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Social Mobility and Equal Opportunities: The Case of Turkish and Moroccan Minorities in Belgium

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1. Introduction

The main purpose of this article is to document educational attainment and occupational status for the two most important Islamic communities in Belgium. Since Turkish and Moroccan immigration started during the early 1960s, the offspring of the earlier migrants currently reach young adulthood. The analyses on educational attainment demonstrate that second generation Turkish and Moroccan men who were raised and socialized in Belgium, attain a higher educational level than both the early first generation and their age-mates who arrived at older ages. When comparing the occupational status of young Turkish, Moroccan and Belgian men in the age bracket between 18 and 29, it has to be taken into account that a considerable group of the second generation is still in education. This implies that the current, second generation labor force consists disproportionately of men who have had shorter educational careers and show lower educational levels. Controlling for age, place of residence and educational level, job opportunities nevertheless turn out to be much less favorable for Turkish and Moroccan men than they are for the Belgian population.

The analyses presented in this paper stem from two earlier papers on educational attainment and occupational status (Neels 1998, Stoop 1998). Attention will successively be directed to the following topics:

- The assessment of educational attainment of young Turkish and Moroccan men.
- The educational attainment of the second generation and the educational level of successive migration cohorts of the first and the intermediate generation.
- The educational level of the current Turkish and Moroccan labor force aged 18 to 30.
- Labor force participation and job opportunities of young Belgian, Turkish and Moroccan men, controlling for age, place of residence and level of education.
- The importance of generation in explaining unemployment and occupational status of young Turkish and Moroccan men relative to age, educational level, job seniority and place of residence.

2. The data

The analyses in this paper used data from the 1991 Belgian census as well as data from two national surveys on social mobility and migration background of Turkish and Moroccan men. No attempt was made to merge census and survey data: both sources relate to different periods and differ as far as data quality and coverage are concerned.

The 1991 census data used in this paper consist of population data for Turkish and Moroccan men and a random one-in-seventy sample for the Belgian population. The census data allow for a comparison of the occupational status of young Turkish, Moroccan and Belgian men, controlling for age, place of residence and educational level. Evaluation of the 1991 census data has shown, however, that data quality is generally poorer for ethnic minorities (Stoop and Surkyn 1996). Response rates are lower for

Turkish and Moroccan men than they are for the Belgian population, both recordwise and for key-variables like occupation and level of education attained in Belgium¹. The lower level of education of ethnic minorities and the fact that census questionnaires were only available in the official languages are a partial explanation for the lower response rates of both ethnic groups. As for the information on educational level in the 1991 Census, study periods abroad were recorded in less detail. This causes the information on educational level and branch of studies to be less accurate for Turkish and Moroccan men, who often spent part of their educational career in the country of origin. Due to the lower response rates and the restricted information on foreign certificates, census data are expected to reflect the educational level of Turkish and Moroccan men only partially. The effects of this bias on the analyses of unemployment and occupational status are discussed in section 7.

The survey data stem from two successive national surveys among respectively Turkish men (1994-1995) and Moroccan men (1995-1996) aged 18 years and older. The questionnaires were available in Dutch-Turkish, Dutch-Arabic, French-Turkish and French-Arabic versions. The interviewers were all recruited among their respective ethnic groups. The samples are drawn from proportionally stratified clusters. First, all municipalities (= cluster) were selected with at least 100 Turkish or Moroccan inhabitants. These municipalities were stratified according to the degree of urbanization. In each stratum, clusters were selected at random, and in each cluster individuals were selected using the National Register. The survey yielded usable questionnaires for 1462 Turkish and for 1286 Moroccan men. The total non-response amounted to 28 percent for the Turkish and to 44 percent for the Moroccan men. Both for the Turkish and the Moroccan population, refusals accounted for some 39 percent of the non-response. The rest of the non-response is due to the fact that the selected person was temporarily absent or could not be located. For the Moroccan survey sampling weights were calculated per cluster in order to re-establish proportionality.

The analyses on educational attainment used survey data. The surveys cover migration histories, family formation, residential characteristics, education and labor force participation, linguistic abilities and opinions concerning religion and politics. Both for study periods in Belgium as for study periods in the country of origin, information is available on age at last grade, the highest educational level reached by the respondent and the highest certificate obtained. Less information is available on the educational level of Turkish and Moroccan men whose educational career includes study leaves in

¹ The average record non-reponse in the 1991 Census amounts to 3.4 percent for the population aged 18 to 59. For Turkish and Moroccan men the odds do not deviate significantly from the grand mean (gross odds-ratio 0.9734), but they are significantly lower for the Belgian population (gross odds-ratio 0.2431). Questions on educational attainment in Belgium are missing for 5.6 percent of the census population (excl. record non-response). The gross odds-ratios are 0.3198 for the Belgian population and 2.4273 for both ethnic minorities. A similar pattern of missing values was found for questions concerning occupation: a grand mean of 5.5 percent (excl. record non response) and gross odds-ratios of 0.4697 and 1.4502 for the Belgian population and both ethnic minorities respectively. Controlling for residence, age, gender and the household size, the amount of missing values remains higher for the Turkish and the Moroccan population than for the Belgian population (Stoop and Surkyn 1996).

countries other than Belgium or the country of origin. The frequency of this type of educational career is limited however for both Turkish and Moroccan men: respectively 2.1 percent and 2.4 percent of the total Turkish and the Moroccan sample and 0.9 percent and 1.7 percent of Turkish and Moroccan men aged 18 to 29.

3. The comparisons

The results in the subsequent sections mainly concern Turkish and Moroccan men aged 18 to 30. This age group was divided in three subgroups to make a distinction between men who were raised and socialized in Belgium and their age-mates who arrived at much older ages (Lesthaeghe and Surkyn 1995). In the analyses attention is directed to the effects of an early participation in the host-society and its institutions. Consequently, the demarcation of generations is based on the age at settlement in Belgium. The second generation was enlarged to include Turkish and Moroccan men who arrived in Belgium before the beginning of the compulsory school age (Veenman 1996).

