigners and especially Moroccans. Neels and Stoop (2000) indicate that even in case of equal qualifications the occupational outcomes of Moroccan and Turkish young people fall short to their Belgian counterparts. Areijn et al (1998) on the basis of experiments documented instances of discrimination of youth from ethnic minorities, and particularly Moroccans, when applying for a clerical job, employment in the retail trade sector, and particularly in jobs involving contact with clientele.

## Spain: New immigrant-accepting country, old problems of immigrant integration

Immigration is a new phenomenon in Spain, which until recently has been considered purely the source of emigration to the more developed Western and Northern European countries. King and Rybaczuk (1993) attribute attractiveness of Spain as immigrant destination to the recent economic reorganisation and restructuring of the production that have created all sorts of niches for which 'marginal' forms of inexpensive and flexible labour, one of which are immigrants, are ideally suited.

Cachón (1999) distinguishes between three groups of immigrants to Spain: (1) highly qualified experts and technicians from EU and other developed countries or, in other words, settled immigrants; (2) workers with low qualifications from other countries or precarious immigrants; and (3) illegal workers. Settled immigrants, which in addition to EU nationals include immigrants from other industrial countries and from Latin America ${ }^{1}$ managed to achieve a considerable degree of integration into the Spanish society, a stable position in the labour market, often superior to the

[^0]national population. The rest of immigrants coming to Spain are classified as precarious and illegal immigrants, the latter without a legal residence status in Spain. They tend to fill mostly poorly paid or socially undesirable jobs in the service sector, i.e. hotel work, catering, retailing and domestic service, in seasonal agriculture, construction, and manufacturing segments such as textiles, garments, metalworking and leather tanneries (SOPEMI 2000; Cachón 1999; Actis et al 1999; Reyneri 2001).

In spite of large-scale unemployment, the number of poorly educated youths out of work is actually relatively low. According to Reyneri (2001), the serious mismatch between demand for low-skilled and poor status jobs and supply of local workers with high education and ambitions plus the subsequent segmentation of the local labour market can explain why employers seek foreign workers despite the widespread availability of educated young jobless at home. Generally migrants and Spanish youth look for different types of jobs, the former being in competition only with marginal sections of the national labour force (young dropouts, uneducated women, elderly people).

Starting from the late 1980s Morocco became a significant source of labour migration to Spain ${ }^{2}$. Moroccan immigrants, prevalent among precarious and even more among illegal workers, are located on the very end of the queer of potential workers for Spanish employers following Asians and Eastern Europeans, which in turn stand below Latin Americans and Black Africans in the job hierarchy, with EU citizens being the most privileged group. Direct discrimination tests conducted by de Prada et al (1996) discovered that young, semi-skilled male Moroccans experienced differential treatment when looking for a job, as compared with a similar group of young male Spanish nationals. If successful in finding a job, Moroccans are over-represented in the secondary economy and in the low-grade employment, the fact that King and Rybaczuk (1993) attribute to their lack of fluency in Spanish and their poor educational background.

Immigrant integration measures are extremely scarce in Spain. De Prada et al (1996) admit that existing vocational training courses specifically targeting immigrants are rare. Furthermore, a short period of validity of residence/work permits does not promote any possible integration of precarious immigrants into the host country.

## Comparative discussion

Spain and Belgium represent an interesting case for a comparative study of young immigrants' early careers and immigrant labour market inclusion in general. First of all, the two countries differ in the context of immigration: while temporary labour migration dominates the entry to Spain, in Belgium it is no longer the case for third-country immigrants, able to secure residence permits (including permanent) only on family reunification or humanitarian (refugees, asylum seekers) grounds.

[^1]Moreover, in Belgium, problems of labour market integration of the second-generation immigrants have become salient, as more children of guest workers from 1960-1970s have entered the labour market.

Differences in the labour market structure might be found responsible for the variance in early career opportunities of young immigrant and native-born school leavers in the two countries. Demand for the low-skilled jobs in the secondary labour market met with the supply of non-EU and especially Moroccan immigrants ready to pick up any jobs in Spain might result in fewer difficulties in finding a lower status job in this country. In Belgium, which undergone substantial downsizing of the primary and secondary economic sectors, young immigrant school-leavers are expected to enter the tertiary labour market where they might encounter discrimination when competing with the indigenous youth.

Diversity in the sending countries and immigration contexts results in the country-specific hierarchies of the ethno-national groups. EU and other industrialized Western countries' nationals are treated preferentially in both societies, however EU nationals from the Southern European countries, and particularly Italy, who arrived as guest workers during 1960s and their children might experience more difficulties at the labour market entry in Belgium. On average, non-EU nationals and immigrants are expected to have quicker entry into employment in Spain, as large percentage of those are privileged newcomers from Spanish-speaking Latin America. Finally, two countries have experienced an inflow of immigrants from the same sending country - Morocco, immigrants who occupy the lowest rank in the ethnical hierarchy in both societies and are expected to be disadvantaged at labour market entry in both societies.

### 2.2 Explaining ethnic inequalities at the transition from school to work: discrimination, country-specific information, and self-selection

In this section some general mechanisms which may account for ethnic inequalities at the labour market entry, and particularly different length of the job search for ethnic minorities as compared to the indigenous populations, are reviewed. The underlying process of the job search can be understood as the problem of matching (the requirements of) jobs to (the characteristics of) individuals. Two types of actors are involved in this process - possible employers and school leavers themselves and both are assumed to look for a solution which is optimal from their point of view.

Following basic economic arguments the aim of the employer is to find the applicant with the highest productivity or human capital given the search activities of the firm and given the characteristics (including the wage) of a certain vacancy. In the literature there are at least three prominent arguments which may account for ethnic disadvantages in this respect. First, in-migration might be highly selective with respect to human capital, either positive or negative (e.g. Borjas 1987). Second, some aspects of human capital (e.g. language skills) are country-specific, i.e. they are more productive in some societal contexts than in others. Therefore, the act of migration leads to a loss of these aspects and, as a consequence, to a certain devaluation of human capital (Chiswick 1978,

1991; Friedberg 2000). Third, immigrants often consider their stay in the host country as being only temporary (Bonachich 1972). Therefore they may be more reluctant to invest in human capital that is specific for the host country. As all three arguments refer directly to the migration experience they hold true for the first generation of immigrants. However, there are multiple ways in which different forms of capital - in forms of either physical or social inheritance - are transmitted from generation to generation (Bourdieu 1977). Moreover, students of social mobility (e.g. Erikson/Goldthorpe 1992; Müller et al. 1989) claim that the impact of social origin on educational and occupational attainment is very strong in most European Countries and thus one would also expect that human capital disadvantages of the first generation immigrants are partly transmitted to the second generation through similar mechanisms.

