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**Publication date**  
2008

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#### **Citation for published version (APA):**

Zorlu, A. (2008). *Struggling for a proper job: recent immigrants in the Netherlands*. (Working Paper; No. 64). AIAS. [http://www.uva-aias.net/uploaded\\_files/publications/WP64-1.pdf](http://www.uva-aias.net/uploaded_files/publications/WP64-1.pdf)

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Amsterdam Institute **AIAS**  
for Advanced Labour Studies

**STRUGGLING FOR A PROPER JOB:  
RECENT IMMIGRANTS IN THE NETHERLANDS**

AIAS Working Paper 07-64  
January 2008

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**AMSTERDAM INSTITUTE FOR  
ADVANCED LABOUR STUDIES**

**Acknowledgement:**

The research was based on collaboration with Statistics Netherlands. I should like to thank Henk-Jan Dirven for his valuable comments. I am also grateful to the participants of the working group 'New immigrants in the European countries' of the EQUALSOC Network of Excellence for their helpful comments.

**Library information:**

A. Zorlu (2008) Struggling for a proper job: Recent immigrants in the Netherlands, AIAS Working paper 2008-64, Amsterdam: University of Amsterdam.

January 2008

AIAS encourages the widespread use of this publication with proper acknowledgment and citation.

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This paper can be downloaded:  
<http://www.uva-aias.net/files/aias/WP64.pdf>

## **ABSTRACT**

This article concerns the employment performance of recent immigrants in the Netherlands. The analysis shows different patterns of adjustment in the Dutch labour market for Western and non-Western immigrants. The entry of Western immigrants into the labour market follows a smooth pattern, while non-Western immigrants have relatively low employment and relatively high unemployment upon arrival. In addition, they often start with semi-skilled or unskilled jobs. The labour market position of non-Western immigrants improves significantly over time. However, a considerable proportion of the disadvantages remains and seems to be persistent over time. Among non-Western immigrants, especially the Turks and Moroccans seem to face difficulties in the labour market, while the Surinamese and Antilleans are able to compensate for a large part of their substantial initial disadvantage. The relative success of the last group is probably a result of their familiarity with Dutch society.

*Keywords:* Immigrants, Employment, Unemployment, Quality of jobs

*JEL Classification:* J15, J21, J24



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## **I. INTRODUCTION**

Research on the labour market performance of immigrants was first carried out in traditional immigration countries and since then has been dominated by studies from North America. The emphasis of research has been on the earnings adjustment of immigrants rather than on their employment performance (Chiswick, 1978; Borjas, 1995). This attention to earnings is probably a result of the more flexible structure of the US labour market, in which employment adjustment takes place through wages and unemployment is a less important phenomenon than it is in European labour markets. However, few European studies have emphasized the duration of residence when examining the employment performance of immigrants (Wheatley Price 2001; Bevelander and Nielsen, 2001; Hartog and Zorlu, forthcoming; Amuedo-Dorantes and de la Rica, 2007).

The labour market adjustment of immigrants in European countries seems to follow different patterns. Relatively low participation rates and high unemployment rates among immigrants are the main concerns of policy makers and are increasingly subject to scholarly research. The relatively poor performance of immigrants is often associated with a less flexible labour market and the generous welfare system in northern and western European countries. In addition, immigrants to Western Europe are relatively less skilled and many must deal with different local languages, which leads to long adjustment processes and, probably because of the generous welfare system, low activity rates.

In the Netherlands, two main groups of immigrants can be distinguished regarding their labour market performance. The labour market position of immigrants from Western countries is similar to that of the native Dutch, while immigrants from non-Western countries experience significant labour market disadvantages. This is related to the way in which immigrants are allowed to enter the Netherlands and to their qualifications. Western immigrants usually enter as labour migrants (they have arranged a job before they arrive and do not face legal barriers) while non-Western immigrants may enter only as family or asylum immigrants; such an entry procedure implies a time period during which they must acquire the legal right to live and work in the country. Moreover, formal qualifications acquired in the origin country are usually not directly recognized and the immigrants need to undergo additional training. These factors may generate a large initial disadvantage for non-Western immigrants.

The immigrants' disadvantage is not limited to their low employment rate. Immigrants are concentrated in 'low quality' segments of the labour market. This can have implications for career prospects and, consequently, for lifetime earnings. This paper provides data concerning the



employment performance of recent immigrants in the Netherlands derived from the 2004 and the 2005 Labour Force Survey. First, the activity rate and the prevalence of unemployment among immigrants were examined by gender. Subsequently, the improvement in the position of the employed labour force – which was approximated using the Erikson, Goldthorpe and Portocarero (EGP) social class schema – was studied for immigrants. The emphasis of this study is on the impact of the duration of residence, which can be seen as the accumulation of knowledge about Dutch society and the Dutch labour market.

The expected performance of immigrants is closely related to the interaction between demand and supply side factors. However, this paper considers only the relevant characteristics of the immigrants themselves (e.g. country of origin and human capital endowment) and implicitly assumes that immigrants and the native population face a similar opportunity structure in the labour market. In other words, the demand for immigrant labour is assumed to be exogenous. It should be noted that our estimates may be coloured by unmeasured cohort effects and selective return migration – a problem that is inherent to the analysis of cross-sectional data.

## **2. IMMIGRATION TO THE NETHERLANDS: AN OVERVIEW**

Recent immigration flows to the Netherlands have mainly comprised family and asylum immigrants. Most of the family-related migration has been from the 'guest worker' countries from which the largest groups of immigrants originated, such as Turkey and Morocco and the former Dutch colonies of Suriname and the Dutch Antilles. Immigration from Turkey, Morocco and Suriname is subject to restrictive immigration policies, which have been increasingly tightened since the 1990s. Immigrants from the former colonies are familiar with Dutch society and often speak the language, while Turks and Moroccans have a different religious and cultural background and need to learn the Dutch language after immigration.

Especially during the second half of the 1990s, immigration flows were dominated by asylum seekers from, for example, the former Yugoslavia, the former Soviet Union, Iran, Iraq, Afghanistan and China. Further tightening of immigration policies at the beginning of the new millennium has substantially hindered asylum migration as well as family migration from Turkey and Morocco. At the same time, the accession of Poland and some other Eastern European countries to the EU has generated a legal ground for immigration from these countries, although immigration from these countries is subject to some restrictions.

In addition to the immigration from non-Western countries, the Netherlands attracts a large number of immigrants from EU countries and from other developed countries, such as the USA, Canada, Australia and Japan. These immigrants are categorized as Western immigrants. They enter the Netherlands as labour migrants and perform in the labour market slightly better than the native Dutch do. Flows of these immigrants are highly sensitive to business cycles and are not subject to restrictive immigration policies, unlike flows of non-Western migrants.



### **3. CONCEPTUAL FRAMEWORK**

The economic framework for the empirical analysis of immigrant adjustment was set out in the influential work of Chiswick (1978), who studied the earnings assimilation of immigrants. Chiswick argues that immigrant earnings improve rapidly in the first years of residence in the host country. They then improve at a slower rate as time passes, and reach parity with the native population after 10-15 years. Although both the low starting position upon arrival and the rapid improvement in the labour market position of immigrants have been confirmed by almost all empirical studies, there is no agreement on whether or not immigrants in the USA catch up with the native Americans. Borjas (1985 and 1995) argues that analyses using cross-sectional data provided biased estimates of earnings assimilation because the skill endowment of immigrant cohorts declined especially in the 1970s. Borjas suggests that recent immigrants would not catch up with the native population. The cross-section may provide biased estimates if the return migration of immigrants is selective or if unobserved dimensions of the quality of immigrants change over time.

Given the restrictions imposed by the cross-sectional data used (i.e. the Labour Force Survey; LFS), this paper cannot capture longitudinal adjustment effects. The propensity to work is modelled as an individual decision-making process rather than as a joint decision made by the partners in the household. Again imposed by the data, we also need to assume that the quality of successive immigrant cohorts has not changed over time and that no selective return migration of immigrants has taken place. Since the LFS does not include information on the characteristics of partners, their earnings or the household income, we were not able to estimate the wage elasticities of employment. Instead, the propensity to work was derived from reduced form model of labour force participation using other observed characteristics of individuals that are standard in the surveys.