In short, a three-way comparison was systematically made between:

- *The second generation*, which is composed of men who were born in Belgium or arrived in Belgium before the age of 6. As school attendance is compulsory in Belgium from this age onwards, the second generation consists predominantly of men who received their full education in Belgium.
- *The intermediate generation*, which is composed of men who immigrated as children in the age bracket between 6 and 17 and typically spent part of their educational career in Belgium.
- *The first generation*, which is composed of men who immigrated at ages 18 and older.

4. Assessing educational attainment

In table 1 we compared school attendance for Turkish and Moroccan men of the second generation, the intermediate generation and the first generation, aged 18 to 30. In the Turkish sample there is a pronounced relationship between school attendance and the age at settlement: school attendance decreases from 15.6 percent for the second generation to 5.1 percent for the intermediate generation and 0.6 for the first generation. In the Moroccan sample school attendance levels are generally more elevated and show a different pattern. School attendance amounts to 37.1 percent for the second generation, 13.2 percent for the intermediate generation and 24.2 percent for the first generation. This high level for the Moroccan first generation is due to recent student migration. Contrary to the educational system in Turkey, Moroccan education is partially in French, offering young Moroccan men the opportunity to study in Belgium and escape the educational restrictions in their country of origin (Lahjomri 1988, Oney 1988).

Table 1. School attendance of Turkish and Moroccan men aged 18-30, by generation.

	Turkish men			Moroccan men		
	first generation	intermediate generation	second generation	first generation	intermediate generation	second generation
finished education	99,4%	94,9%	84,4%	75,8%	86,8%	62,9%
still studying	0,6%	5,1%	15,6%	24,2%	13,2%	37,1%
<i>lower secondary</i>	0,0%	0,0%	0,0%	0,8%	1,9%	1,5%
<i>higher secondary</i>	0,0%	2,6%	7,9%	0,0%	8,5%	22,9%
<i>higher education</i>	0,6%	2,6%	7,6%	23,5%	2,8%	12,7%
total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
N	160	117	340	132	106	275

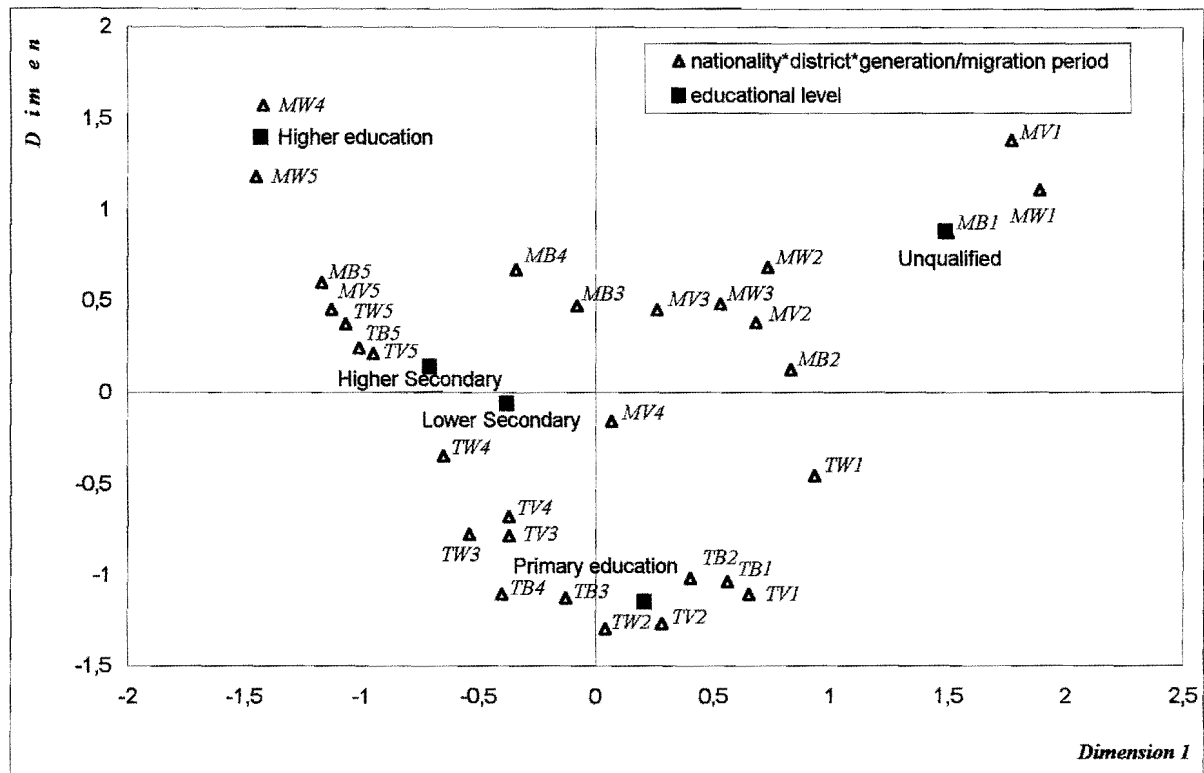
Source: Survey VUB UG ULG, 1994-1996

The varying number of censored observations for the second, the intermediate and the first generation distort the assessment of educational attainment for these young cohorts. The educational level of men who quit school or already graduated cannot be used as a proxy for the educational achievement of the whole cohort. As men with more extended educational careers run a higher risk of being censored this measure relies disproportionately on men with short educational careers and low levels of education. To assess the educational level and to allow for a comparison of educational achievement for successive migration cohorts and generations the educational levels were adjusted by means of life-tables. For the earlier migration cohorts of the first generation raw and adjusted educational levels are the same. For these cohorts the assessment of the educational level is not distorted by censored observations.

5. The educational attainment of the second generation and the educational level of successive migration cohorts of the first and the intermediate generation.