On the other hand, employers may treat members of ethnic groups differently even if the amount of their human capital is controlled for. In other words, ethnic minorities may face some form of overt or hidden discrimination in the labour market. How can this be explained? The neo-classical approach clearly predicts that discrimination will not exist in perfect markets. This implies that market failure is a necessary condition for discriminative behaviour to exist and several prominent theories may be fitted under this general idea. First, theories of monopsonistic discrimination start from the assumption that there is a lack of competition on the demand side for labour (Madden 1973). The arguments do not only hold true for monopsonies in a narrower sense, but also if cartels or mobility barriers for labour exist. Alternative is statistical discrimination approach, which assumes that employers do not have full information on the productivity of workers and impute some group information instead (Phelps 1972; Arrow 1972; Aigner/Cain 1977; England 1992: 56ff). It is worth noting, that taking the ideas seriously, statistical discrimination will only predict individual discrimination but not discrimination of a group on average. Therefore, a related but distinct mechanism should be distinguished, namely 'error discrimination'. Here, it is assumed that due to the lack of full information false beliefs (rather than statistical approximations) are imputed about the 'true' productivity of workers (e.g. England 1992: 60). Finally, in his seminal work on 'the economics of discrimination' Becker (1971) introduces the notion of personal preferences or, in his words, 'tastes for discrimination'. He shows that such tastes - appearing either on the side of employers, employees or customers - will result in effective market discrimination. It has been argued that tastes for discrimination (like 'false beliefs' in the case of error discrimination) will not exist over time in markets that are otherwise competitive (e.g. Arrow 1972: 192; Arrow 1998). Recently, however, some models have been suggested that show that tastes could be stable over time if search costs in the labour market are severe (Black 1995; Borjas/Bronars 1989).

On the side of the school leaver or job seeker there are two central factors influencing the speed of the matching process: search efficiency and search intensity. Explaining ethnic inequalities thus implies answering the question why these factors may 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. As such information is based on cultural-specific knowledge and social capital which is specific for the host society we would expect
immigrants and their descendants to be disadvantaged in this respect. However, assuming diminishing marginal returns of additional information we would also expect that these ethnic disadvantages decrease in the course of time, i.e. the longer the duration of search the narrower the information gap between the indigenous youth and the young immigrants.

While search efficiency refers to the 'objective' probability of finding a matching vacancy, given the search activities of an employee, these may differ with respect to ethnicity. In the economic search theory (e.g. Stigler 1961; McCall 1970; Devine/Kiefer 1991), search for further vacancies is assumed to imply costs on the one hand, and uncertainty about whether the search will be successful, on the other hand. Therefore, employees stop searching as soon as the utility (wage) of a given alternative exceeds a certain threshold (reservation wage). A simple representation of these ideas can be seen in the following model. We assume that the expected utility of a potential job alternative is given by $U_{A}$ and the utility of the status quo is given by $U_{S Q}$. Further, if the search for the job alternative includes costs $C$ and the subjective probability of finding such an alternative is given by $p$, then the utility of search is given by:

$$
U_{\text {search }}=p U_{A}+(1-p) U_{S Q}-C
$$

while the utility of stopping further search is:
$U_{\text {-search }}=U_{S Q}$.
In a sequential model search is continued as long as $U_{\text {search }}>U_{\text {-search }}$ which for $p \neq 0$ is equivalent to
$U_{S Q}<U_{A}-C / p .\left(^{*}\right)$
The term $U_{A}-C / p$ may be interpreted as the threshold or 'reservation wage', i.e. it resembles the utility level of the status quo which is sufficient for the job seeker to stop further activities. The lower the expected gains from potential alternatives, the higher the search costs and the lower the subjective expected probability of finding such an alternative, the sooner the process of job search is stopped.

Following this model two assumptions with respect to the search behaviour of immigrants lie near at hand: first, it is reasonable to assume that ethnic minorities have higher search costs $C$, as they may lack specific knowledge and specific social capital with respect to the labour market of the host society. Second, minorities may fear discrimination in the labour market (even if it does not actually exist) resulting in a lower subjective probability $p$ of being successful in finding an alternative. Holding $U_{A}$ constant both arguments lead to a decrease of the reservation wage, therefore resulting in shorter search durations and lower job levels for non-indigenous 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.

## 3 Data and methodology

To explore early career developments of immigrant job entrants in the two countries, the study utilises a new dataset made available by Eurostat - the European Union Labour Force Survey (EULFS) 2000 ad hoc module on school-to-work transitions. In addition of the data's linkage to the general EULFS it provides a core set of substantively important variables on school-to-work transitions, including longitudinal information on the first significant job. Both Spain and Belgium rather successfully implemented the ad hoc module (see lannelli 2002). In Belgium the actual sample size of the target population, i.e. young people who left education during previous ten years, is 2930 individuals, while in Spain it is 14909 young people. There are some slight differences in the age range of the target group, which do not seem to impede the comparability and significantly distort results of the study: in Spain the target population includes 16-35 years old, while in Belgium the target group are those of 15-34 years old.

In the EULFS ad hoc module first significant job is defined as non-marginal employment of at least 20 hours per week that has lasted at least six months and started after leaving continuous education. It is worth noting that such a strict definition of first significant job might ignore labour market integration of school-leavers who have a succession of temporary contracts, albeit with different employers, which is typical of Spanish youth labour market known for its high flexibility and precariousness. In addition, Belgium, strictly following Eurostat's definition of first significant job, excluded all jobs that started before leaving continuous education, while Spain considered first jobs as significant employment even if they started before leaving education but otherwise met the criteria of first significant jobs. These data specificities do not constitute a serious obstacle for the current analysis since its main focus is on labour market integration of immigrants as compared to indigenous young people in each particular country.

Transition from education to first significant occupation is approached from the event history perspective, i.e. we analyse the hazard rates of getting a first significant job since leaving education. The hazard rate or 'risk' $r(t)$ is defined by (e.g. Blossfeld/Rohwer 1995: 28):

$$
r(t)=\lim _{t^{*} \rightarrow t} \frac{\operatorname{Pr}\left(t \leq T<t^{*} \mid T \geq t\right)}{t^{*}-t}
$$

i.e. it is the limit (as $t^{*}$ approaches $t$ ) of the conditional probability that the event occurs (at time $T$ ) between time points $t$ and $t^{*}$, given that it has not occurred until $t$, divided by the length of the interval between $t^{*}$ and $t$. In our case the event is defined by getting a first significant job and the process is considered to start at the time of leaving the educational system for the first time $(t=0)$.

In these analyses the starting time of an episode is given by the time of leaving education. If a person immigrated $x$ month after leaving education s/he enters the risk set at time $x$, which leads to a conditional likelihood approach (Guo 1993). An event occurs, if an individual enters the first significant job, and in this case time of entering defines the ending time of an episode. Hence the
duration of the search, measured in months in the study, equals the period between leaving continuous education and starting first significant job. Cases when immigrants experienced their first significant job outside the host country ( $5.9 \%$ in Belgium and $5.3 \%$ in Spain) were deleted from the analysis since they are out of the scope of the present study. Those individuals (episodes), who did not enter the first significant job until the time of interview, are considered right censored. Here, the duration of the job search equals time since leaving continuous education for the first time. In Belgium in 1.1 per cent of cases negative duration of more than 12 months $^{3}$ between leaving education and starting the first significant job was observed, these cases were excluded from the analysis.

A major problem in the Spanish ad hoc module, relevant to the current study, is relatively large number of missing values (up to 26 per cent) on the month of an event, either when leaving education or when starting the first significant job, as this information was optional for the events that occurred before 1997. In Belgium missing information in these variables was less substantial (about 6 per cent). For both countries the missing month of leaving education was substituted by month 'June' if the information on year of the event was present. To minimize mistakes in calculation of the duration variables similar imputations were adopted for the missing month of starting first significant job.