The LFS measures labour market position according to the international definition of employment and unemployment. Those who are actively looking for a job and can start work within two weeks are categorized as labour market participants and unemployed. Such a setting suggests a sequential process: individuals decide to participate, and they then find a job or remain unemployed. Therefore, we firstly modelled labour market participation behaviour in a two-equation sequential selection framework, in the spirit of van de Ven and van Praag (1981). Using the available variables, we ran a number of alternative selection models for the separate samples of men and women. Unfortunately, our exercises with selection models did not provide consistent parameter estimates. Selection coefficients are highly sensitive to model specifications and are not stable for our data, as is often pointed out in the literature (Sartori 2003). In the end, we decided to estimate the likelihood of employment by means of a conventional probit model.

The standard labour supply model suggests that individual  $i$  will work if the offered market wage  $w_i$  is greater than his or her reservation wage,  $w_i^*$ . Consider a latent variable model measuring the propensity to work

$$p^* = (w_i - w_i^*) = x_i\beta + YSM\gamma + \varepsilon_i \quad (1)$$

where  $x_i$  is a vector of explanatory variables,  $YSM_i$  is the number of years of stay in the Netherlands,  $\beta$  and  $\gamma$  are vectors of unknown parameters and  $\varepsilon_i$  is error term that is symmetrically distributed about zero.  $\varepsilon_i \sim N(0,1)$ . Since  $p_i^*$  is unobserved, we observe only the binary outcome indicating whether an individual is employed ( $p_i^* > 0$ ) or unemployed ( $p_i^* \leq 0$ )

$$\begin{aligned} p_i &= 1 \text{ if } (p_i^* > 0) \\ p_i &= 0 \text{ if } (p_i^* \leq 0) \end{aligned} \quad (2)$$

Assuming that the model is fitted by the standard probit model, the probability of employment is determined by the following probit model.

$$p_i = \Pr(p = 1 | x, YSM) = \Pr(\varepsilon_i > [x_i\beta + YSM_i\gamma] | x, YSM) \quad (3)$$

Since the labour market participation behaviour of women fundamentally differs from that of men, we estimated the employment probabilities of men and women separately.

Relying on the observation that unemployment is drastically high among immigrants, we also estimated the likelihood of unemployment for those who are participants in order to capture the main labour market states, that is:

$$\begin{aligned} UNEMP_i &= 1 \text{ if individual } i \text{ is unemployed} \\ UNEMP_i &= 0 \text{ if } (p_i = 1) \end{aligned}$$

Then, the probability of unemployment was similarly determined by the following probit model.

$$UNEMP_i = \Pr(UNEMP = 1 | x, YSM) = \Pr(u_i > [x_i\beta + YSM_i\gamma] | x, YSM) \quad (4)$$

where  $u_i$  is the error term.

To facilitate a better interpretation of estimates, the marginal effects of the variables stressed can be calculated for both outcomes: for the employment,  $\partial p_i / \partial YSM_i$ , and similarly for the unemployment,  $\partial UNEMP_i / \partial YSM_i$

Marginal effects reflect the change in the probability of employment, as one variable changes, holding all other variables constant. Since we were interested in dummy indicator variables for immigrant groups, marginal effects for these indicators simply give the discrete change from 0 to 1.

### 3.1. OCCUPATIONAL STATUS

Immigrants are at a disadvantage not only as regards their active labour market participation. It has been widely documented that immigrants are also more likely to be concentrated in occupations that are at the lower end of the occupation distribution regarding the intensity of job routine, responsibility and managerial position. To assess the relative position of immigrants in occupational attainment, we applied the three categories of the EGP social class schema, namely service (I and II), intermediate (IIIa, IV, V and VI) and working class (IIIb and VII) (Evans, 1992).

Determinants of being in a certain class can be studied by regression models. We treated these three classes as independent categories rather than as being in a natural rank order. Correspondingly, the probability of being in one of the occupational classes was assumed to follow a multinomial choice process.

Suppose that individual  $i$ 's attainment of an occupation class is determined by  $YSM$  (years since migration) and a vector of other observed characteristic  $x$  by

$$Occ^* = x\delta_k + YSM\lambda_k + v \quad (5)$$

where  $\delta$  and  $\lambda$  are a vector of parameters to be estimated, and  $v$  is error term. Considering the unordered structure of the three occupational categories, we applied a multinomial logit model to estimate the likelihood of being in state  $k$ , given by

$$\ln P_{k|b}(x, YSM) = \ln \frac{\Pr(Occ = k|x, YSM)}{\Pr(Occ = b|x, YSM)} \quad (6)$$

where  $k=1, \dots, J$ , and  $b$  is the base category. Using  $J$  equations, the predicted probabilities of having service, intermediate and working class (semi-unskilled) occupations can be computed by

$$\Pr(Occ = k|X_i, YSM) = \frac{\exp(x\delta_{k|b} + YSM\lambda_{k|b})}{\sum_{j=1}^J \exp(x\delta_{j|b} + YSM\lambda_{j|b})} \quad (7)$$

where  $x$  is a vector of explanatory variables for individual  $i$ ,  $\delta_j$  is a vector of coefficients varying with three alternative outcomes and the coefficients for reference outcome 3 (semi-skilled and unskilled class) are normalized to zero.

### **3.2. PREDICTING OUTCOMES**

An interpretation of coefficients of non-linear models is difficult and depends on the value of the independent variables. To facilitate a better understanding, we predicted the probabilities for the separate country-of-origin groups. The estimated coefficients were used to predict the outcomes for a representative individual from the groups distinguished, evaluated at the average sample characteristics. The predicted employment probabilities and occupational position were derived using the standard likelihood function for employment, and using equations (7) for occupational position.

## **4. DATA AND DESCRIPTIVE STATISTICS**

We used the LFS from Statistics Netherlands because these surveys provide the best available comparable data across European countries. To gain more observations for immigrant groups, we pooled the data from the 2004 and 2005 LFS and restricted the sample to persons aged 15 to 65 years. The LFS contains information about education in addition to a large number of variables. However, no distinction is made between education acquired in the home country and that acquired in the Netherlands. This raises some doubt about measurement error where foreign education has been translated into the standard education classification used in the Netherlands.

Considering the size of immigrant groups and the internal similarities in the data, we defined four immigrant groups in addition to the native Dutch. The first group ('TurMor') comprises Turks and Moroccans, who have the most similar migration history and socio-economic position. The second group ('Caribbean') comprises Surinamese and Antilleans, who have a colonial history and relation with the Netherlands; many of them speak Dutch, unlike other immigrants. A common characteristic of these two immigrant groups is the continual immigration flows from the origin countries induced by family reunification and formation, and very little return migration. It is reasonable to assume that the relevant skills of successive immigration cohorts from these countries have not changed since 1990. In the 1990s, the only relatively high return migration rate was that of Antilleans, because of the free mobility between the Dutch Antilles and the Netherlands. However, Antillean immigrants comprise less than one third of the Caribbean sub-sample, and excluding them from the sample has no impact on the estimates. This suggests that our analyses on these groups are not biased due to selective return migration or to changes in the skill composition of arrival cohorts. Therefore, the YSM variable has the potential to indicate the impact of the length of residence on the success of immigrants.

The third group ('NW') comprises other non-Western immigrants and Eastern European immigrants. Although this group is highly heterogeneous regarding background and migration history, its members have a fairly similar socio-economic position. Immigrants in this group arrived from various countries of origin in different periods, which implies regular shifts in source countries of immigration flows. It is imaginable that the skill composition of immigration cohorts could have changed over time since the skill endowment of immigrants differs by country of origin. That means that the YSM variable can be an indicator only for NW arrival cohorts, rather than measuring the impact of duration. The last group ('Western') comprises an aggregate of Western immigrants for whom labour market outcomes are similar to those of the native population. Although the return



migration rate is high for this group, it is unknown whether it is selective. Therefore, also for this group the YSM variable is more an indicator for arrival cohorts.

Each immigrant group was broken down into three main groups, namely new immigrants (i.e. immigrants who arrived after 1990), old immigrants (immigrants who arrived before 1990), and second-generation immigrants (immigrants who were born in the Netherlands or entered the Netherlands when they were younger than six years old. Since our focus is on new immigrants, the duration of stay for them is categorized as up to 3 years, 3-5 years, 6-9 years and 10-15 years.

The variables in table I are used to explain the differences in the employment probabilities and occupational positions of new immigrants and the second generation. Table I presents the mean values of covariates by gender and immigrant groups. It is immediately apparent that more than 40 per cent of the first two groups (TurMor and Caribbean) arrived in the Netherlands before 1990, while the share of new immigrants is the highest among NW immigrants. The share of second-generation immigrants is the highest among Western and Caribbean immigrants.