The survey data permit the construction of a five category typology of generations and migration cohorts. The typology distinguishes the second generation and four successive migration cohorts of the first and the intermediate generation. The intermediate generation and the first generation were collapsed for reasons of sample size. The combination of this typology with nationality and district results in 30 groups for which life tables were constructed in order to determine the adjusted educational level. Homogeneity analysis (Homals) was used to scale or classify these groups with respect to educational attainment. The Homals procedure results in a chart where all the categories of the variables are shown. Each category is plotted in the center of the cases belonging to that category. This feature implies that the plot can be interpreted in terms of distances between category points. If characteristic A often appears in combination with characteristic B, the category points of A and B will be plotted close to each other as A and B relate to the same cases.

Chart 1. Homals-solution for educational level, nationality, district and migration period/generation. Turkish and Moroccan men ⁽²⁾.



Source: Survey VUB UG ULG, 1994-1996

In short, the interpretation of the Homals-chart is as follows. The cluster of second generation cohorts close to the categories 'Higher Secondary' and 'Higher Education' reflects the favorable level of education attained by Turkish and Moroccan men of the second generation. The Moroccan second generation shows a stronger inclination toward higher education. The successive migration cohorts of the first and intermediate generations show a pronounced shift toward higher levels of education for both Moroccan and Turkish men. The shift from 'Unqualified' toward 'Higher Education' for the Moroccan cohorts is indicative of a strong heterogeneity in the Moroccan community with respect to education. There are more men without formal education in the Moroccan community than in the Turkish community, but the Moroccans reach higher levels of education among those that did receive an education.

The share of second generation men who spent their full educational career in Belgium amounts to respectively 86 and 96 percent for the Turkish and the Moroccan second generation. A considerable number of second generation Turkish men (13 percent) return to the country of origin for educational reasons. These study periods turn out to have a negative effect on educational attainment as they

² The 30 groups in the homogeneity analysis were labeled by means of three characters. The first letter indicates nationality: Turkish men (T), Moroccan men (M). The second letter indicates district: Brussels (B), Flanders (V), Wallonia (W). The third character indicates migration period and generation: before 1970 (1), period 1970-1974 (2), period 1975-1984 (3), after 1984 (4). The second generation is labeled with 5 on the third position.

interrupt the educational career. The educational achievement of second generation men who received their full education in Belgium varies according to district and nationality. The Turkish second generation shows a stronger orientation toward technical and vocational training in secondary education and they often leave school after completing higher secondary education. The Moroccan second generation focuses more on general education at the secondary level, thereby aiming at post-secondary levels. However, higher levels of dropping out in lower secondary and higher education indicate that ambitions are often too high. Controlling for nationality, the odds at following general education vary according to district as well, being higher in Wallonia and Brussels than in Flanders. The concentration of the Moroccan population in Brussels and of the Turkish population in Flanders results in a further diversification of the educational attainment of the Turkish and the Moroccan second generation.

The earliest migration cohorts of the first and intermediate generations show low levels of education for both Turkish and Moroccan men. For the first generation men in particular, the educational level was realized in the country of origin. The separate position of the earliest Turkish and Moroccan cohorts in the Homals-chart clearly reflects the different educational background in the country of origin. In Morocco the development of a national system of education started with the independence in 1957. The intake of children in elementary education has gone up gradually and was characterized by regional and gender differences (Radi 1995, Lahjomri 1988). In Turkey the attendance of elementary education had already been made compulsory in 1923 with the foundation of the Turkish Republic. Although the compliance with compulsory attendance increased gradually and was slower for women and in rural areas, this historical factor explains why there are fewer men without formal education in the Turkish community than in the Moroccan one (Öney 1995, Timmerman 1996).

For the Moroccans, several developments account for the strong increase of educational levels of the cohorts that arrived after 1970. The share of first generation men without formal education gradually dropped from 34 percent before 1970 to 2 percent for the most recent cohort (after 1984). In addition, the educational career of first generation men who studied in Morocco shows a more favorable course for successive cohorts. Both for the Moroccan first generation as for the intermediate generation there is a marked increase of participation in Belgian education. For the intermediate generation participation gradually increased from 28 percent before 1970 to 90 percent for the most recent cohort. A similar conclusion can be drawn for the first generation: participation increased to 18 percent in the period 1975-1984 and to 22 percent after 1984. The high level of education prior to migration and the pattern of residence of these most recent Moroccan migrants point at the emergence of Moroccan student migration. This latter group attains a higher level of education than the Moroccan second generation.

For the Turkish community similar developments occurred. The share of first generation men without formal education equally dropped from 17 percent before 1970 to 2 percent for the most recent cohort. Similarly, the educational career of first generation men who studied in Turkey has taken a more favorable course for later cohorts. Contrary to the Moroccans, there is no increase of participation in Belgian education among first generation Turkish men. The increase of participation is also less pronounced for the Turkish intermediate generation: an increase from 48 percent before 1970 to 66 percent after 1984. In addition, the educational attainment is less favorable for the Turkish intermediate generation than for the Moroccan intermediate generation.

6. The educational level of the Turkish and the Moroccan labor force aged 18 to 30.

The varying levels of school attendance of Turkish and Moroccan men aged 18 to 30 result in equally varying levels of labor force participation. For young groups like the Moroccan second generation we expect the current labor force to consist disproportionately of men with short educational careers and (consequently) low levels of education. In tables 2a & b we compared the adjusted educational level of young men of the first, the intermediate and the second generation with the educational level of the current labor force aged 18 to 30.

Table 2a. Educational level of the Turkish labor force aged 18-30, by generation.

	Second generation		Intermediate generation		First generation		Total	
	Labor Force	Adjusted	Labor Force	Adjusted	Labor Force	Adjusted	Labor Force	Adjusted
unqualified	0	0	3	3	0	0	1	1
elementary	8	7	19	18	46	46	21	19
lower secondary	38	32	31	30	19	19	32	29
higher secondary	49	48	45	46	32	32	44	44
higher education	4	13	2	4	3	3	3	8
total	99	100	100	101	100	100	101	101
N =	288	341	112	117	160	160	560	618

Source: Survey VUB UG UCL, 1994-1996.