We estimate multiple destinations models, which in our case means that one origin state (having no first significant job yet) and three possible destination states are distinguished. Individuals may move to one of three types of jobs: professional, technical, or managerial jobs (further on PTM), clerical or service occupations (CS), or blue-collar ${ }^{4}(B C)$ jobs.

We run piecewise constant exponential models (see Blossfeld/Rohwer 1995: 110-119) to approximate the shape of the hazard functions and to estimate the impact of independent variables. In a multiple destination model the piecewise constant exponential model for transition to destination $k$ is given by:
$r^{k}(t)=\exp \left(a^{k}{ }_{1}+a^{k}{ }_{1} x_{1}+\ldots+a^{k}{ }_{m} x_{m}\right), \quad$ for $t \in\left[\tau_{1}, \tau_{1+1}\right]$ with $0=\tau_{1}<\tau_{2}<\ldots<\tau_{L}<\tau_{L+1}=\infty$.

That means that in this model the time axis is divided into $L$ intervals and an interval-specific constant $a^{k}$, is estimated for each interval $\left[\tau_{l}, \tau_{l+1}\right](I=1, \ldots, L)$ and each possible destination $k$. In addition to that for all covariates $x_{1}, \ldots, x_{m}$ destination-specific but time-independent parameters $a^{k}{ }_{1}, \ldots, a^{k}{ }_{m}$ are estimated. The independent variables of our analyses are summarized in Table 1.

[^2]Table 1: Description of the independent variables in the multivariate analysis

| Independent Variable | Description |
| :--- | :--- |
| Ethno-national group ${ }^{5}$ | A group of dummy coded variables: <br> Indigenous (native-born national) - reference category <br> EU and other industrialized Western countries' nationals or immigrants <br> born in EU or other Western countries (latter including: other Western <br> European countries, the USA, Canada, Australia and Japan). This <br> group is further called EU nationals <br> Non-EU nationals or immigrants born in other non-EU countries <br> (descriptive analyses also distinguishes a group of Moroccans in both <br> countries) |
| Age at leaving education | Age minus time since leaving education (in years) |
| Gender | Men (reference category), women |
| Level of education when <br> leaving school for the first <br> time | A group of dummy coded variables: <br> Low - ISCED 1-2 - reference category <br> Medium - ISCED 3-4 <br> High - ISCED 5-6 |
| Parental highest level of <br> education | A group of dummy coded variables: <br> Low - ISCED 1-2 - reference category <br> Medium - ISCED 3-4 <br> High - ISCED 5-6 |
| Waiting time for non-EU <br> immigrants (time-varying) | Equals the time after leaving education (round years) for non-EU- <br> immigrants <br> Equals 0 for indigenous populations and EU immigrants. |
| Education received not in <br> the host country <br> migration (Spain only) | 1: Immigrant arrived after leaving continuous education for the first time <br> $0:$ Indigenous youth, EU nationals and non-EU nationals born or <br> immigrated before leaving continuous education in the host country - a <br> reference category |
| Waiting time in home <br> country for immigrants | Equals the time until immigration (years) after leaving continuous <br> education if education not received in the host country |
| Waiting time for EU <br> immigrants (time-varying) |  |
| Equals the time after leaving education (round years) for EU- <br> immigrants <br> Equals 0 for indigenous populations and non-EU immigrants. |  |

[^3]
## 4 Results

### 4.1 Socio-demographic characteristics of the target group in Belgium and Spain

Presence of immigrant and ethnic minorities' youth is more pronounced in Belgium than in Spain, which only recently became an immigrant country. This is evident from Table 2, which presents the descriptive overview of the socio-demographic characteristics of young people belonging to different ethno-national groups who left continuous education in the recent decade (the target group of the EULFS 2000 ad hoc module) and the occupational characteristics of their first job in Belgium and Spain. Four ethno-national groups are distinguished in each country: indigenous, i.e. national nativeborn youth, EU nationals, i.e. people born in the EU or other Western industrial countries or those possessing nationality of one of the EU or Western industrial countries, other non-EU nationals and Moroccans as a separate group.

In both countries immigrants and second generation youth from Morocco is a demographically distinctive group. Being slightly younger than the rest of the target group, the larger proportion of Moroccans are married and have children in both countries in the data set. Interesting to note existence of the gender imbalance among immigrant youth in Belgium with higher proportion of women among EU nationals and of men among non-EU nationals.

As it was already mentioned earlier, immigration is a relatively recent phenomenon in Spain, where the majority of immigrants arrived in the recent decade with the proportion of the second-generation immigrants being rather negligible. In Belgium, on the contrary, almost half of the target group arrived more than 10 ago with about one fifth of all ethnic minorities' youth being born in the country. The proportion of naturalized non-EU youth is quite similar and rather low in both countries. In Spain Spanish nationals dominate immigrant inflow from the EU countries, which might be explained by the return migration of Spanish emigrants and their offspring.

In Belgium young people tend to leave education later than in Spain. In both countries differences between ethno-national groups in age at leaving education are evident. In Belgium EU nationals stay at school longer, while Moroccans leave education slightly earlier. In Spain immigrants from EU and non-EU countries (with the exception of Morocco) leave school later than indigenous Spaniards. Moroccans tend to leave education at about 17 years old, which is about 2 years earlier than nativeborn Spaniards and almost 3 years as compared to the rest of immigrants in Spain. Almost equal proportion of young people left education for the first time with the tertiary degree (about 43 per cent) in both countries. However in Belgium rather a low proportion (15 per cent) of young people left school possessing a secondary education only, while analogous number for Spanish young school leavers is much higher - about 35 per cent. Educational distribution of the EU nationals is quite similar to that of

Table 2: Descriptive overview of young people who left continuous education in the recent 10 years in Belgium and Spain