Immigrants – especially non-Western immigrants – are relatively young and more often poorly educated compared to the native population. They often have children younger than 12 and are concentrated in more urbanized areas. Among non-Western immigrants, Caribbean immigrants have a particular position, as mentioned. They share a common history with the Netherlands as a result of colonial relations. Almost 90 per cent of Caribbean immigrants have Dutch nationality. Interestingly, the share of immigrants from the NW and Western categories who have a university education is higher than that of the native Dutch. The characteristics of Western immigrants are more similar to those of the native population. Many of the differences in the labour market outcomes are probably a result of the differences in human capital endowments approximated by education and age.

Table 1. Means of variables by gender and ethnic group, age 15 - 64

	MEN					WOMEN				
	Native	TurMor	Carib.	NWWestern		Native	TurMor	Carib.	NWWestern	
Age	43.12	37.10	38.80	38.80	44.71	43.12	35.31	39.46	38.21	44.02
YSM < 3 yr		0.03	0.02	0.03	0.01		0.03	0.02	0.07	0.02
YSM 3-5 yr		0.06	0.05	0.13	0.02		0.04	0.05	0.14	0.03
YSM 6-9 yr		0.08	0.06	0.21	0.03		0.08	0.06	0.19	0.04
YSM 10-15 yr		0.18	0.12	0.27	0.04		0.17	0.13	0.25	0.05
YSM >15 yr		0.45	0.42	0.20	0.15		0.43	0.46	0.21	0.17
Naturalized (immigrants)		0.19	0.89	0.22	0.37		0.18	0.86	0.24	0.39
Second gen.		0.20	0.34	0.16	0.75		0.24	0.28	0.13	0.70
Primary	0.06	0.26	0.11	0.10	0.06	0.08	0.40	0.13	0.16	0.08
Extended primary, gen.	0.06	0.06	0.08	0.04	0.07	0.10	0.05	0.09	0.04	0.09
Extended primary, voc.	0.15	0.15	0.16	0.12	0.12	0.16	0.14	0.11	0.09	0.11
Secondary, general	0.06	0.16	0.10	0.18	0.08	0.08	0.11	0.12	0.20	0.13
Secondary, vocational	0.36	0.21	0.33	0.30	0.31	0.33	0.19	0.32	0.25	0.31
High, vocational	0.19	0.05	0.13	0.06	0.17	0.19	0.03	0.14	0.05	0.16
University	0.11	0.05	0.06	0.17	0.17	0.07	0.02	0.05	0.16	0.12
Education missing	0.01	0.07	0.04	0.04	0.02	0.00	0.05	0.04	0.05	0.02
Work hours	39.69	38.46	38.05	38.74	39.01	25.18	28.14	29.93	28.79	26.69
Married	0.56	0.57	0.53	0.56	0.54	0.53	0.53	0.45	0.51	0.50
Divorced or widowed	0.28	0.35	0.21	0.26	0.29	0.33	0.41	0.28	0.34	0.35
One child 0-5 years	0.11	0.28	0.16	0.19	0.12	0.12	0.30	0.18	0.22	0.13
More children 0-5 years	0.07	0.13	0.07	0.09	0.06	0.07	0.13	0.07	0.08	0.06
Child 6-11 years	0.18	0.36	0.18	0.22	0.16	0.19	0.40	0.25	0.27	0.18
Strongly urbanized	0.10	0.37	0.41	0.29	0.16	0.11	0.37	0.45	0.29	0.16
Urbanized	0.26	0.36	0.36	0.35	0.32	0.26	0.36	0.35	0.34	0.31
N	65978	1906	1327	2118	5666	66506	1940	1700	2530	6285



## 5. LABOUR MARKET POSITION

The labour market status of the potential labour force is shown by immigrant group in table 2. The labour market status of the immigrant groups are shown by gender, separately for new immigrants (YSM  $\leq 15$  years), earlier immigrants (YSM  $> 15$ ) and second-generation immigrants. Considering the general picture, it is immediately apparent that the employment rate of non-Western immigrants is significantly lower than that of the native Dutch, while the employment rate of Western immigrants is similar to that of the native Dutch. Women are in general less likely to be active participants, although the relative position of immigrant women with respect to native women is slightly better than is the case with immigrant men. Interestingly, the employment rate of male immigrants from the TurMor and Caribbean groups who immigrated before 1990 is lower than that of their counterparts who arrived since 1990. This is the opposite for immigrant females in these groups. Earlier Western immigrants, both male and female, apparently have lower employment rates and higher inactivity rates than do the more recent ones. What is striking is the particularly low employment rates among immigrant women in the TurMor group, and the high employment rate among immigrant women from the Caribbean group. Also striking are the high activity rates of Caribbean and NW second-generation men and women.

In relation to activity rates, the unemployment rate and the inactivity rate of non-Western immigrants are drastically higher than those of the native population. Especially all immigrants and second-generation immigrants in the TurMor group and new immigrants in the NW group seem to have the worst labour market position. Western immigrants are also more likely to be unemployed.

Table 2. Labour market position by gender and immigrant background (Weighted)

	MEN					WOMEN				
	Native	TurMo	rCarib	NW	West.	Native	TurMor	Carib	NW	West
YSM $\leq 15$										
Employed	84.1	73.3	73.2	58.4	85.6	69.0	27.4	60.7	39.4	64.6
Unemployed	2.9	10.9	9.9	14.4	5.6	2.9	4.8	9.6	8.7	5.3
Inactive	13.0	15.8	17.0	27.2	8.7	28.1	67.8	29.7	52.0	30.1
YSM $> 15$										
Employed		55.6	70.8	70.6	68.9		29.3	62.3	55.8	55.7
Unemployed		9.6	6.3	8.7	3.4		3.3	6.2	4.6	2.2
Inactive		34.8	22.9	20.7	27.7		67.4	31.5	39.6	42.1
2 <sup>nd</sup> Gen										
Employed		67.4	79.4	82.8	80.2		61.2	75.7	77.1	68.6
Unemployed		14.7	12.3	5.7	4.6		10.8	6.3	5.7	3.6
Inactive		17.9	8.3	11.5	15.3		28.1	18.0	17.3	27.7



## **6. ESTIMATES OF EMPLOYMENT PROBABILITIES**

The descriptive statistics show strong variation in the employment probabilities of the immigrant groups by generation and duration of stay. In order to provide a better understanding of the performance of immigrants, equation (3) was estimated by maximum likelihood procedure for male and female samples. We allowed for different effects among the immigrant groups, which were split up into the duration of stay intervals and second generation. Subsequently, marginal effects were calculated using equation (4). Table 3 shows the estimates and corresponding marginal effects for the groups distinguished. The estimated models also include the detailed controls reported in table 1 and at the bottom of table 3. In all instances, the native Dutch form the comparison group.

The estimates indicate that non-Western immigrants are in general less likely to be employed than similarly qualified native Dutch people are. This holds for both men and women. A common pattern of employment performance of non-Western immigrants is that their employment probability is drastically low during the first two years following their arrival, and increases with the duration of stay. However, both the rate and the length of this increase differ across both gender and immigrant groups. Immigrant men in the TurMor group start with a 26 percentage point lower employment rate than the native population does; this gap narrows to 15.9 percentage points within 9 years, after which it increases again. Immigrant men from the Caribbean group have a 41.6 percentage points lower employment rate than the native population does, and this gap declines to 4 percentage points within 9 years. The employment gap between immigrant men in the NW group and native Dutch men is about 51 percentage points in the first period, and decreases to 9 percentage points when the duration of stay exceeds 15 years.

Considering the estimates for women, immigrant women in the TurMor and the NW group have a substantial employment gap of 63 and 56 percentage points, respectively, but this disadvantage halves after 15 years for both groups. For immigrant women in the Caribbean group, the gap is initially 50 percentage points and there is no significant gap after 5 years. The smaller initial disadvantage of these immigrants and its rapid decline within five years are probably related to the immigrants' familiarity with Dutch society in terms of language and cultural norms, as well as to a high degree of transferability of educational qualifications acquired in the origin country. However, these favourable characteristics do not guarantee that they will be able to eliminate their disadvantage.

Remarkably, the employment gap of TurMor and Caribbean immigrants who arrived before 1990 is slightly larger than it is for those who have been in the Netherlands for 10-15 years. This may reflect possible selectivity of immigration flows or a differentiated effect of business cycles on immigrants, but is less likely to reflect selective return migration since the return migration rate of non-Western immigrants is very low.

Western male immigrants, on the other hand, seem to experience no employment disadvantage compared to native Dutch men, while Western female immigrants initially have an employment gap of 43 percentage points, although after 9 years no significant gap remains.