Table 2b. Educational level of the Moroccan labor force aged 18-30, by generation.

	Second generation		Intermediate generation		First generation		Total	
	Labor Force	Adjusted	Labor Force	Adjusted	Labor Force	Adjusted	Labor Force	Adjusted
unqualified	0	0	3	3	15	13	5	4
elementary	17	11	17	14	20	17	18	13
lower secondary	38	24	30	27	17	14	30	22
higher secondary	38	37	46	48	33	28	39	37
higher education	8	29	4	8	14	29	9	25
total	101	101	100	100	99	101	101	101
N =	175	279	92	107	110	132	377	518

Source: Survey VUB UG UCL, 1994-1996.

The data in table 2 indicate that particularly the current Moroccan labor force shows low levels of education in comparison with the adjusted level of education. For the Moroccan first and second generations an increase of respectively 10 and 20 percent is to be expected in the share of men who will graduate from higher secondary or higher education. Such men with longer educational careers will subsequently enter the labor market. The current Moroccan labor force of the first generation shows a higher share of men who graduated from higher education than does the current second generation labor force. For the Turkish population the educational level of the current labor force is far more representative than is the case for the Moroccan population. Turkish men show a stronger orientation toward technical and vocational training in secondary education, and only a limited number of Turkish men take up higher education subsequently.

7. Labor force participation, unemployment and occupational status of Turkish, Moroccan and Belgian men aged 18-29.

According to the 1991 Census, respectively 86.6 percent and 69.5 percent of the Turkish and Moroccan men aged 18 to 29 have finished their education. As was the case for the survey, labor force participation varies significantly in terms of generation. Respectively 97.0 percent, 93.8 percent and 79.1 percent of the Turkish first, intermediate and second generations have entered the labor market. For the Moroccan population labor force participation amounts to 71.9 percent, 82.6 percent and 63.7 percent for the first, intermediate and second generation respectively. In table 3 we have compared the observed and the expected unemployment rate and occupational status of the Belgian, Turkish and Moroccan labor force aged 18 to 29. For the analyses on occupational status the full Ericsson, Goldthorpe and Portocarero (E.G.P.) occupational classification has been collapsed into a three category classification. Before discussing the expected frequencies and their calculation, the observed frequencies are compared for Belgian men and both ethnic groups.

Table 3. Occupational status and unemployment of Belgian, Turkish and Moroccan men aged 18 to 29. Observed and expected frequencies.

Occupational Status	Higher occupations		Skilled labor		Semi- & unskilled labor		Unemployed		N ⁽³⁾
	Obs	Exp	Obs	Exp	Obs	Exp	Obs	Exp	
Turkish men	9,2%	22,5%	33,2%	38,8%	21,6%	24,0%	36,0%	14,6%	6719
<i>First generation</i>	6,9%	23,8%	30,0%	39,6%	28,2%	24,2%	34,9%	12,4%	1426
<i>Intermediate generation</i>	8,8%	22,2%	36,6%	38,7%	21,8%	24,2%	32,8%	15,0%	1974
<i>Second generation</i>	10,5%	22,4%	32,4%	38,6%	18,6%	23,6%	38,4%	15,3%	3319
Moroccan men	15,2%	31,5%	24,6%	33,2%	23,2%	21,8%	36,9%	13,5%	7698
<i>First generation</i>	18,6%	31,9%	20,9%	34,6%	31,2%	23,7%	29,3%	9,8%	1309
<i>Intermediate generation</i>	13,5%	30,1%	27,7%	33,5%	25,9%	21,5%	33,0%	15,0%	2211
<i>Second generation</i>	15,1%	33,5%	24,2%	32,3%	19,4%	21,4%	41,4%	12,8%	4178
Belgian men	39,3%	39,3%	31,2%	31,2%	19,6%	19,6%	9,9%	9,9%	7532

Source: 1991 Census

Compared to the unemployment level of the Belgian population, Turkish and Moroccan men show much higher unemployment levels of respectively 36.0 and 36.9 percent. This striking overrepresentation of ethnic minorities in unemployment varies in terms of generations. Across generations and nationalities, the Moroccan first generation shows the smallest relative surplus of unemployment (19.4 percent⁴). The most disadvantaged position was found for the Moroccan second generation (31.5 percent). Differences between generations are less pronounced for the Turkish population. The other striking feature is that both ethnic minorities are strongly underrepresented in higher occupations. The share of Turkish men taking up higher occupations is limited to 9.2 percent. The underrepresentation amounts to 28.8 percent for the Turkish second generation and 32.4 percent for the Turkish first generation. Moroccan men generally attain a more favorable occupational status. The underrepresentation in higher occupations is limited to respectively 20.7, 25.8 and 24.2 percent for the Moroccan first, intermediate and second generation.

The occupational status of the Belgian population varies significantly according to age, place of residence, educational level and branch of studies⁵. For the Belgian sample probabilities of employment increase with age and level of education. Controlling for these latter variables, the highest levels of unemployment were found for the provinces of Hainaut and Namur. In Flanders the highest risk of unemployment was found for the province of Limburg. For both ethnic groups expected frequencies were calculated to determine to what extent their unfavorable occupational status is the

³ Cases with a missing value on occupation or year of arrival in Belgium (in the case of Turkish and Moroccan men) were excluded from the analysis.

⁴ 19.5 percent = the observed Belgian unemployment level (9.9%) subtracted from the observed ethnic level (29.3%).

⁵ The output of the logistic regression analysis on the Belgian sample can be found in Appendix 1.

result of lower educational levels, a younger age composition and an unfavorable pattern of residence (Veenman 1996). First, probabilities of unemployment and occupational status were calculated for the Belgian sample by age, educational level and region. Expected frequencies were obtained by applying the probabilities of the Belgian sample to the marginal distributions of both ethnic minorities. As was mentioned in section 2, information on the branch of studies is often unavailable for Turkish and Moroccan men of the first and intermediate generations. For these latter cases the opportunities of Belgian men with vocational training were used in the calculation of the expected occupational status. The calculation of the expected occupational status of Turkish and Moroccan men is furthermore affected by the underestimation of the educational level in the 1991 census. This results in an underestimation of the difference between the observed and the expected occupational status of both ethnic groups and an overestimation of the difference between the expected position of ethnic minorities and the occupational status of the Belgian population.