|  | Belgium |  |  |  | Spain |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Indigenous | EU nationals | Moroccans | Other non-EU | Indigenous | EU nationals | Moroccans | Other non-EU |
| Percent out of the total target group | 87.5 | 4.1 | 2.0 | 6.4 | 97.0 | 1.1 | 0.6 | 1.4 |
| Mean age | 25.6 | 26.3 | 24.5 | 25.8 | 23.8 | 24.9 | 23.6 | 25.0 |
|  | (3.6) | (3.9) | (4.0) | (3.9) | (4.1) | (4.2) | (5.5) | (4.4) |
| Percent male | 52.0 | 35.3 | 57.0 | 57.4 | 52.4 | 52.6 | 49.8 | 44.8 |
| Percent married | 31.0 | 31.5 | 46.9 | 36.2 | 11.8 | 21.9 | 42.7 | 36.4 |
| Percent with children | 29.7 | 35.3 | 52.3 | 38.2 | 23.3 | 25.1 | 68.9 | 27.2 |
| Immigrants status |  |  |  |  |  |  |  |  |
| Born in the country | 100 | 22.9 | 14.3 | 26.6 | 100 | 9.5 | . | 1.8 |
| Arrived less than 5 years ago |  | 20.1 | 28.8 | 15.3 |  | 51.6 | 44.4 | 71.6 |
| Arrived 5-10 years ago |  | 10.5 | 11.6 | 13.3 |  | 32.3 | 37.5 | 22.5 |
| Arrived more than 10 years ago |  | 46.5 | 45.2 | 44.8 |  | 6.5 | 18.1 | 4.0 |
| With citizenship of the host country | 100 | 26.0 | 15.9 | 34.2 | 100 | 86.4 | 16.8 | 37.2 |
| Mean age at leaving education | 20.9 | 21.5 | 20.0 | 20.9 | 19.4 | 20.0 | 17.1 | 20.3 |
|  | (2.6) | (3.3) | (3.2) | (3.6) | (4.1) | (4.0) | (4.3) | (3.9) |
| Level of education when leaving it for the 1st time |  |  |  |  |  |  |  |  |
| Percent with low education | 15.0 | 12.8 | 37.8 | 30.0 | 35.3 | 30.3 | 64.4 | 23.0 |
| Percent with medium education | 42.3 | 40.6 | 45.5 | 39.1 | 21.7 | 21.9 | 20 | 29.7 |
| Percent with high education | 42.7 | 46.6 | 16.6 | 30.9 | 43 | 47.8 | 15.6 | 47.3 |
| Highest level of parental education |  |  |  |  |  |  |  |  |
| Percent with low education | 43.3 | 44.1 | 97.7 | 57.0 | 80.1 | 69.2 | 90.0 | 70.9 |
| Percent with medium education | 30.3 | 28.7 | 1.4 | 15.9 | 9.6 | 17.3 | 3.1 | 13.9 |
| Percent with high education | 26.4 | 27.2 | 0.9 | 27.2 | 10.3 | 13.5 | 7.0 | 15.3 |
| Mean ISEI of the first significant job | 45.1 | 45.1 | 36.8 | 43.6 | 41.4 | 43.6 | 27.3 | 38.9 |
|  |  | (16.5) |  | (15.4) | (16.5) | (15.7) | (8.4) | (17.4) |
| First significant job (Percent in) |  |  |  |  |  |  |  |  |
| Professional, technical, managerial | 40.8 | 38.3 | 20.6 | 36.9 | 27.6 | 37.5 | 3.2 | 25.2 |
| Clerical and services | 28.5 | 38.0 | 24.3 | 32.4 | 31.6 | 33.1 | 30.6 | 36.6 |
| Blue-collar jobs | 30.7 | 23.7 | 55.1 | 30.7 | 40.8 | 29.4 | 66.2 | 38.2 |
| Total number | 2556 | 120 | 58 | 188 | 14269 | 164 | 60 | 202 |

[^4]indigenous youth in both countries, with slightly higher proportion of more educated people among the EU youth in Spain. Moroccan immigrants with secondary education are the large majority of those settled in Spain; while in Belgium more or less similar percentages of Moroccans possess secondary and post-secondary tertiary education credentials. At the same time, they tend to be under-represented among tertiary-educated in both countries (16-17 per cent). Educational level of other non-EU nationals in Spain is rather similar to that of EU nationals, i.e. about half of all young people are highly educated and about a third are with post-secondary diplomas. In Belgium equal proportions of immigrants from other non-EU countries left tertiary, post-secondary and secondary school (about a third in each group).

Turning to the social background of the target group, measured as the highest level of parental education, we find similarities among indigenous population and youth from the EU member states in Belgium. In Spain parents of the ad hoc module target group tend to educationally overperform parents of the indigenous youth. Almost absolute majority of young Moroccans' parents have only secondary education in both countries. Social background of other non-EU immigrants seems to be comparable to that of indigenous populations in both countries, with relatively (to the national native-born youth) higher proportion of less-educated parents among Belgian young immigrants.

From Table 2, which includes information on the first significant job of young people, it is evident that socio-economic status of the first significant job of the indigenous youth is the same as among EU nationals is Belgium. In Spain, however, EU nationals managed to get better jobs than native-born nationals. Moroccans are greatly disadvantaged in the socio-economic status of the first significant job in both countries, the gap with the indigenous youth being more pronounced in Spain. Despite more favourable educational background young people from third countries in Spain seem to be more disadvantaged in the first significant job as compared to the native-born youth. The lower part of Table 2 presents the distribution of respondents according to the occupation of their first significant job, which is grouped in three wide categories: professional, technical managerial; clerical and services and the blue-collar employment. In Belgium indigenous youth are over-represented in professional, technical and managerial jobs (PTM), the trend closely followed by EU nationals ${ }^{7}$ and to some degree by other non-EU nationals. Similar patterns of occupational location are evident for indigenous Spaniards and other non-EU nationals, while EU nationals in Spain are over-represented in the PTM jobs as compared to the native-born Spanish youth. Moroccan youth are clearly over-represented in the blue-collar jobs in Belgium and even more so in Spain. In Belgium almost equal proportions of the Moroccan origin youth find first jobs in PTM and service jobs, while in Spain virtually no Moroccans are found in the higher prestige PTM employment.

[^5]
### 4.2 Patterns of entry into the first significant job in Belgium and Spain

We start the analysis of entry into the first significant job by looking at the hazard rates of the transition in Belgium and Spain. We approximate the shape of the hazard function using the piecewise constant exponential model without covariates defining eight discrete time periods. ${ }^{8}$ The first one covers the first twelve months after leaving education (year 1), the second the next twelve months (year 2) and so on. Finally, due to the number of cases left the eights period covers all possible month after the seventh year. The model is implemented as a 'competing risk model', i.e. individuals may move to one of three possible destinations: a PTM-job, a service job (CS), or a blue-collar job (BC). The results of the estimates for Belgium and Spain are shown in Figure 1.


Figure 1: Time-dependent risks of entering first significant job after leaving education for the 1st time (results from a piecewise constant model without covariates)

Source: Linked EULFS 2000 and EULFS 2000 ad hoc module on school-to-work transitions

[^6]The most obvious difference between Belgium and Spain is the risk of entering first significant job already in the first year after leaving education. While in Spain the rate estimate is rather low and nearly the same for all three types of jobs, it is considerably higher in Belgium, especially for PTMjobs. However, after the first year, the risk level drops in Belgium and remains only slightly higher than in Spain. After the second year the risk increases in the course of time in both countries. In Spain, this holds true especially for blue-collar jobs, while the tendency is only slightly visible for PTM-jobs and CS-jobs are in between. In Belgium (assumingly due the number of cases) the differences between job types are less clear-cut.

To study whether the transition patterns differ between ethnic groups it is advisable to look at the survivor functions into which the hazard rates translate. ${ }^{9}$ The survivor function is defined by $G(t)=\operatorname{Pr}(T>t)$.
In our case $G(t)$ it can be interpreted as the proportion of young people who still did not find a first significant job at time $t$ after leaving education. Again we distinguish between three possible job types (destination states) and estimate the survival functions for four ethno-national groups using the Kaplan-Meier method (product-limit estimator). The results of the analyses are shown in Figure $2^{10}$.

In general a smoother entry into the first employment is manifested in Belgium. Moroccans have most difficult time entering first significant job as compared to indigenous youth especially in PTM and service job. They are followed by other non-EU nationals, for whom it also takes significantly longer to find PTM employment compared to native-born Belgians. No significant differences ${ }^{11}$ are found between indigenous youth and young people from the EU member states in their access to the first employment, irrespective of its type. A certain ethno-national hierarchy, with Moroccans followed by other non-EU nationals being mostly disadvantaged, is evident at the entry to the PTM employment in Belgium. The ethnic hierarchy becomes less obvious when looking at the picture of the entry to service and manual jobs.