Table 3. Probit of the likelihood of being employed of immigrant group relative to the native population by gender: coefficients, (standard errors) and [marginal effects]

	MEN				WOMEN			
	Tur/Mor	Carib.	NW	Western	Tur/Mor	Carib.	NW	Western
YSM: < 3 years	-0.882 * (0.174) [-0.263]	-1.270 * (0.262) [-0.416]	-1.507 * (0.161) [-0.509]	-0.141 (0.245) [-0.030]	-2.039 * (0.029) [-0.631]	-1.375 * (0.078) [-0.501]	-1.636 * (0.023) [-0.565]	-1.143 * (0.038) [-0.431]
YSM: 3-5 years	-0.690 * (0.142) [-0.193]	-0.983 * (0.177) [-0.303]	-1.413 * (0.080) [-0.472]	-0.343 * (0.148) [-0.082]	-1.141 * (0.052) [-0.431]	-0.795 * (0.058) [-0.307]	-1.253 * (0.022) [-0.466]	-0.588 * (0.039) [-0.226]
YSM: 6-9 years	-0.593 * (0.122) [-0.159]	-0.564 * (0.167) [-0.150]	-1.170 * (0.063) [-0.375]	-0.036 (0.136) [-0.007]	-0.942 * (0.040) [-0.362]	-0.199 (0.051) [-0.073]	-1.006 * (0.022) [-0.385]	-0.578 * (0.036) [-0.222]
YSM: 10-15 years	-0.781 * (0.076) [-0.225]	-0.187 * (0.140) [-0.041]	-0.928 * (0.058) [-0.280]	-0.049 (0.113) [-0.010]	-0.793 * (0.030) [-0.307]	-0.095 (0.036) [-0.034]	-0.643 * (0.021) [-0.248]	-0.018 (0.029) [-0.006]
YSM: >15 years	-0.814 * (0.052) [-0.236]	-0.277 * (0.084) [-0.064]	-0.373 * (0.084) [-0.090]	-0.131 * (0.060) [-0.028]	-0.741 * (0.020) [-0.286]	-0.136 (0.026) [-0.049]	-0.332 * (0.028) [-0.124]	-0.116 * (0.019) [-0.042]
2nd generation	-0.860 * (0.071) [-0.254]	-0.498 * (0.071) [-0.128]	-0.236 * (0.085) [-0.053]	-0.140 * (0.026) [-0.030]	-0.545 * (0.025) [-0.209]	-0.137 * (0.025) [-0.050]	-0.070 (0.030) [-0.025]	-0.026 (0.008) [-0.009]
LR Chi-sq	14321				18902			
N	76995				78961			

The model includes controls for age intervals, 7 levels of completed education, marital status, degree of urbanization, naturalization, and 3 control variables for the number of children between 0 and 5, and between 6 and 11 years.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 4 shows the predicted employment probabilities by education level as the duration of stay increases. The employment gap between the native population and non-Western immigrants is generally the largest in the first years of residence, and this declines with the duration of stay. The

immigrant employment gap is smaller for men than it is for women. The gap of TurMor and Caribbean immigrant men effectively disappears within 5 years for all education levels, after which it tends to decrease slightly for the first group. For the NW immigrant men, the narrowing of the employment gap is relatively slower and their employment rate keeps increasing slightly, although it does not reach the employment rate of the native population after 15 years.

The adjustment process of immigrant women follows a different pattern across the immigrant groups. The employment gap of TurMor immigrant women is extremely large in the first years of residence, and while it declines with the duration of stay it does not disappear. The employment rate of poorly educated TurMor immigrant women increases by 20 percentage points, namely from 3 per cent in the first years to 23 per cent in the 10-15 YSM interval. The increase for women with a medium or a high level of education is more than 34-36 percentage points. A similar pattern holds for NW immigrant women, although they perform slightly better than TurMor women. Caribbean and Western immigrant women start with a relatively smaller employment gap (and a higher employment rate), which completely disappears in the 10-15 YSM interval.

Table 4. Predicted employment probabilities by origin, YSM, gender and education level

		MEN				WOMEN			
		Low	Medium	High	Total	Low	Medium	High	Total
	Native Dutch	0.79	0.87	0.90	0.86	0.50	0.75	0.84	0.686
TurMor	YSM < 3 years	0.58	0.73	0.83	0.70	0.03	0.15	0.30	0.10
	YSM 3-5 years	0.73	0.83	0.89	0.81	0.15	0.38	0.60	0.26
	YSM 6-9 years	0.76	0.86	0.91	0.83	0.21	0.42	0.62	0.30
	YSM 10-15 years	0.69	0.81	0.88	0.76	0.23	0.51	0.64	0.33
	YSM >15 years	0.56	0.71	0.78	0.63	0.24	0.52	0.65	0.32
	2nd generation	0.62	0.77	0.82	0.70	0.44	0.66	0.82	0.59
	Total	0.62	0.77	0.82	0.70	0.26	0.54	0.71	0.38
Carib.	YSM < 3 years	0.44	0.57	0.60	0.52	0.13	0.31	0.50	0.26
	YSM 3-5 years	0.54	0.66	0.77	0.61	0.30	0.55	0.71	0.45
	YSM 6-9 years	0.73	0.80	0.84	0.78	0.53	0.73	0.83	0.68
	YSM 10-15 years	0.79	0.90	0.92	0.87	0.53	0.77	0.87	0.71
	YSM >15 years	0.71	0.78	0.80	0.76	0.48	0.70	0.77	0.63
	2nd generation	0.73	0.83	0.88	0.80	0.63	0.79	0.88	0.77
	Total	0.71	0.81	0.84	0.78	0.51	0.73	0.82	0.67
NW	YSM < 3 years	0.28	0.51	0.60	0.46	0.09	0.26	0.44	0.27
	YSM 3-5 years	0.40	0.54	0.64	0.52	0.15	0.36	0.54	0.34
	YSM 6-9 years	0.48	0.63	0.73	0.62	0.22	0.42	0.61	0.40
	YSM 10-15 years	0.61	0.71	0.77	0.70	0.32	0.55	0.72	0.51
	YSM >15 years	0.69	0.74	0.82	0.75	0.37	0.61	0.75	0.56
	2nd generation	0.77	0.83	0.90	0.83	0.53	0.80	0.90	0.75
	Total	0.59	0.69	0.77	0.69	0.30	0.52	0.68	0.49
Western	YSM < 3 years	0.83	0.89	0.95	0.91	0.18	0.44	0.67	0.53
	YSM 3-5 years	0.78	0.87	0.92	0.88	0.39	0.62	0.79	0.66
	YSM 6-9 years	0.83	0.92	0.92	0.91	0.37	0.58	0.74	0.62
	YSM 10-15 years	0.80	0.88	0.91	0.88	0.53	0.76	0.86	0.76
	YSM >15 years	0.60	0.73	0.79	0.72	0.37	0.60	0.73	0.57
	2nd generation	0.74	0.83	0.87	0.82	0.48	0.73	0.82	0.68
	Total	0.73	0.82	0.86	0.81	0.47	0.69	0.80	0.66



Immigrants who entered the Netherlands before 1990 also have a lower employment level than their native counterparts do. Among the second generation, only TurMor immigrants seem to experience an employment gap of 10-15 percentage points, while the performance of the other immigrant groups is very similar to that of their native counterparts.

## **7. ESTIMATES OF UNEMPLOYMENT PROBABILITIES**

Table 5 presents the estimates of the likelihood of unemployment vs employment for the immigrant groups relative to the native population. Within the first two years after their arrival, immigrant men and especially women in the Caribbean group have the highest unemployment rate compared to their native gender counterpart: the difference is 33 percentage points for males and 43 percentage points for women. However, these enormous disadvantages decrease to 4.8 and 3.2 percentage points, respectively, in the 10-15 years YSM interval. TurMor immigrants also have a high unemployment rate in the first years following their arrival. In the beginning, the unemployment rates of men and women are 19 and 33 percentage points higher, respectively, than those of their native counterparts. However, the decline of these disadvantages is flatter than in the case of Caribbean immigrants because they remain at a relative higher level, namely at 8 and 6 percentage points for men and women, respectively. On the other hand, the disadvantage of NW immigrant men and women is limited to 10 and 21 percentage points, respectively; these figures fluctuate in the course of time and remain at the highest level compared to the other groups (15 and 10 percentage points, respectively) after 15 years. Western immigrants have no disadvantage in the beginning. Their unemployment rate is about 6 percentage points higher than that of the native population in the 3-5 years YSM interval, but there is no significant disadvantage later.