The expected frequencies for Turkish and Moroccan men reflect what the occupational status of both ethnic groups would be if job opportunities were the same for ethnic minorities as for the Belgian population, given educational level, age and place of residence. For both ethnic groups the expected frequencies are rather similar for different generations. This is due to a different distribution of the first, the intermediate and the second generation with respect to age and educational level. Turkish and Moroccan men of the second generation generally show higher levels of educational attainment than the first and intermediate generations, but have a much younger age structure. The first and intermediate generations compensate for this lack of education with a higher level of job seniority.

Table 4 summarizes the differences between observed and expected frequencies for unemployment and occupational status:

- 'Deficit' is defined as the result of subtracting the observed frequencies of the Belgian population from the expected frequencies of Turkish and Moroccan men. In this calculation the opportunity structure is the same across nationalities, while the marginal distributions with respect to education, age and place of residence differ. Consequently, the 'deficit'-column in table 4 reflects to what extent the unfavorable occupational status of ethnic minorities is the result of lower levels of education, a younger age composition and an unfavorable pattern of residence (Veenman 1996, Dagevos 1996).
- 'Discrimination' is defined as the result of subtracting the expected frequencies of ethnic minorities from the observed frequencies of ethnic minorities. In this calculation the marginal distributions with respect to education, age and place of residence are fixed, while the opportunity structure is different. Consequently, the 'discrimination' column reflects to what extent the socio-economic deprivation of ethnic minorities cannot be explained by educational level, age and pattern of settlement.

Table 4. Level of deficit and discrimination of Turkish and Moroccan men.

Occupational status	Higher Occupations		Skilled Labor		Semi- & Unskilled labor		Unemployed	
	Deficit	Discr.	Deficit	Discr.	Deficit	Discr.	Deficit	Discr.
Turkish men	-16,8%	13,3%	7,6%	5,6%	4,4%	2,4%	4,7%	-21,4%
<i>First generation</i>	-15,5%	16,9%	8,4%	9,6%	4,6%	-4,0%	2,5%	-22,5%
<i>Intermediate generation</i>	-17,1%	13,4%	7,5%	2,1%	4,6%	2,4%	5,1%	-17,8%
<i>Second generation</i>	-16,9%	11,9%	7,4%	6,2%	4,0%	5,0%	5,4%	-23,1%
Moroccan men	-7,8%	16,3%	2,0%	8,6%	2,2%	-1,4%	3,6%	-23,4%
<i>First generation</i>	-7,4%	13,3%	3,4%	13,7%	4,1%	-7,5%	-0,1%	-19,5%
<i>Intermediate generation</i>	-9,2%	16,6%	2,3%	5,8%	1,9%	-4,4%	5,1%	-18,0%
<i>Second generation</i>	-5,8%	18,4%	1,1%	8,1%	1,8%	2,0%	2,9%	-28,6%

Source: 1991 Census

Under the condition of equal opportunities and comparing with the Belgian population, Turkish men show a surplus of 4.7 percent for unemployment, a surplus of 4.4 and 7.6 percent for employment in unskilled and skilled labor respectively and a shortfall of 16.8 percent for employment in higher occupations. Educational level, age and pattern of residence only partially explain the observed underrepresentation of Turkish men in higher occupations and offer a very limited explanation for the overrepresentation of Turkish men in unemployment. Levels of deficit and discrimination vary in terms of generations. Turkish men of the first generation show the lowest level of deficit compared to the Belgian population. A strong overrepresentation of the Turkish first generation in both unemployment and unskilled labor indicates, however, that the first generation is also the least successful in realizing their expected occupational status. On average the Turkish intermediate generation shows the smallest discrepancy between observed and expected occupational status. In line with what could be expected on grounds of educational level, age composition and pattern of residence the intermediate generation can for the most part be found in skilled labor. Note however that the intermediate generation has the most deviant profile from the Belgian population as far as education, age and pattern of residence are concerned. For the Turkish second generation the high level of unemployment is the most important barrier for the realization of the expected occupational status. The latter group shows the lowest level of discrimination with respect to higher occupations. This means that the Turkish second generation of young men can move up to higher occupations, provided that they find a job.

Contrary to the Turkish men, Moroccan men generally show lower levels of deficit. This results in even higher levels of discrimination, as the economic deprivation is equally large for Moroccan as for Turkish men. Educational level, age composition and pattern of residence offer an even more limited explanation in the case of the Moroccans. Under the condition of equal opportunities, Moroccan men

show a surplus of 3.6 percent for unemployment, a surplus of 2.2 and 2.0 percent for employment in unskilled and skilled labor respectively and a shortfall of 7.8 percent for employment in higher occupations. Again, levels of deficit and discrimination differ among generations. Due to discrimination the Moroccan second generation shows a surplus of unemployment of 28.6 percent. For the first and intermediate generation the surplus of unemployment is less pronounced (19.5 and 18.0 percent respectively). For these latter generations discrimination predominantly takes the form of an overrepresentation of employment in semi- and unskilled labor (of 7.5 and 4.4 percent respectively). The Moroccan second generation shows a more elevated level of discrimination with respect to higher occupations than the Moroccan intermediate and first generations. To sum up, the Moroccan first and intermediate generations are more successful in escaping unemployment and in taking up higher positions. Although the expected occupational status of the Moroccan second generation bears the closest resemblance to the occupational status of the Belgian population, the Moroccan second generation shows the highest level of discrimination. A similar situation was found for the Turkish first generation.