A different pattern of the entry into the first job is distinct in Spain. There exists no significant difference between indigenous, EU and non-EU (with the exception of Morocco) youth in the entry to PTM employment. Moreover, non-EU nationals (with the exception of Moroccans) tend to enter service occupations quicker, while EU nationals and Moroccans do not significantly differ from nativeborn Spaniards with respect to entry into service jobs. EU nationals tend to have significantly slower entry into the blue-collar jobs as compared to the indigenous youth. Moroccans are almost excluded from PTM employment and have slower entry, albeit statistically insignificant, to other types of jobs.

[^7]

Figure 2: Kaplan-Meier estimates of survival functions of entering job types

### 4.3 Disentangling the mechanisms

In the theoretical part it was shown that ethnic differences in search durations might result from several distinct mechanisms: lack of human capital, effects of social origin, discrimination, countryspecific information, and self-selection. We also argued that the absolute and relative weight of each mechanism would vary between countries, Belgium and Spain, because it is dependent on structural background conditions like migration history and institutional settings. In the following analyses we try to disentangle these mechanisms using multivariate event history models introducing related independent variables.

The basic idea is as follows: While human capital and social origin can be directly controlled, hypotheses on discrimination, specific information, and self-selection processes must be separated more indirectly relying on implications of the mechanisms for the specific duration dependency of the process. First, discrimination in the labour market will, by definition, result in net effects of ethnicity on the risk of entering the first significant job controlling for educational qualification and social origin. As the driving force is the behaviour of employers we assume that this effect is independent of the employees' duration of search. Specific information on the labour market of the host society is partly controlled by a dummy variable for finishing education in the home country and eventual waiting time between leaving education and immigration (controlling further for age of leaving education). However, possible gaps between indigenous youth and young immigrants are then expected to narrow over time assuming marginal returns of information. Therefore, for ethnic minorities compared to the indigenous population we expect a relative increase in the risk of finding a job over time if the mechanism of specific information is at work. Finally, if the mechanism of self-selection is present, the reverse should be true - at least for higher status jobs: the relative risk of ethnic minorities should decrease over time as search activities are stopped earlier.

To test our competing assumptions on the time dependency of the relative risk of immigrants we include two time-varying variables in our models, a variable called 'EU $\times$ waiting time' (waiting time for EU immigrants) and 'non-EU $\times$ waiting time' (waiting time for non-EU immigrants). These variables equal waiting time (in round years) if an individual belongs to the EU respectively to the non-EU ethno-national group and equals 0 if else. Thus the variable captures the time dependent change in relative risks of two ethno-national groups compared to the indigenous youth given the underlying risk shape and given the time-independent relative effects of ethnicity (main effects). If the sign of the parameter for this variable is positive, the relative risk of (non-)EU youth compared to the reference groups increases over time, if the parameter is negative the relative risk decreases over time.

The estimated parameters of different models are shown in Table 3 for Belgium and in Table 4 for Spain. Like in the analyses above we consider multiple destinations, i.e. PTM jobs, clerical or service jobs and blue-collar jobs. With respect to the higher status PTM jobs we find clear
disadvantages of EU immigrants and non-EU immigrants ${ }^{12}$ in Belgium when controlling only for gender and age at leaving education (model 1). In Spain we also find clear disadvantages for the non-EU group, while EU-immigrants do not differ significantly from the indigenous population. In model 2 we introduce also a control for educational level and a dummy variable pertaining to the place of educational attainment. We find that in Belgium education is to a large degree responsible for ethnic inequalities of non-EU youth. In Spain coefficient pertaining to non-EU nationals only slightly diminishes but still remains highly significant. In both countries the effect for EU immigrants is only slightly affected when controlling for education. The fact that education has been finished in the home country has a negative, however insignificant effect on the risk function in both countries. After controlling for parental education (model 3) the situation in Belgium remains more or less the same although this variable has a significant impact on the risk of getting a PTM-job. In Spain ethnic disadvantages even slightly increase, taking parental education into account. Finally (model 4), controlling also for the length of waiting time in the home country, we include the interaction term of the EU group membership with waiting time and the interaction of non-EU group membership with waiting time to the model. In Belgium the parameters for these variable are nearly zero, while in Spain there is a highly significant negative effect for the waiting time of the non-EU group. This points to the relevance of the self-selection mechanism with respect to PTM-jobs in the Spanish case. Note that the main effect for non-EU immigrants is only -.0 .78 in model 4 compared to -1.12 in model 3. This means that ethnic differences in the risk of getting a higher-level PTM job are less pronounced soon after leaving education, but then become more and more severe each additional year after leaving education.

Looking at the risk of getting a clerical or service job (CS-job) ethnicity effects are nearly absent in both countries. As one would expect, the risk of getting a clerical and service job is higher for women in both countries. Moreover, medium level of education and medium level of parental education increase the corresponding risk. Note that in Spain effects for EU national group even become positive (albeit not significantly) when introducing these controls. While the interactions of waiting time with ethnicity groups have no effect on the hazard rate in Belgium, the waiting time for the non-EU group has a significant negative effect in Spain. An interesting finding is that having finished education in the home country and being a non-EU immigrant or national both have a positive effect on the risk function in model 4 for Spain. This means that soon after leaving education non-EU youth seem to have a better access to CS-jobs, however this advantage vanishes with the passage of time after leaving education.

[^8]Table 3: Effects on the risk of getting a first significant job in Belgium (coefficients from competing risk piecewise constant exponential models)