Table 5. Probit of the likelihood of being unemployed of immigrant group relative to the native population by gender: coefficients, (standard errors) and [marginal effects]

	MEN				WOMEN			
	TurMor	Carib.	NW	West.	TurMor	Carib.	NW	West.
YSM < 3 years	1.110*** (0.194) [0.188]	1.532*** (0.294) [0.331]	0.750** (0.283) [0.098]	0.181 (0.332) [0.014]	1.429* (0.409) [0.334]	1.672* (0.360) [0.429]	1.081 * (0.178) [0.212]	0.625* (0.190) [0.090]
YSM 3-5 years	0.806*** (0.168) [0.110]	1.190*** (0.223) [0.213]	1.075*** (0.110) [0.178]	0.559** (0.174) [0.062]	0.576 (0.307) [0.080]	1.041* (0.207) [0.199]	0.779 * (0.125) [0.126]	0.496* (0.150) [0.065]
YSM 6-9 years	0.874*** (0.141) [0.125]	0.722** (0.222) [0.092]	1.124*** (0.080) [0.191]	0.374* (0.162) [0.035]	0.534* (0.209) [0.072]	0.393* (0.196) [0.047]	0.883 * (0.096) [0.153]	0.075 (0.190) [0.007]
YSM 10-15 years	0.684*** (0.105) [0.084]	0.471*** (0.176) [0.048]	0.986*** (0.072) [0.152]	0.049 (0.179) [0.003]	0.450** (0.145) [0.057]	0.292* (0.148) [0.032]	0.673 * (0.082) [0.100]	0.058 (0.145) [0.005]
YSM >15 years	0.827*** (0.073) [0.113]	0.663*** (0.121) [0.080]	0.775*** (0.117) [0.103]	0.289** (0.101) [0.025]	0.330** (0.104) [0.038]	0.255* (0.119) [0.027]	0.309 * (0.124) [0.035]	-0.025 (0.110) [0.002]
2nd generation.	0.822*** (0.089) [0.113]	0.621*** (0.083) [0.072]	0.244* (0.117) [0.021]	0.175* (0.040) [0.014]	0.630* (0.087) [0.091]	0.203* (0.099) [0.021]	0.202 (0.123) [0.021]	0.068 (0.041) [0.006]
LR Chi-sq	1525				927			
N	66802				55115			

The models estimated also include controls for 5 age intervals, 7 levels of completed education, marital status, degree of urbanization, naturalization and 3 control variables for the number of children between 0 and 5, and between 6 and 11 years.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

What is remarkable is the larger disadvantage of immigrants who arrived before 1990 compared to immigrants who have been in the Netherlands for 10-15 years. Also second-generation immigrants are significantly more likely to be unemployed than their native Dutch counterparts are. Within the second-generation immigrants, men have a relatively greater disadvantage than women.

To find out more about immigrants' employment outcome by education level, unemployment probabilities were driven from the models presented in table 5. Table 6 shows the predicted unemployment probabilities of the native population and of the immigrant groups by the YSM intervals, gender and education level. As expected, women and those with a lower level of education are more likely to be unemployed than are higher educated individuals and men, irrespective of country of origin. Non-Western immigrants have substantially high unemployment in the first years of stay, and while this initial disadvantage partly disappears after 15 years of stay it seems to have a

persistent component. The unemployment rate is at least 3 times higher for non-Western immigrants who have been in the Netherlands for 10-15 years than it is for the native population.

Considering the outcome of men, there are significant differences across both country of origin and duration of residence. The unemployment rate of TurMor immigrants is about 24 per cent in the first years of residence and declines to 10 per cent in the 10-15 years YSM interval. The initial unemployment rate is even higher (30 per cent) for those among these immigrants who have a low level of education; also the decline in unemployment is sharper for these groups (17 percentage points). Caribbean immigrants experience the highest unemployment of all non-Western immigrants. Almost half of the poorly educated and 30 per cent of the higher educated are unemployed in the first two years of their stay. However, these percentages decline sharply with time. Unemployment rates for those who have resided in the Netherlands for 10-15 years are 9 and 7 per cent, respectively. NW immigrants, on the other hand, have a relatively lower unemployment rate (13 per cent) in the first duration interval, but it increases in subsequent years and ends up at 16.5 per cent after 10-15 years. Western immigrants do not face an initial disadvantage. Their unemployment rate increases a little in the subsequent years but declines again to the initial level.

Unemployment among immigrant women is more pronounced. More than half of poorly educated TurMor and Caribbean immigrant women are unemployed during the first year of their residence. Unemployment among TurMor and Caribbean immigrants diminishes especially in the duration intervals 3-5 years and 6-9 years. Strikingly, TurMor immigrant women end up with a higher level of unemployment than do Caribbean women. Unlike men, Western immigrant women experience a high unemployment rate, although it decreases within 5 years.

Table 6. Predicted unemployment probabilities by origin, YSM, gender and education level

		MEN				WOMEN			
		Low	Medium	High	Total	Low	Medium	High	Total
TurMor	Native Dutch	0.04	0.03	0.02	0.03	0.06	0.04	0.02	0.04
	YSM < 3 years	0.30	0.22	0.19	0.24	0.56	0.41	0.30	0.45
	YSM 3-5 years	0.16	0.12	0.10	0.13	0.23	0.14	0.09	0.16
	YSM 6-9 years	0.17	0.11	0.11	0.14	0.19	0.12	0.09	0.15
	YSM 10-15 years	0.13	0.08	0.07	0.10	0.18	0.11	0.08	0.14
	YSM >15 years	0.15	0.10	0.09	0.13	0.14	0.08	0.06	0.11
	2nd generation	0.21	0.14	0.12	0.17	0.22	0.14	0.09	0.16
	Total	0.17	0.11	0.10	0.14	0.18	0.12	0.09	0.15
Carib.	YSM < 3 years	0.47	0.33	0.30	0.37	0.58	0.51	0.36	0.50
	YSM 3-5 years	0.28	0.18	0.23	0.22	0.34	0.26	0.22	0.29
	YSM 6-9 years	0.14	0.10	0.07	0.11	0.15	0.10	0.06	0.11
	YSM 10-15 years	0.09	0.06	0.05	0.07	0.14	0.09	0.06	0.09
	YSM >15 years	0.10	0.08	0.06	0.08	0.12	0.07	0.05	0.08
	2nd generation	0.17	0.11	0.09	0.13	0.11	0.07	0.04	0.07
		Total	0.14	0.10	0.08	0.11	0.14	0.09	0.05
NW	YSM < 3 years	0.18	0.12	0.10	0.13	0.39	0.25	0.19	0.26
	YSM 3-5 years	0.30	0.20	0.15	0.22	0.27	0.17	0.13	0.18
	YSM 6-9 years	0.30	0.20	0.17	0.22	0.29	0.20	0.15	0.20
	YSM 10-15 years	0.21	0.16	0.14	0.17	0.23	0.14	0.11	0.15
	YSM >15 years	0.12	0.09	0.08	0.10	0.14	0.08	0.06	0.09
	2nd generation	0.09	0.07	0.04	0.06	0.10	0.06	0.04	0.06
		Total	0.19	0.14	0.11	0.15	0.20	0.13	0.10
Western	YSM < 3 years	0.05	0.04	0.03	0.04	0.21	0.13	0.10	0.12
	YSM 3-5 years	0.10	0.08	0.08	0.08	0.18	0.11	0.07	0.10
	YSM 6-9 years	0.08	0.05	0.05	0.05	0.08	0.05	0.03	0.04
	YSM 10-15 years	0.05	0.03	0.02	0.03	0.10	0.05	0.03	0.04
	YSM >15 years	0.06	0.04	0.04	0.04	0.07	0.04	0.03	0.04
	2nd generation	0.06	0.04	0.03	0.04	0.07	0.05	0.03	0.05
		Total	0.06	0.04	0.03	0.04	0.07	0.05	0.03

## 8. OCCUPATIONAL STRUCTURE

Table 7 shows the distribution of immigrants and the native Dutch across the occupational classes. It is remarkable that non-Western immigrants are highly concentrated in working class jobs while the occupational distribution of Western immigrants is closer to that of the native population. Among non-Western immigrants, TurMor immigrants are mostly over-represented in working class jobs at the expense of managerial and professional jobs (service class). About 70 per cent of immigrants from this group have semi-skilled or unskilled jobs, compared to 9 per cent in service jobs. NW and Caribbean immigrants are also over-represented in working class jobs but their concentration is less sharp.