8. The impact of generation on unemployment and occupational status of Turkish and Moroccan men aged 18-29.

The results in section 7 indicated that Turkish and Moroccan men of the second generation do not always attain a more favorable occupational status than their age-mates who arrived at older ages. Unemployment levels are generally higher for the second generation, and strikingly, the Moroccan first generation even outnumbered the second generation as far as employment in higher occupations is concerned. However, these results do not give a decisive answer about the effect of generation on unemployment and occupational status as the comparison of generations is distorted by different marginal distributions with respect to age, pattern of residence and educational level. The aim of this last section is to examine the importance of generation in explaining unemployment and occupational status of Turkish and Moroccan men relative to characteristics such as age, educational level, job seniority and pattern of residence. The regional unemployment level and job opportunities of the Belgian population by arrondissement ($N = 43$) were also used as continuous predictors of the unemployment level and occupational status of ethnic minorities.

8.1 Methods

Logistic regression was used for both the analysis of unemployment as for the analyses of occupational status (Dagevos 1996). Age was primarily used as a proxy for job seniority and place of residence was used as a proxy for local labor market conditions. The results report gross and net odds-ratios. The odds-ratios reflect to what extent belonging to a category leads to an increase or decrease of the overall risk. The gross and net odds-ratios were also expressed relative to the grand mean.

When interpreting the gross effects, it has to be taken into account that the independent variables are strongly correlated. The Turkish and Moroccan first, intermediate and second generations show a very different profile with respect to age, place of residence and educational level. Both the Turkish and the Moroccan second generation are on average younger than the first and intermediate generations. The majority of the Turkish and the Moroccan second generation was still younger than 25 in 1991. The first generation shows an older age composition as they often immigrated at the occasion of a marriage to a Turkish or Moroccan bride with Belgian residence. Patterns of residence are also different for the Turkish and the Moroccan population. The Moroccan population shows a strong regional concentration with half of the entire population living in the province of Brabant, which contains the Brussels agglomeration. In the province of Antwerp important numbers of both ethnic groups can be found. Both ethnic groups are also present in the provinces of Liège and Hainaut, with a slight overrepresentation of Turkish inhabitants. The Turkish population is regionally concentrated in the provinces of Limburg and East-Flanders. The regions of West-Flanders, Namur and Luxembourg were not included in the analyses as each of these regions accommodate less than 2 percent of the entire Turkish and Moroccan population. Finally, Turkish and Moroccan men show different educational profiles. With respect to the educational profile of the Turkish and the Moroccan labor force, the 1991 census data and the survey data offer consistent findings. Turkish men of the first and intermediate generations show the highest percentage of men without formal education or with primary education, and only a limited number of men graduated from higher secondary education or higher education. The share of men without formal education or with elementary education decreases for the Turkish first, intermediate and second generations respectively and an increase can be found of men who graduated from higher secondary or higher education. The educational level of the second generation is rather similar for the Turkish and Moroccan population in the 1991 Census. Remarkable for the Moroccan population is the large number of first generation men who graduated from higher education. With respect to higher education the Moroccan first generation outnumbers the second generation.

8.2 Unemployment

In table 5 we compared the effect of nationality, generation, educational level, province, age and the local unemployment level of the Belgian labor force on the risk of unemployment of Turkish and Moroccan men.

Table 5. Results of a logistic regression with unemployment as dependent variable. Turkish and Moroccan men.

		<i>odds-ratio</i>		<i>Difference from grand mean of unemployment (36.5%)</i>	
		<i>Gross</i>	<i>Net</i>	<i>Gross*</i>	<i>Net*</i>
Nationality & generation	Turk. First	0,9931	1,0304	-0,2%	+0,7%
	Turk. Intermediate	0,9112	0,8445	-2,1%	-3,8%
	Turk. Second	1,1605	0,9015	+3,5%	-2,4%
	Mor. First	0,7943	0,9501	-5,1%	-1,2%
	Mor. Intermediate	0,9183	1,0728	-1,9%	+1,6%
	Mor. Second	1,3055	1,2506	+6,3%	+5,3%
Educational Level	Unqualified/ Primary ed.	1,3546	1,4800	+7,2%	+9,4%
	Lower Secondary	1,1552	1,1045	+3,4%	+2,3%
	Higher Secondary	0,8622	0,8128	-3,3%	-4,6%
	Higher Education	0,7411	0,7526	-6,6%	-6,3%
Province	Antwerp	0,7265	0,8568	-7,0%	-3,5%
	E.-Flanders	0,4625	0,5628	-15,4%	-12,0%
	Limburg	1,3695	1,7106	+7,5%	+13,0%
	Brabant	1,0020	0,9448	+0,0%	-1,3%
	Liège	1,476	0,9886	+9,4%	-0,3%
	Hainaut	1,4693	1,2979	+9,2%	+6,2%
Age	+1 year	0,9319	0,9272	-1,4%	-1,5%
Unemployment level of the Belgian labor force (by arrondissement)		1,0395	1,0348	+0,9%	+0,8%

Source: 1991 Census

The level of education has a marked influence on the risk of unemployment of young Turkish and Moroccan men. For men without a formal education or with elementary education the risk of unemployment is 9 percent higher than average, while the risk for men who graduated from higher education is 6 percent lower than average. The risk of unemployment equally varies in terms of age or job seniority. For Turkish and Moroccan men the risk of unemployment declines with increasing age as is the case for the Belgian population. For young Turkish and Moroccan men a 10 years age increment results in a decline of the risk of unemployment of 15 percent. Both for the Belgian as well as for the Turkish and the Moroccan population the risk of unemployment varies in terms of region. If the level of unemployment of the Belgian population is 1 percent higher in arrondissement A than in

arrondissement B, a 0.8 percent difference can be expected to be found among Turkish and Moroccan men. Controlling for the Belgian opportunities and the other variables in the analysis, a net effect was found of province on the risk of unemployment of Turkish and Moroccan men. The most favorable job opportunities were found in the province of East-Flanders (-12.0 percent). The highest levels of unemployment were found in Limburg (+13.0 percent). Due to their regional concentration in these latter provinces, place of residence turns out to be crucial for the job opportunities of especially Turkish men. The risk of unemployment does not deviate from the grand mean in the Liège province. The region of Hainaut does show a higher level of unemployment. The risk of unemployment turns out to be particularly high in regions where foreign labor formerly consisted of coal-mine workers.