|  | Model 1 |  | Model 2 |  | Model 3 |  | Model 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coeff | S.E. | Coeff | S.E. | Coeff | S.E. | Coeff | S.E. |
| PTM-jobs |  |  |  |  |  |  |  |  |
| EU | -0.51** | (0.18) | -0.37** | (0.18) | -0.32* | (0.18) | -0.38* | (0.21) |
| non-EU | -0.99** | (0.16) | -0.42** | (0.16) | -0.41** | (0.16) | -0.45** | (0.19) |
| female | 0.27 ** | (0.06) | 0.10 | (0.07) | 0.11* | (0.07) | 0.11* | (0.07) |
| age at leaving educ. | 0.28** | (0.01) | 0.11** | (0.02) | 0.11** | (0.02) | 0.11** | (0.02) |
| medium education |  |  | 1.61 ** | (0.30) | 1.57 ** | (0.30) | 1.57 ** | (0.30) |
| high education |  |  | 2.98** | (0.30) | 2.88** | (0.30) | 2.88** | (0.30) |
| education host c. |  |  | -1.11 | (0.82) | -1.14 | (0.82) | 0.33 | (1.11) |
| parental educ. med. |  |  |  |  | 0.20** | (0.09) | 0.21** | (0.09) |
| parental educ. high |  |  |  |  | 0.28** | (0.08) | 0.29** | (0.08) |
| EU $\times$ waiting time |  |  |  |  |  |  | 0.09 | (0.09) |
| non-EU $\times$ waiting time |  |  |  |  |  |  | 0.04 | (0.09) |
| waiting time home c. |  |  |  |  |  |  | -0.84 | (0.64) |
| CS-jobs |  |  |  |  |  |  |  |  |
| EU | -0.03 | (0.20) | -0.04 | (0.20) | -0.01 | (0.20) | 0.09 | (0.22) |
| non-EU | -0.21 | (0.15) | -0.22 | (0.16) | -0.16 | (0.16) | -0.21 | (0.19) |
| female | 0.73** | (0.08) | 0.73** | (0.08) | 0.76** | (0.08) | 0.76** | (0.08) |
| age at leaving educ. | 0.02* | (0.01) | $0.05{ }^{* *}$ | (0.02) | 0.05** | (0.02) | 0.05** | (0.02) |
| medium education |  |  | 0.40** | (0.12) | 0.37 ** | (0.12) | 0.37 ** | (0.12) |
| high education |  |  | 0.07 | (0.16) | 0.02 | (0.16) | 0.02 | (0.16) |
| education host c. |  |  | -0.31 | (0.58) | -0.38 | (0.58) | -0.75 | (1.01) |
| parental educ. med. |  |  |  |  | 0.34 ** | (0.09) | 0.34** | (0.09) |
| parental educ. high |  |  |  |  | 0.09 | (0.11) | 0.09 | (0.11) |
| EU $\times$ waiting time |  |  |  |  |  |  | -0.12 | (0.14) |
| non-EU $\times$ waiting time |  |  |  |  |  |  | 0.03 | (0.08) |
| waiting time home c. |  |  |  |  |  |  | 0.22 | (0.29) |
| Blue-collar jobs |  |  |  |  |  |  |  |  |
| EU | 0.17 | (0.22) | 0.13 | (0.23) | 0.10 | (0.23) | 0.24 | (0.25) |
| non-EU | -0.15 | (0.14) | -0.32** | (0.15) | -0.40** | (0.15) | -0.68** | (0.19) |
| female | -1.12** | (0.09) | -1.02** | (0.09) | -1.07** | (0.09) | -1.06** | (0.09) |
| age at leaving educ. | -0.18** | (0.02) | -0.03 | (0.02) | -0.03 | (0.02) | -0.03 | (0.02) |
| medium education |  |  | 0.08 | (0.09) | 0.17* | (0.09) | 0.15* | (0.09) |
| high education |  |  | -1.78** | (0.19) | -1.57** | (0.19) | -1.59** | (0.19) |
| education host c. |  |  | 0.69* | (0.37) | 0.71* | (0.37) | 0.81 | (0.74) |
| parental educ. med. |  |  |  |  | -0.45** | (0.09) | -0.45** | (0.09) |
| parental educ. high |  |  |  |  | -0.57** | (0.13) | -0.56** | (0.13) |
| EU $\times$ waiting time |  |  |  |  |  |  | -0.14 | (0.16) |
| non-EU $\times$ waiting time |  |  |  |  |  |  | 0.18** | (0.06) |
| waiting time home c. |  |  |  |  |  |  | -0.14 | (0.21) |

[^9]Table 4: Effects on the risk of getting a first significant job in Spain (coefficients from competing risk piecewise constant exponential models)

|  | Model 1 |  | Model 2 |  | Model 3 |  | Model 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coeff | S.E. | Coeff | S.E. | Coeff | S.E. | Coeff | S.E. |
| PTM-jobs |  |  |  |  |  |  |  |  |
| EU | -0.13 | (0.17) | -0.27 | (0.41) | -0.38 | (0.40) | -0.80* | (0.45) |
| non-EU | -1.06** | (0.22) | -0.87** | (0.39) | -1.12** | (0.39) | -0.78** | (0.40) |
| female | 0.15** | (0.04) | 0.02 | (0.04) | 0.05 | (0.04) | 0.05 | (0.04) |
| age at leaving education | 0.26** | (0.00) | 0.16** | (0.01) | 0.15** | (0.01) | 0.15** | (0.01) |
| medium education |  |  | 1.15** | (0.13) | 1.13** | (0.13) | 1.13** | (0.13) |
| high education |  |  | 2.35** | (0.12) | 2.27 ** | (0.12) | 2.28 ** | (0.12) |
| education in host country |  |  | -1.21 | (0.84) | -0.87 | (0.84) | -0.64 | (1.53) |
| missing YSM |  |  | 0.10 | (0.41) | 0.24 | (0.40) | 0.42 | (0.41) |
| parental educ. medium |  |  |  |  | 0.25** | (0.06) | 0.26 ** | (0.06) |
| parental educ. high |  |  |  |  | 0.56** | (0.05) | 0.56 ** | (0.05) |
| EU $\times$ waiting time |  |  |  |  |  |  | 0.11* | (0.06) |
| non-EU $\times$ waiting time |  |  |  |  |  |  | -0.30** | (0.13) |
| waiting time home country |  |  |  |  |  |  | 0.18 | (0.54) |
| CS-jobs |  |  |  |  |  |  |  |  |
| EU | -0.20 | (0.18) | 0.30 | (0.31) | 0.29 | (0.31) | 0.24 | (0.37) |
| non-EU | 0.01 | (0.14) | 0.26 | (0.24) | 0.25 | (0.24) | 0.44* | (0.26) |
| female | 0.90** | (0.04) | 0.88** | (0.04) | 0.88** | (0.04) | 0.88** | (0.04) |
| age at leaving education | 0.05** | (0.00) | 0.04** | (0.01) | 0.04** | (0.01) | 0.04** | (0.01) |
| medium education |  |  | 0.61** | (0.05) | 0.60** | (0.05) | 0.60** | (0.05) |
| high education |  |  | 0.17 ** | (0.07) | 0.17 ** | (0.07) | $0.16{ }^{* *}$ | (0.07) |
| education in host country |  |  | 0.04 | (0.33) | 0.08 | (0.33) | 1.10** | (0.56) |
| missing YSM |  |  | -0.56 | (0.30) | -0.58** | (0.29) | -0.44 | (0.30) |
| parental educ. medium |  |  |  |  | 0.20** | (0.06) | 0.20** | (0.06) |
| parental educ. high |  |  |  |  | -0.01 | (0.07) | -0.02 | (0.07) |
| EU $\times$ waiting time |  |  |  |  |  |  | -0.03 | (0.08) |
| non-EU $\times$ waiting time |  |  |  |  |  |  | -0.16** | (0.08) |
| waiting time home country |  |  |  |  |  |  | -0.29 | (0.23) |
| Blue-collar jobs |  |  |  |  |  |  |  |  |
| EU | -0.58** | (0.19) | -0.35 | (0.19) | -0.34 | (0.34) | 0.13 | (0.38) |
| non-EU | 0.03 | (0.13) | -0.00 | (0.24) | 0.02 | (0.24) | -0.12 | (0.29) |
| female | -1.15** | (0.04) | -1.12** | (0.04) | -1.12** | (0.04) | -1.12** | (0.04) |
| age at leaving education | -0.04** | (0.00) | 0.01 | (0.01) | 0.01 | (0.01) | 0.01 | (0.01) |
| medium education |  |  | -0.06 | (0.05) | -0.04 | (0.05) | -0.04 | (0.05) |
| high education |  |  | -0.59** | (0.07) | -0.55** | (0.07) | -0.55** | (0.07) |
| education in host country |  |  | 0.37 | (0.32) | 0.31 | (0.32) | 0.09 | (0.45) |
| missing YSM |  |  | -0.25 | (0.30) | -0.24 | (0.30) | -0.27 | (0.30) |
| parental educ. medium |  |  |  |  | -0.22** | (0.06) | -0.22** | (0.06) |
| parental educ. high |  |  |  |  | -0.46** | (0.08) | -0.46** | (0.08) |
| EU $\times$ waiting time |  |  |  |  |  |  | -0.19** | (0.09) |
| non-EU $\times$ waiting time |  |  |  |  |  |  | 0.05 | (0.06) |
| waiting time home country |  |  |  |  |  |  | 0.07 | (0.12) |