Table 7. Occupational distribution of employed labour by gender, 15-64, percentages (weighted)

	MEN					WOMEN				
	Native	TurMor	Carib.	NW	West.	Native	TurMor	Carib.	NW	West.
Service class	41.2	9.5	21.8	15.3	47.6	36.4	8.6	27.6	22.4	39.2
Intermediate	34.8	21.5	33.3	29.0	25.5	36.2	18.0	26.3	24.4	27.2
Working class	24.0	69.0	45.0	55.7	26.9	27.4	73.4	46.1	53.2	33.6
Total	100	100	100	100	100	100	100	100	100	100

The question is how this skewed distribution of non-Western immigrants can be explained. To learn more about the change in the distribution with the increasing duration of residence, we estimated the relative probabilities of being in a service or an intermediate job, using equation (7). The analysis was carried out separately for men and women in order to address significant behavioural differences by gender. The models also include relevant control variables from table 1.

Table 8 shows the multinomial odds ratios and marginal effects for the immigrant groups relative to the native population by duration of residence, gender and country of origin. The most notable finding is that almost all of the TurMor immigrants who are employed in the first years of residence have semi-skilled or unskilled jobs. They improve their occupational position the longer they stay in the Netherlands. However, their representation on the highest occupational ladder is still significantly poor after 10-15 years of residence. The gap between the shares of the native population and TurMor immigrants in service jobs is almost 28 percentage points for men and 21 percentage points for women after a residence of 10-15 years. More improvement, in fact, occurs in their relative share in the intermediate jobs. The native-immigrant gap decreases from 34 to 5 percentage points for men and from 45 to 20 percentage points for women. A similar pattern holds for immigrant men and women from other non-Western countries. The native-immigrant gap in service jobs is about 25 percentage points for Surinamese men in the first two years of stay, and

decreases to 17 percentage points when the duration of residence is 10-15 years. Although Surinamese women have a higher gap at entry (32 percentage points), the decline is also larger, namely 18 percentage points. Interestingly, the native-immigrant gap in intermediate jobs seems to be similar for the immigrant groups – that is, about 5 percentage points at the 10-15 years YSM interval – although this gap is larger for TurMor immigrants in the first two years. The native-immigrant gap for Western immigrants in both service and intermediate jobs is the lowest after 10-15 years of residence, although especially women experience a large gap in the first two years.

In contrast to immigrants, the native-immigrant gap is not statistically significant for the second generation among Caribbean and Western immigrants, and NW male immigrants. TurMor second-generation immigrants have a small but statistically significant gap regarding service jobs.

Table 8. Multinomial logit estimates of the likelihood of the immigrant groups of being in service and intermediate classes relative to the native population; multinomial odds, (standard errors), [marginal effects]

	MEN				WOME N			
	TurMor	Carib.	NW	West.	TurMor	Carib.	NW	West.
<b>Service</b>								
YSM: < 3 years	0.000*** (0.448) [-0.398]	0.112 (1.782) [-0.255]	0.021*** (0.876) [-0.362]	0.338* (0.457) [-0.089]	0.000* (0.626) [-0.323]	0.000*** (0.593) [-0.324]	0.049*** (0.636) [-0.273]	0.083*** (0.435) [-0.245]
YSM 3-5 years	0.011*** (0.716) [-0.376]	0.414 (0.562) [-0.057]	0.038*** (0.366) [-0.346]	0.173*** (0.416) [-0.220]	0.000* (0.546) [-0.326]	0.490 (0.536) [0.026]	0.050*** (0.343) [-0.270]	0.329** (0.381) [-0.086]
YSM 6-9 years	0.041*** (0.519) [-0.341]	0.350* (0.452) [-0.131]	0.053*** (0.276) [-0.328]	0.473** (0.278) [-0.095]	0.150** (0.678) [-0.190]	0.190*** (0.367) [-0.155]	0.109*** (0.275) [-0.226]	0.293*** (0.318) [-0.106]
YSM 10-15 years	0.112*** (0.299) [-0.276]	0.269*** (0.325) [-0.170]	0.061*** (0.219) [-0.325]	0.821 (0.243) [0.029]	0.122* (0.448) [-0.213]	0.241*** (0.305) [-0.139]	0.117*** (0.223) [-0.217]	0.407*** (0.260) [-0.075]
YSM >15 years	0.164*** (0.191) [-0.235]	0.341*** (0.229) [-0.126]	0.267*** (0.255) [-0.194]	0.513*** (0.165) [-0.063]	0.325* (0.252) [-0.106]	0.360*** (0.248) [-0.090]	0.129*** (0.281) [-0.211]	0.454*** (0.176) [-0.033]
2nd generation	0.623* (0.212) [-0.064]	1.019 (0.177) [-0.007]	0.758 (0.210) [-0.078]	1.039 (0.060) [0.019]	0.567** (0.202) [-0.051]	0.872 (0.177) [-0.036]	0.640* (0.226) [-0.074]	0.903 (0.067) [-0.009]
<b>Intermediate</b>								
YSM: < 3 years	0.032*** (0.751) [-0.343]	0.186 (1.053) [-0.170]	0.184*** (0.508) [-0.143]	0.256** (0.456) [-0.169]	0.000* (0.660) [-0.446]	0.125 (1.257) [-0.251]	0.157*** (0.469) [-0.256]	0.188*** (0.332) [-0.200]
YSM 3-5 years	0.113*** (0.327) [-0.223]	0.299** (0.441) [-0.157]	0.267*** (0.228) [-0.071]	0.312*** (0.267) [-0.085]	0.024* (0.952) [-0.399]	0.145** (0.595) [-0.304]	0.130*** (0.251) [-0.184]	0.250*** (0.293) [-0.197]
YSM 6-9 years	0.239*** (0.269) [-0.097]	0.463* (0.370) [-0.049]	0.241*** (0.167) [-0.099]	0.587* (0.237) [-0.025]	0.193* (0.470) [-0.210]	0.166*** (0.351) [-0.244]	0.211*** (0.219) [-0.202]	0.250*** (0.248) [-0.191]
YSM 10-15 years	0.331*** (0.171) [-0.051]	0.415*** (0.236) [-0.052]	0.303*** (0.123) [-0.050]	0.593* (0.222) [-0.091]	0.195* (0.298) [-0.202]	0.258*** (0.233) [-0.174]	0.194*** (0.159) [-0.180]	0.374*** (0.200) [-0.131]
YSM >15 years	0.355*** (0.125) [-0.053]	0.415*** (0.186) [-0.071]	0.547** (0.193) [0.015]	0.515*** (0.143) [-0.064]	0.333* (0.183) [-0.139]	0.341*** (0.189) [-0.141]	0.220*** (0.208) [0.027]	0.290*** (0.147) [-0.191]
2nd generation	0.735 (0.161) [-0.005]	1.071 (0.142) [0.014]	1.100 (0.160) [0.066]	0.938 (0.053) [-0.021]	0.583* (0.159) [-0.060]	1.046 (0.148) [0.031]	0.879 (0.182) [-0.225]	0.912 (0.057) [-0.008]
Wald Chi-sq	31384				32955			
N	63905				52342			

The models estimated also include controls for 5 age intervals, 7 levels of completed education, work hours, marital status, degree of urbanization, naturalization, and 3 control variables for the number of children between 0 and 5, and between 6 and 11 years.

\* p<.05; \*\* p<.01; \*\*\* p<.001



To show the relationship between employment type and education, we present in figures 1 and 2 the predicted probabilities of having a working class job by education level for a representative man and woman. Tables A1 and A2 (appendix) show the predicted probabilities in service and working class jobs from which the probabilities of intermediate jobs can easily be derived. It is apparent from figures 1 and 2 that most of the individuals with a low level of education have working class jobs, but the proportion of poorly educated native Dutch persons in unskilled jobs is lower compared to immigrants, as is the proportion of poorly educated men compared to women. Also immigrants who have a medium level of education are more likely to be employed in working class jobs than are the native Dutch who have a medium level of education. The most striking finding is the high concentration of immigrants in working class jobs in the first years of residence regardless of their education level. Especially TurMor immigrants start with working class jobs: more than 80 per cent of TurMor immigrants with a medium level of education are employed in working class jobs in the first YSM interval; the same applies to 90 per cent of the highly educated TurMor immigrants in that period. These percentages rapidly decrease with duration of stay. About 15 per cent of the highly educated and 50 per cent of those with a medium level of education are in working class jobs when the YSM interval of 10-15 years is considered. Also immigrants from other non-Western countries (NW) experience an unfavourable starting position, and they make significant progress as the duration of residence increases. Caribbean immigrants start with a relatively favourable position compared to other non-Western immigrants. In the first two years of residence, higher educated Caribbean women are significantly more likely to have working class jobs, but they rapidly improve their position. On the other hand, Caribbean men face very few initial difficulties. A similar adjustment pattern holds for Western immigrants. This small adjustment cost for these two groups is probably a result of the easy transferability of human capital acquired in the origin countries to the Netherlands, as mentioned earlier.