The risk of unemployment equally varies in terms of generations and nationalities. The gross odds indicate that the unemployment level is higher for the Turkish and Moroccan second generation than for the first and intermediate generations. Controlling for the other variables in the analysis, however, the risk of unemployment turns out to be lower for the Turkish second generation than for the Turkish first generation. This is not the case for the Moroccan population : the Moroccan second generation shows higher net odds for unemployment than the first and intermediate generations. As far as unemployment is concerned it can be stated that the risk is not consistently lower for men of the second generation. Taking into account the high level of unemployment and the importance of age, educational level and region in explaining the risk of unemployment of both ethnic minorities it can be concluded that generation is only of limited importance. For the Turkish and the Moroccan men of the first generation the risk of unemployment turns out to be rather similar. For the intermediate and second generations the risk of unemployment is much more unfavorable for Moroccan than for Turkish men. The high level of education and the favorable pattern of settlement of the Moroccan second generation can only partially compensate for this high risk.

8.3 Occupational status

The analyses of occupational status concentrate on working Turkish and Moroccan men aged 18-29. For these analyses repeated logistic regression was used. First, the odds of employment in skilled labor rather than unskilled labor are examined. Second, the probabilities of taking up a higher occupation are compared with those of employment in skilled labor. Table 6 reports gross and net odds-ratios and deviations from the grand mean for both analyses.

Table 6. Repeated logistic regression analysis of occupational status. Turkish and Moroccan working men aged 18-29.

		SKILLED VERSUS UNSKILLED LABOR				HIGHER OCCUPATIONS VERSUS SKILLED LABOR			
		Odds-ratio		Difference from grand mean of skilled labor (55.8%)		Odds-ratio		Difference from grand mean of higher occupations (30.5%)	
		Gross	Net	Gross*	Net*	Gross	Net	Gross*	Net*
Nationality & generation	Turk. First	0,9029	0,9312	-2,5%	-1,7%	0,5559	0,6291	-10,9%	-8,8%
	Turk. Inter.	1,3980	1,1968	+8,1%	+4,4%	0,5797	0,8123	-10,2%	-4,2%
	Turk second	1,4696	1,2562	+9,2%	+5,6%	0,7981	1,1970	-4,5%	+4,0%
	Mor. First	0,5743	0,6369	-13,7%	-11,2%	2,1606	1,3296	+18,2%	+6,4%
	Mor. Inter.	0,8948	0,9529	-2,7%	-1,1%	1,1871	0,9829	+3,8%	-0,3%
	Mor. Second	1,04903	1,1769	+1,2%	+4,0%	1,5159	1,2509	+9,5%	+5,0%
Educational Level	Unqualified/ Primary ed.	0,7758	0,7795	-6,3%	-6,1%	0,6398	0,6900	-8,5%	-7,2%
	Lower Secondary	1,1760	1,0696	+4,0%	+1,7%	0,617	0,6610	-9,2%	-8,0%
	Higher Secondary	1,3829	1,2954	+7,8%	+6,3%	0,6784	0,7006	-7,5%	-6,9%
	Higher Education	0,7925	0,9258	-5,7%	-1,8%	3,73409	3,1295	+31,6%	+27,4%
	Province	Antwerp	0,9369	0,9662	-1,6%	-0,8%	1,0759	1,0538	+1,6%
	E.-Flanders	0,993	0,9673	-0,1%	-0,8%	0,5472	0,7163	-11,1%	-6,5%
	Limburg	1,9086	1,6497	+14,9%	+11,8%	0,3856	0,5292	-16,0%	-11,6%
	Brabant	0,5251	0,6047	-15,9%	-12,4%	3,0709	1,5503	+27,0%	+10,0%
	Liège	0,9843	1,0009	-0,3%	+0,1%	1,3337	1,5091	+6,5%	+9,4%
	Hainaut	1,0896	1,0716	+2,2%	+1,8%	1,0755	1,0699	+1,6%	+1,5%
Age	+1 year	0,9754	1,0227	-0,6%	0,6%	1,0893	1,058	+1,9%	+1,4%
% of skilled labor(A) / higher occupations(B) of Belgian labor force (by arrondissement)		1,0383	1,0095	1,0%	0,3%	1,075	1,04	+1,6%	+0,9%

Source: 1991 Census

Skilled labor versus unskilled labor

Again, the level of education has an important influence on the odds of employment in skilled labor. The probabilities of taking up skilled labor are higher for men who finished higher secondary education. Turkish and Moroccan men with this level of education most often received vocational or technical training in secondary education. The observed (gross) probability of taking up skilled labor decreases for older men as mostly men of the second and intermediate generations have received a technical or vocational training in Belgium. Controlling for generation and educational level the odds of taking up skilled labor increase with age. An age increment of 10 years results in a 6 percent increase of the probability of taking up skilled labor. The percentage of skilled laborers of the Belgian population turns out to be a poor indicator of the probabilities of Turkish and Moroccan men taking up

skilled labor. Region does have a strong influence on the odds of skilled labor. The province of Limburg shows high net probabilities of taking up skilled labor while the reverse is true for the province of Brabant.

Controlling for the other independent variables in the analysis generation turns out to have a pronounced effect on the odds of taking up skilled labor, showing higher probabilities for the Turkish and the Moroccan second generation than for the first and intermediate generations. Across generations and nationalities, Turkish men of the second and intermediate generations show the highest net odds for skilled labor. The even higher gross odds indicate that the high level of employment in skilled labor of the Turkish second and intermediate generations is also due to a favorable pattern of residence and the strong orientation of Turkish men toward vocational and technical training. Moroccan men generally show lower levels of employment in skilled labor.