Notes: ** $\mathrm{p}<0.05$, * $\mathrm{p}<0.10$
Source: Linked EULFS 2000 and EULFS 2000 ad hoc module on school-to-work transitions

The results with respect to the access to the blue-collar jobs differ from those for both other types of jobs. Here, we find notably various patterns in the two countries. First of all, in all models for Belgium no differences between EU immigrants and indigenous youth are apparent. In Spain, however, EU immigrants have significantly lower risk of entering blue-collar jobs which seems to be mainly due to their higher education (compare model 2 to model 1). Most obviously however, both countries differ with respect to the entry patterns of non-EU youth. For this group in all models for Spain no effect is to be found. In Belgium the gross effect (model 1) is also near to zero. However, after introducing the control variables in models 2 to 4 the non-EU youth turn out to be disadvantaged in the Belgium labor market with respect to BC-jobs. Most interestingly we find a significant positive effect of this groups' waiting time in model 4 . This points to a diminishing gap between the indigenous population and nonEU immigrants in the course of time, assumingly due to gathering more country-specific information.

## 5 Summary and discussion

In this paper an attempt is made to disentangle mechanisms leading to ethnic inequalities at the labour market entry and thus to enhance understanding of ethnic inequalities using comparative longitudinal information available in the EULFS 2000 ad hoc module. Since data constraints do not allow us to conduct a wide-scale cross-national comparison, we focus on Belgium and Spain, two European countries with different histories of immigrant acceptance and contexts of immigrant integration. Looking at the transitions from education to first significant jobs in general and at the access to higher status professional, technical and managerial jobs as the most telling indicator of social inclusion in particular we find notable ethnic disadvantages in both contexts, especially for nonEU immigrants and/or nationals. However, the general background against which these disadvantages appear as well as the mechanisms which seem to account for the observed inequalities obviously differ between the two countries.

First of all, the transition from the educational system to the labour market turns out to be quicker in Belgium as the rates of entering the first significant job there are much higher (especially for higher status jobs) soon after leaving education. In contrast, a converse pattern of transition process is found in Spain where the risks of entering any kind of job are much lower immediately after leaving school but tend to slightly increase in the following years, most notably for lower status blue-collar jobs. Although general patterns of labour market entry of young people differ in Belgium and Spain, in both countries non-EU immigrants and/or nationals face a clear disadvantage with respect to higher status jobs, which is manifested in a highly significant negative relative effect on the baseline transition rates. While the parametric models do not allow to distinguish between more than two wide ethno-national groups (EU and non-EU immigrants and/or nationals), the survivor functions presented in section 4.2 show that ethnic disadvantages of Moroccan youth are indeed pronounced in both countries and that attempts should be made to invest in larger sample sizes allowing finer distinction between representatives of different ethnic minorities groups.

The time-dependent multivariate analyses reveal that the mechanisms leading to gross disadvantages at the labour market entry seem to be dissimilar in both countries. In Belgium, on the one hand, ethnic inequalities with respect to access to higher status jobs are to a large degree a matter of inferior educational qualifications. However, although the effect of ethnicity considerably diminishes when controlling for education (and also parental education) it does not completely disappear. This suggests that discrimination in the labour market seems to be an additional factor responsible for ethnic inequalities at labour market entry. In Spain, on the other hand, differences in educational qualifications and social origin (in terms of parental education) do not seem to account for ethnic inequalities. Rather we find a nearly unchanged negative net effect for non-EU ethno-national group controlling for these and other variables which points to the existence of marked discrimination. In addition to that we also find that the gap between non-EU and indigenous youth even widens with the passage of time after leaving education which might be attributed to a process of self-selection: Since job search costs and (subjective) probability of success in finding job are lower among minority youth they might give up their search for higher status jobs earlier.

The analyses of the time-dependent risk of entering other types of jobs, i.e. service and clerical as well as blue collar employment, and especially the changes in the relative disadvantages of the ethnic minorities' youth over time provides further interesting results and confirms the existence of other mechanisms underlying labour market integration processes. For example, we find that in Belgium the gap between the indigenous youth and non-EU nationals with respect to blue-collar jobs decreases over time which may be explained by the improved specific knowledge of the latter on the labour market of the host country. Self-selection mechanism might be also taking place: some discouraged ethnic minorities' job seekers give up their search of higher status jobs and are pushed to the pool of lower-status job seekers, where they might succeed more quickly. Unfortunately, we lack some more direct measures of country-specific capital like language skills or information networks to validate and strengthen our interpretations. Also we lack some other variables important to account for remaining ethnicity effects, like e.g. place (region) of residence, which in previous research proved to be essential for both countries because of the regional differences in the chances of finding employment. Despite of these shortcomings, however, the data of the EUFLS 2000 ad hoc module provide useful insights into mechanisms of ethnic inequalities at labour market entry in both countries and thus enhances the understanding of the processes of immigrant integration in general.

## 6 References

Actis, Walter, Miguel Ángel de Prada and Carlos Pereda. 1999: Spain in in Angenendt Steffen (Ed.) Asylum and Migration Policies in the European Union. Research Institute of the German Society for Foreign Affairs (DGAP), Berlin.

Aigner, Dennis J., und Glen G. Cain, 1977: Statistical Theories of Discrimination in Labor Markets, Industrial and Labor Relations Review 30: 175-187.

Areijn, Peter, Serge Feld and André Nayer. 1998: Discrimination in access to employment on grounds of foreign origin: the case of Belgium International Migration papers. No. 23. International Labour Office. Geneva.

Arrow, Kenneth J., 1972: Some Mathematical Models of Race Discrimination in the Labor Market in Anthony H. Pascal (Ed.) Racial Discrimination in Economic Life. Lexington: D. C. Heath: 187203

Arrow, Kenneth J., 1998: What Has Economics to Say About Racial Discrimination? Journal of Economic Perspectives 12: 91-100.

Becker, Gary S., 1971 (1957): The Economics of Discrimination. $2^{\text {nd }}$ ed. Chicago: University Press.
Black, Dan A., 1995: Discrimination in an Equilibrium Search Model, Journal of Labor Economics 13: 309-334.

Blossfeld, Hans-Peter and Götz Rohwer, 1995: Techniques of Event History Modeling: New Approaches to Causal Analysis. Lawrence Erlbaum Assiciates, Publishers. Mahwah, New Jersey.

Bonacich, Edna, 1972: A Theory of Ethnic Antagonism: The Split Labor Market, American Sociological Review 37: 547-559.

Borjas, George J., 1987: Self-Selection and the Earnings of Immigrants. The American Economic Review 77: 531-553.

Borjas, George J., und Stephen G. Bronars, 1989: Consumer Discrimination and Self-Employment, Journal of Political Economy 97: 581-605.

Bourdieu, Pierre, 1977: Cultural Reproduction and Social Reproduction in Karabel, J./ Haley, A.H. (eds.), Power and Ideology in Education. New York: 487-511

Cachón, Lorenzo. 1999: Immigrants in Spain: From Institutional Discrimination to Labour Market Segmentation in Wrench, John, Andrea Rea and Nouria Ouali (Eds.) Migrants, Ethnic Minorities and the Labour Market. Integration and Exclusion in Europe. Macmillan Press Ltd.