In summary, return to education is significantly lower for TurMor immigrants, and to a lesser extent for other non-Western immigrants, compared to Caribbean immigrants. Especially in the first years of residence in the Netherlands, return to higher education is dramatically low. However, it increases with the duration of stay (YSM). For the Caribbean immigrants, return to higher education is relatively higher and the initial adjustment period is shorter. Western male immigrants face hardly any disadvantage while Western female immigrants quickly overcome some initial disadvantage. Across all immigrant groups, women experience a lower return to education compared to men from the same group. A relatively shorter adjustment period and a higher return to education for Caribbean immigrants and particularly for Western immigrants can probably be attributed to their familiarity with Dutch society and their command of an accessible language, factors that facilitate an effective transferability of their human capital endowment.

Figure 1. Predicted probabilities of being in working class jobs by the immigrant group, YSM and education level, men

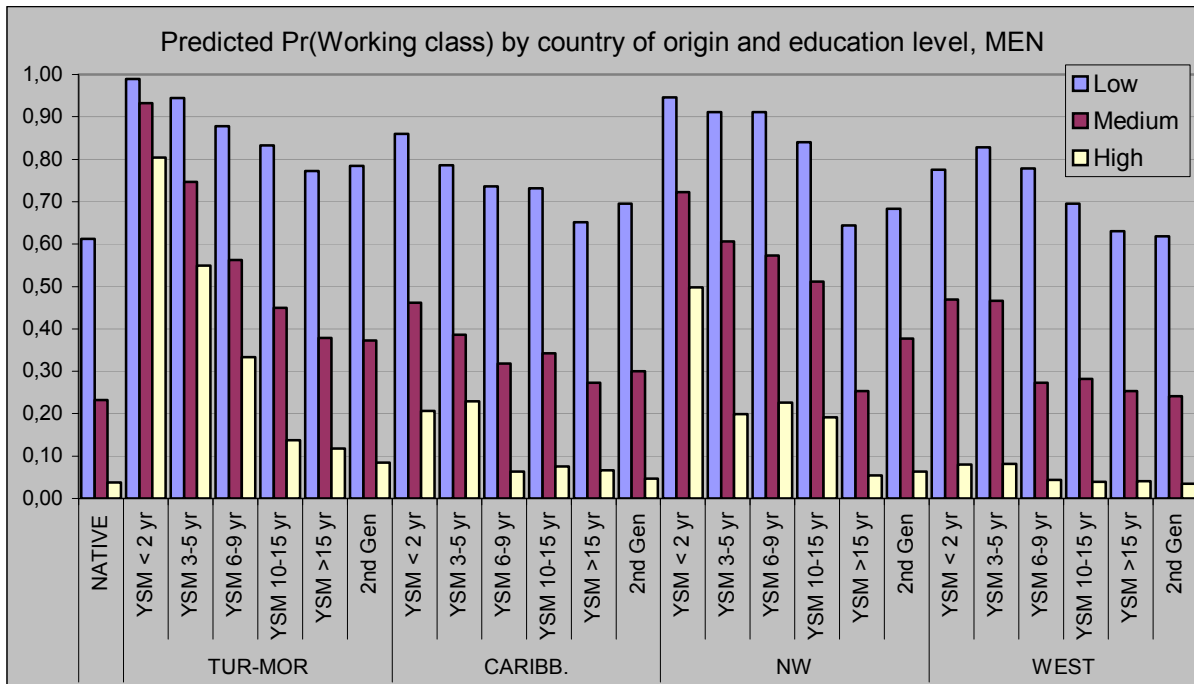
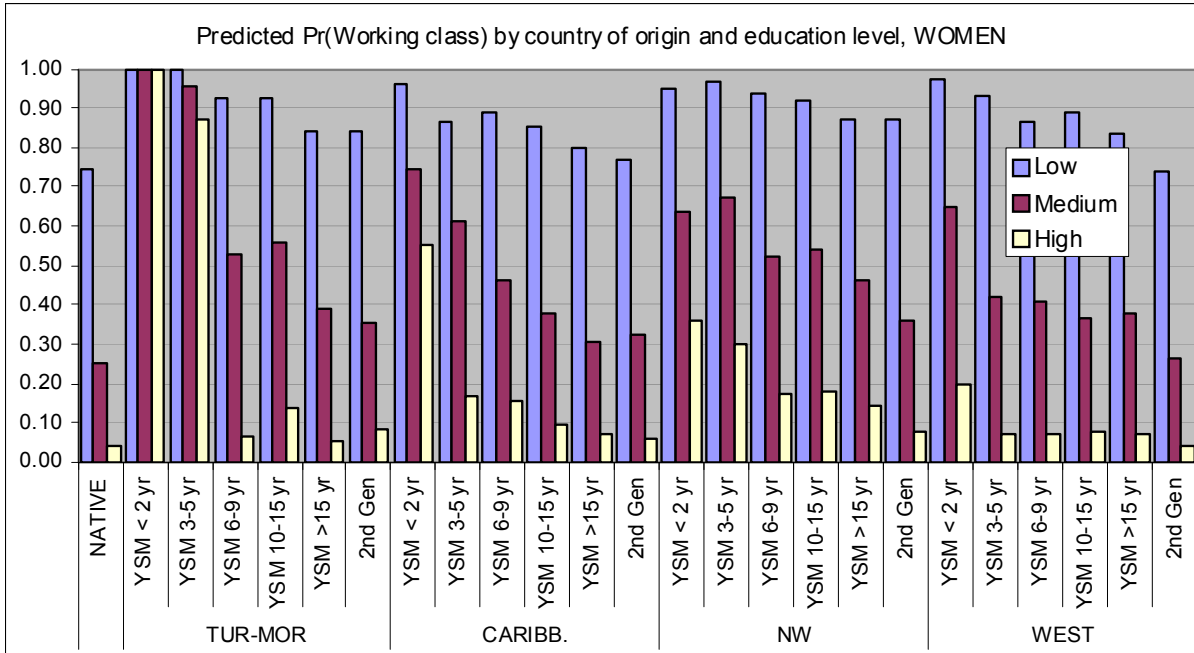


Figure 2. Predicted probabilities of being in working class jobs by the immigrant group, YSM and education level, women





## **9. CONCLUSIONS**

The analysis shows that non-Western immigrants are substantially less likely to participate in the labour market upon arrival and are more likely to be unemployed when they do participate. In addition, immigrants are highly concentrated in the 'low quality' segment of the labour market after immigration. Immigrants significantly improve their labour market position with the duration of residence in the Netherlands. However, a considerable level of disadvantage remains fifteen years after immigration. Also immigrants who arrived before 1990 have a clear disadvantage.

The results of this study suggest that there are significant differences between Turkish and Moroccan immigrants (TurMor) on the one hand, and Surinamese and Antillean (Caribbean) on the other. In the first two years after immigration, the employment rates among TurMor men and TurMor women are lower by 26 and 63 percentage points, respectively, than those of their native counterparts. These gaps are about 23 and 31 percentage points, respectively, for TurMor immigrants who arrived 10-15 years ago, which suggests a slight improvement for men and a rapid improvement but still a larger gap for women. A similar pattern is observed for unemployment: the unemployment rates among TurMor men and TurMor women are higher by 19 and 33 percentage points, respectively, than those of their native counterparts, but the rate declines sharply for the women as the length of residence increases. Perhaps more striking is the high concentration of TurMor immigrants in semi-skilled and unskilled jobs upon arrival. Despite a significant upward mobility, this concentration remains relatively high.

In contrast, the initial employment gap is relatively wider for Surinamese and Antillean (Caribbean) immigrant men and relatively smaller for their female compatriots, while the unemployment rate is considerably larger for both men and women compared to TurMor immigrants. However, Caribbean immigrants improve their position at a relatively faster rate and their disadvantage is significantly smaller after 10-15 years. Moreover, the initial concentration of Caribbean immigrants in low-skilled jobs is much more pronounced, especially for the men.