Higher occupations versus skilled labor

The odds of employment in higher occupations vary significantly in terms of education. The probability of taking up a higher occupation is 27 percent higher than average for men who graduated from higher education. The probabilities are similarly unfavorable for all lower levels of education. The pronounced effect of education on employment in higher occupations is consistent with the outcomes for the Belgian population. The odds of taking up a higher occupation also increase with age, indicating that job seniority has a large effect on the probability of taking up a higher occupation. A 10 years age increment results in a 14 percent increase of the probability of employment in higher occupations. The percentage of Belgian men in higher occupations is a reliable proxy for the opportunities of Turkish and Moroccan men. If the level of employment in higher occupations of the Belgian population is 10 percent higher in arrondissement A than in arrondissement B, a 9 percent increase can equally be expected for Turkish and Moroccan men. Controlling for the other variables in the analysis, the opportunities of employment in higher occupations vary significantly by region, as was the case for unemployment and skilled labor. In short, the opportunities are far more favorable in Brabant (Brussels) and the Walloon provinces (Liège and Hainaut) than in the Dutch speaking part of the country, where especially Limburg shows limited opportunities.

The odds for taking up a higher occupation equally vary in terms of nationality and generation. Turkish men turn out to take up higher occupations less than average. Controlling for the other variables in the analysis, however, the odds for higher occupations of the second and intermediate generations are equivalent for both ethnic groups. Hence, the limited employment of the Turkish second and intermediate generations in higher occupations is predominantly due to lower levels of education and a more unfavorable pattern of settlement. The Turkish second generation shows a higher probability of employment in higher occupations than do the Turkish first and intermediate generations. The reverse is true for the Moroccan population. Moroccan men of the first generation

show an 18 percent surplus of employment in higher occupations than average. However, controlling for the other variables in the equation the odds are equivalent for the Moroccan first and second generation. The overrepresentation (gross) of the Moroccan first generation is due to the high level of education and the age structure of the Moroccan first generation.

9. Conclusions

The results presented in the previous sections are summarized in four concluding remarks:

1. The use of life-table techniques is necessary when studying the educational attainment of young Turkish and Moroccan men. For young groups like the second generation in particular, the educational level of men who quit school or already graduated cannot be used as a reliable proxy for the educational attainment of the second generation. As men with extended educational careers run a higher risk of being censored, this measure relies disproportionately on men with short educational careers and consequently low levels of education.
2. The Moroccan population shows a high degree of polarization with respect to education. There are more men without formal education in the Moroccan community than in the Turkish one, but among those Moroccans that did receive an education, a higher level of education is being reached. Especially the Moroccan second generation and the most recent Moroccan first generation migration cohort show a strong orientation toward general education in secondary education, aiming further at higher education. The Turkish second generation shows a strong orientation toward technical and vocational training at the secondary level, and only a limited number of second generation men take up higher education.
3. The results of our analyses offer limited evidence for the hypothesis that unemployment levels and occupational status are consistently more favorable for men of the second generation. Although this is more or less the case for the Turkish population, the hypothesis has to be rejected for the Moroccans. Compared to the second generation, Moroccan men of the first generation show more favorable odds for both unemployment and employment in higher occupations. Multivariate analyses indicate that age, place of residence and education have equally important effects on unemployment and occupational status of young Turkish and Moroccan men. The level of education and generation are however strongly correlated, indicating that education is an important intermediate variable in the relation between generation and occupational status.
4. With respect to unemployment and occupational status both ethnic minorities show a considerable lag compared to the Belgian population. Across generations and nationalities the overrepresentation of ethnic minorities in unemployment varies from 19.4 percent for the Moroccan first generation to 31.5 percent for the Moroccan second generation. For young Turkish and Moroccan men this high level of unemployment turns out to be the most important barrier to social mobility. Under the condition of equal opportunities the excess in unemployment would be limited to approximately 5 percent for both ethnic groups. Education, age and pattern of residence

do offer a partial explanation for the underrepresentation of Turkish men in higher occupations. Moroccan men generally show lower levels of deficit than Turkish men, which implies even higher levels of discrimination, given that the deprivation is equally large for Turkish and Moroccan men.

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Appendix I. Logistic Regression analysis on unemployment and employment in higher occupations of Belgian men aged 18-29, Gross and net effects of age, province and educational level.

	Unemployment Grand Mean 10,2%		Higher occupations Grand Mean 39,2%	
	Gross Exp(B)	Net Exp(B)	Gross Exp(B)	Net Exp(B)
Province				
<i>Antwerp</i>	0,5354	0,5414	1,1830	1,2026
<i>Brabant</i>	1,0284	1,0618	1,6211	1,4545
<i>W.-Flanders</i>	0,4467	0,447	1,0384	1,0077
<i>E.-Flanders</i>	0,5262	0,5199	1,0700	1,0656
<i>Hainault</i>	2,5266	2,4419	0,8201	0,9432
<i>Liège</i>	1,8298	1,8662	1,0594	1,0554
<i>Limburg</i>	0,7778	0,8297	0,9010	0,8222
<i>Luxembourg</i>	0,9479	0,8657	0,8005	0,8388
<i>Namur</i>	2,2668	2,2868	0,7489	0,7755
Level of education				
<i>Unqualified</i>	1,7131	1,8094	0,5401	0,5418
<i>Primary Education</i>	1,7931	1,5696	0,2524	0,2422
<i>Low. Sec. Vocational</i>	1,3263	1,1849	0,2083	0,2112
<i>Low. Sec. Technical</i>	0,7825	0,7629	0,3849	0,3881
<i>Low. Sec. General</i>	1,2301	1,0005	1,3578	1,3870
<i>High. Sec. Vocational</i>	1,1559	0,9626	0,4824	0,5450
<i>High. Sec. Technical</i>	0,5227	0,5081	0,5869	0,6242
<i>High. Sec. General</i>	1,0895	1,0603	2,8863	2,9997
<i>Higher Education Short</i>	0,6341	0,7828	5,8365	5,6122
<i>University</i>	0,6109	0,9560	14,1285	11,7042
Age	0,8367	0,8305	1,1929	1,1466

Source: 1991 Census

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