Chiswick, Barry R., 1978: The Effect of Americanization on the Earnings of Foreign-born Men, Journal of Political Economy 86: 897-921.

Chiswick, Barry R., 1991: Speaking, Reading, and Earnings among Low-skilled Immigrants, Journal of Labor Economics 9: 149-170.

Clasquin B., F. Gérardin, and V. Toresse., 1998. Research on transition. CEDEFOP.
Cruz, Antonio., 1999. Belgium in in Angenendt Steffen (Ed.) Asylum and Migration Policies in the European Union. Research Institute of the German Society for Foreign Affairs (DGAP), Berlin.

Devine, T.J., and Kiefer, N.M., 1991: Empirical Labor Economics: The Search Approach. New York: Oxford University Press.

England, Paula, 1992: Comparable Worth. Theories and Evidence. New York: de Gruyter.
Erikson, Robert and John H. Goldthorpe, 1992: The Constant Flux: A Study of Class Mobility in Industrial Countries. Oxford: Clarendon Press.

Friedberg, Rachel M., 2000: You Can't Take It with You? Immigrant Assimilation and the Portability of Human Capital. Journal of Labor Economics 18: 221-251.

Guo, G., 1993: Event-history analysis for left-truncated data. Sociological Methodology 23: 217-243.
lannelli Cristina, 2002: Evaluation and Analyses of the LFS 2000 ad hoc module on School-to-work transitions. Report on data quality and cross-country comparability. Edinburgh: Centre for Educational Sociology
lannelli Cristina and Asunción Soro-Bonmatí, 2001: The Transition from school to Work in Southern Europe: The Cases of Italy and Spain. Working Papers. TSER project Comparative Analysis of Transitions from education to Work in Europe.

Köhler, Holm-Detlev, 1999: Adjustment problems between Human Resources Strategies and Public Educational Systems in Germany and Spain. Proceedings of the workshop Transitions and Mobility in the Youth Labour Market. Nova: Oslo.

Neels Karel, 2000: Education and the Transition to Employment: Young Turkish and Moroccan Adults in Belgium in Lesthaeghe R. (Ed.) Communities and Generations. Turkish and Moroccan Populations in Belgium. Brussels, VVB Press: 243-278.

Neels Karel and Reinhard Stoop, 2000: Reassessing the Ethnic Gap: Employment of Younger Turks and Moroccans in Belgium in Lesthaeghe R. (Ed.) Communities and Generations. Turkish and Moroccan Populations in Belgium. Brussels, VVB Press: 279-319.

Madden, Janice F., 1973: The Economics of Sex Discrimination. Lexington: D. C. Heath.
Massey Douglas S., Joaquin Arango, Graeme Hugo, Ali Kouaouci, Adela Pellegrino, J. Edward Taylor, 1993: Theories of International Migration: A Review and Appraisal. Population and Development Review, Vol. 19 (3): 431-466.

McCall, J.J., 1970: Economics of information and job search. Quarterly Journal of Economics 84: 113126.

Miguel Ángel de Prada, Walter Actis, Carlos Pereda and R. Pérez Molina, 1996: Labour market discrimination against workers in Spain International Migration papers. No. 9. Employment department. International Labour Office. Geneva.

Müller, Walter, Paul Lüttinger, Wolfgang König und Wolfgang Karle, 1989: Class and Education in Industrial Nations. International Journal of Sociology 19: 3-39.

OECD, 1998: The Employment Outlook.
OECD, 1999: Preparing youth for the $21^{\text {st }}$ century. The transition from education to the labour market.
Phalet Karen, 2002: Minority educational attainment and occupational inequality: the Belgian case. Paper presented at ISA RC28 in Oxford.

Phelps, Edmund S., 1972: The Statistical Theory of Racism and Sexism, The American Economic Review 62: 659-661.

Piore, M.J., 1971: The Dual Labor market. Theory and Implications, in D.M. Gordon (Ed.) Problems in Political Economy: An Urban perspective. Lexington: DC Heath.

Piore, M.J.. 1979: Birds of Passage. Migrant Labor and Industrial Societies. Cambridge: Cambridge University Press.

Planas, Jordi, 1999: School-to-work transition in Spain in Stern, David and Daniel A. Wagner (Eds.) International perspectives on the school-to-work transition. Hampton Press, Inc.: Cresskill, New Jersey.

Reyneri, Emilio, 2001: "Migrants in Irregular Employment in the Mediterranean Countries of the European Union" International Migration papers. No. 41. International Migration Branch. International Labour Office. Geneva

SOPEMI, 2000: Belgium. Trends in International Migration. Continuous Reporting System on Migration. Annual Report. Paris: OECD.

SOPEMI, 2000: Spain. Trends in International Migration. Continuous Reporting System on Migration. Annual Report. Paris: OECD.

Stigler, George J., 1961: The economics of information. Journal of Political Economy 69: 213-225.


[^0]:    1 Immigrants from Hispanic America, the Philippines, Equatorial Guinea and Andorra are eligible to apply for naturalisation after 2 years of residence in Spain, while for the rest the waiting period is 10 years.

[^1]:    2 In the late 1980s the French authorities began to demand visas from Maghreb foreigners, which resulted in switch from France to Spain as a destination country for Moroccans.

[^2]:    3 Because of the imputations, negative durations of less than 12 months were considered in the study as the fact of immediate entry to the first significant job.
    4 Blue-collar jobs include skilled agricultural and fishery workers, craft and related trades workers, plant and machine operators and assemblers, and unskilled workers. Relatively small number of cases for the immigrants groups in both countries does not allow break-down to less heterogeneous groups of occupations, like for example, skilled and unskilled labourers.

[^3]:    5 Unfortunately the EULFS data does allow identifying second-generation immigrants who possess nationality of a host country thus excluding this group extremely important for the analysis of persistence of ethnic inequalities in the immigrant-receiving countries. This might be more of a problem for Belgium than Spain, since the latter has experienced immigration inflow only recently. Besides, in both countries the LFS data might under-estimate proportion of illegal immigrants which probably more serious problem in Spanish data since it experiences more substantial inflow of illegal immigrants seeking jobs in the informal sector of Spanish economy.
    6 This and the following quantitative time-varying variables are built by splitting time axes into episodes of 12 month each (Blossfeld/Rohwer 1995: 139-143).

[^4]:    Source: Linked EULFS 2000 and EULFS 2000 ad hoc module on school-to-work transitions

[^5]:    ${ }^{7}$ Immigrants from the EU countries are more represented in clerical and service jobs and less so in the bluecollar jobs than indigenous Belgians.

[^6]:    8 An alternative may be seen in using the life table method choosing the same intervals.

[^7]:    9 The survivor function $G(t)$ can be computed from the hazard function $r(t)$ by $G(t)=\exp (-\quad r(x) d x)$
    10 Survival functions illustrate first 4 years ( 48 months) after leaving education for the first time.
    11 To compare survival functions we used Wilcoxon (Breslow) test, which is more sensitive to the differences of the survival functions at the beginning of the duration (Blossfeld/Rohwer 1995).

[^8]:    12 Because of the small number of cases yielding instability in the models Moroccans were combined with other non-EU nationals.

[^9]:    Notes: ** $p<0.05$, * $p<0.10$
    Source: Linked EULFS 2000 and EULFS 2000 ad hoc module on school-to-work transitions