The significantly more disadvantaged starting position of Caribbean immigrants and a strong improvement in the subsequent years is probably related to their favourable but unmeasured qualifications, since the estimates adequately control for demographic and household characteristics and education level. These favourable qualifications (which are often referred to as 'host country-specific capital endowment') possibly stem from a common colonial background. Many of these immigrants speak Dutch and are familiar with mainstream cultural values and norms. In addition, they may have the legal rights that are necessary to access additional sources to facilitate their

integration into the Dutch labour market. On the other hand, many of the TurMor immigrants who enter the Netherlands as family immigrants lack host-country specific capital and do not speak Dutch.

Immigrants from other non-Western and Eastern European countries (NW) comprise a heterogeneous group that includes many asylum seekers. This is mainly reflected in their adjustment pattern. In the first years after entry, their activity rate is particularly low, coinciding with a relatively low employment rate and a high unemployment rate. They improve their position significantly in time but end up at a high level of disadvantages, like TurMor immigrants. This outcome is possibly related to the large number of asylum seekers in this group and their particular position (they are not allowed to work while applying for asylum). However, high unemployment among them can indicate a difficult starting position due to depreciation of their human capital endowment during their forced idleness (Hartog and Zorlu, forthcoming).

The analysis shows that immigrants who arrived in the Netherlands before 1990 are in a relatively disadvantageous position compared to those who arrived between 1990 and 1995. This suggests that the labour market performance of non-Western immigrants does not disappear completely after a long residence in the Netherlands. However, this reasoning assumes that earlier immigrants, who are relatively older, have been exposed to similar employment regimes, similar impacts of changes in employment structure and business cycles, and that there has been no selection in immigration and return migration flows. On the other hand, the existence of a significant labour market disadvantage also for the children of NW immigrants (the second generation) suggests that a part of the disadvantage among NW immigrants is persistent.

Western immigrants experience few adjustment difficulties in the labour market. Their significantly smaller disadvantage in the first years of residence can possibly be explained by their motives for migration, that is, they enter the Netherlands as labour migrants. In most cases, they have already a job in the Netherlands before their arrival and their migration decisions are not subject to any legal restrictions. This implies that Western immigrants are well-educated individuals who might be positively self-selected. Some increase in their disadvantage in the residence interval of 3-5 years and the decline thereafter may indicate a high mobility between jobs and corresponding frictions. Another reason may be the selective return migration of more successful individuals.

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## APPENDIX

Table A1. Predicted probabilities of service and working class employment by country of origin, YSM, gender and education level; men

		Service class				Working class			
		Low	Medium	High	Total	Low	Medium	High	Total
TurMor	Native Dutch	0.102	0.257	0.833	0.386	0.613	0.233	0.038	0.280
	YSM < 3 years	0.000	0.006	0.125	0.024	0.989	0.932	0.804	0.930
	YSM 3-5 years	0.001	0.013	0.226	0.047	0.944	0.747	0.549	0.778
	YSM 6-9 years	0.006	0.051	0.435	0.092	0.878	0.562	0.334	0.646
	YSM 10-15 years	0.018	0.121	0.648	0.126	0.833	0.449	0.137	0.588
	YSM > 15 years	0.034	0.160	0.675	0.146	0.772	0.379	0.117	0.549
	2nd generation	0.046	0.179	0.747	0.220	0.784	0.372	0.085	0.506
	Total	0.030	0.130	0.612	0.147	0.807	0.456	0.196	0.580
Carib.	YSM < 3 years	0.024	0.133	0.641	0.188	0.859	0.461	0.206	0.563
	YSM 3-5 years	0.071	0.288	0.624	0.231	0.786	0.386	0.230	0.512
	YSM 6-9 years	0.047	0.172	0.730	0.213	0.736	0.318	0.063	0.433
	YSM 10-15 years	0.049	0.163	0.743	0.243	0.731	0.342	0.076	0.397
	YSM > 15 years	0.089	0.227	0.768	0.305	0.652	0.273	0.066	0.342
	2nd generation	0.071	0.228	0.813	0.296	0.695	0.300	0.047	0.392
		Total	0.072	0.217	0.779	0.283	0.693	0.303	0.062
NW	YSM < 3 years	0.002	0.019	0.279	0.066	0.945	0.723	0.497	0.737
	YSM 3-5 years	0.004	0.043	0.566	0.164	0.911	0.607	0.199	0.601
	YSM 6-9 years	0.005	0.060	0.576	0.153	0.911	0.573	0.226	0.594
	YSM 10-15 years	0.011	0.065	0.588	0.158	0.840	0.511	0.191	0.518
	YSM > 15 years	0.053	0.188	0.770	0.290	0.644	0.253	0.054	0.295
	2nd generation	0.066	0.161	0.777	0.280	0.683	0.377	0.064	0.404
		Total	0.032	0.106	0.664	0.211	0.785	0.454	0.143
Western	YSM < 3 years	0.116	0.228	0.862	0.507	0.776	0.469	0.080	0.308
	YSM 3-5 years	0.032	0.132	0.821	0.402	0.828	0.466	0.081	0.342
	YSM 6-9 years	0.043	0.225	0.856	0.489	0.779	0.273	0.044	0.218
	YSM 10-15 years	0.093	0.314	0.887	0.496	0.696	0.282	0.039	0.245
	YSM > 15 years	0.105	0.289	0.860	0.438	0.631	0.254	0.040	0.254
	2nd generation	0.116	0.286	0.861	0.443	0.619	0.242	0.034	0.270
		Total	0.113	0.281	0.861	0.446	0.626	0.256	0.037



Table A2. Predicted probabilities of service and working class employment by country of origin, YSM, gender and education level; women

		Service class				Working class			
		Low	Med	High	Total	Low	Med	High	Total
	Native Dutch	0.07	0.18	0.79	0.33	0.75	0.25	0.04	0.32
TurMor	YSM < 3 years	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00
	YSM 3-5 years	0.00	0.00	0.00	0.00	1.00	0.95	0.87	0.95
	YSM 6-9 years	0.02	0.11	0.82	0.11	0.93	0.53	0.07	0.72
	YSM 10-15 years	0.01	0.08	0.68	0.11	0.92	0.56	0.14	0.70
	YSM >15 years	0.04	0.15	0.80	0.16	0.84	0.39	0.05	0.59
	2nd generation	0.04	0.16	0.76	0.21	0.84	0.36	0.08	0.48
	Total	0.04	0.14	0.73	0.16	0.86	0.42	0.12	0.58
Carib.	YSM < 3 years	0.00	0.00	0.00	0.00	0.96	0.74	0.55	0.85
	YSM 3-5 years	0.07	0.16	0.76	0.22	0.87	0.61	0.17	0.64
	YSM 6-9 years	0.03	0.17	0.71	0.27	0.89	0.46	0.15	0.48
	YSM 10-15 years	0.04	0.16	0.74	0.27	0.85	0.38	0.09	0.44
	YSM >15 years	0.06	0.18	0.76	0.27	0.80	0.31	0.07	0.40
	2nd generation	0.06	0.15	0.76	0.28	0.77	0.32	0.06	0.37
	Total	0.05	0.17	0.75	0.27	0.81	0.35	0.08	0.41
NW	YSM < 3 years	0.01	0.03	0.42	0.12	0.95	0.64	0.36	0.64
	YSM 3-5 years	0.00	0.05	0.53	0.18	0.97	0.67	0.30	0.64
	YSM 6-9 years	0.01	0.10	0.66	0.21	0.94	0.52	0.17	0.53
	YSM 10-15 years	0.02	0.10	0.66	0.22	0.92	0.54	0.18	0.53
	YSM >15 years	0.02	0.09	0.65	0.23	0.87	0.46	0.14	0.47
	2nd generation	0.03	0.13	0.74	0.25	0.87	0.36	0.08	0.46
	Total	0.02	0.10	0.65	0.22	0.90	0.50	0.17	0.51
Western	YSM < 3 years	0.00	0.06	0.66	0.33	0.97	0.65	0.20	0.45
	YSM 3-5 years	0.02	0.21	0.85	0.42	0.93	0.42	0.07	0.35
	YSM 6-9 years	0.05	0.20	0.84	0.44	0.86	0.41	0.07	0.31
	YSM 10-15 years	0.03	0.18	0.80	0.40	0.89	0.37	0.08	0.29
	YSM >15 years	0.06	0.21	0.83	0.36	0.84	0.38	0.07	0.38
	2nd generation	0.08	0.19	0.80	0.36	0.74	0.26	0.04	0.31
	Total	0.07	0.19	0.80	0.36	0.75	0.31	0.05	0.32

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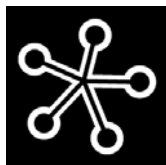


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