COMPARING LIKES WITH LIKES: IMMIGRANTS IN DENMARK AND GERMANY

BY

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Abstract

In this paper I study and compare the earnings of the same immigrant groups in Germany and Denmark using fresh bi-national surveys. Results show that Danish immigrants earn more than comparable immigrants in Germany. Although experience is not as well rewarded in Denmark, an initial earnings advantage upon arrival is sustained. Human capital acquired in the host country generates an earnings premium in both countries. Controlling for individual characteristics the differences across the nationalities disappear among the Danish immigrants. They remain, however, among the German immigrants: Compared to Turks, all groups earn more except the Lebanese, who earn less. Counterfactual analysis shows that if Danish immigrants were to move to Germany, they would suffer a total financial loss but if German immigrants were to move to Denmark they would experience an improvement in their earnings. This suggests that the Danish labor market is more effective in enhancing the immigrants' capacity to succeed in the labor market.

1. Introduction

A good measure of the individual worker's labor market performance is earnings. The monetary success of native and immigrant workers is welcomed in any country, since it not only benefits the individuals concerned but also leads to higher tax revenues and lower welfare payments for the state. Moreover, assuming that the level of earnings reflects productivity, then greater monetary success of native and immigrant workers is an indication of higher productivity, which is very desirable for any country. The legal immigrant population of Germany in 2002 comprised 9% of the total population. While guest-workers made up the largest group of immigrants, the numbers of Poles, Vietnamese, and Lebanese were also high. In the same year, the immigrant population in Denmark (including descendants) amounted to 8% of the Danish population.

Unlike the US, immigrants in welfare states such as Germany and Denmark enjoy considerable employment protection and sizable unemployment benefits. They tend to be highly concentrated within the host countries, both geographically and in terms of occupation. In Germany, the strong employment protection regulations - coupled with high severance payments and comparatively low welfare benefits - encourage more

workers to join the labor force. Once workers find a job (native and immigrants alike), they usually stay in that job for a very long time. While employment protection is not as rigid in Denmark, welfare benefits are higher. In particular, immigrants who arrived in Denmark before July 1st 2002 enjoy very generous unemployment and welfare benefits, and this implicitly may lead to a lower level of job search activity. Consequently, one would expect that immigrants who gain employment in Denmark should fare better than immigrants in Germany, at least in terms of their earnings.

In general, Danish workers earn more than German workers. In 2002, the average gross weekly earnings of an average production worker amounted to \notin 790 in Denmark and \notin 639 in Germany (OECD, 2003). This does not necessarily imply that German workers are cheaper labor; employers' social contributions are higher in Germany, rendering total labor costs almost the same in Denmark and Germany. For example, in 2000 the total labor cost per hour in the industry and service sectors was \notin 27.10 in Denmark and \notin 26.54 in Germany (Eurostat, 2003). Further, the consumption value of earnings seems to be on the same level in the two countries, as both income taxes and prices are higher in Denmark (OECD, 2003 and 2004).

The earnings assimilation of immigrants has been the subject of many studies in many countries. Typical results for the US, for example, show that immigrants can approach and reach the earnings of natives with additional years of residence in the US (Chiswick, 1978), although the speed of this earnings assimilation can be slow if one adjusts for cohort effects and takes ethnicity into account (Borjas, 1985). The literature on the immigrant situation in Germany has shown that immigrants are not well integrated in the labor market; their earnings are far below those of the natives, and there are no prospects of assimilation (Licht and Steiner, 1994 and Constant, 1998). These studies are mostly based on the traditional guest-worker groups. For Denmark, however, studies have shown that there is some earnings assimilation, suggesting that certain immigrant groups in Denmark are doing well (Husted et al., 2001 and Nielsen et al., 2001).

The central aim of this paper is to study the earnings of immigrants in Germany and Denmark based on fresh immigrant surveys – the RFMS-G (2002) and RFMS-D (2001) - and gauge any earnings dispersion among the immigrant groups within each country and across countries in a bi-national comparison. The innovation of this paper is that it employs the actual years of work experience in the host country, along with age and age at entry, and uses the quatric specification of years of labor market experience as a better approximation. In addition, by taking advantage of these surveys I am able to disentangle work experience in the host country from years of residence in the host country. I am further, able to employ an objective measure of host country language proficiency by using the interviewer's assessment. Moreover, I create a "pure" nationality variable by extracting the immigrants who ascend to citizenship from their corresponding nationalities. Finally, I study the same immigrant groups present in both countries' surveys, comparing likes with likes, and I apply a counterfactual analysis.

The economic analysis is based primarily on the human capital theory, which posits that the young and the better-educated are more likely to migrate and that migration yields higher returns to the more able and the more highly motivated. Migrants with higher levels of human capital will command higher wages in the labor market, since investment in human capital raises their productivity. The econometric analysis focuses on the earnings of immigrants in Germany and Denmark and uses the Heckman twostage technique that controls for selection in the labor force. Lastly, I correct the errors for possible heteroscedasticity. The paper is organized in the following way: Section 2 presents a brief overview of the immigration policies, laws, and "guest-worker" systems of Germany and Denmark, Section 3 outlines the methodology and the predictions to be tested, and Section 4 describes the immigrant surveys and sample populations. Section 5 presents the econometric findings and the counterfactual analysis of the earnings performance of immigrants, were they to move to the other country. Section 6 concludes with a recapitulation of the main points of the paper.

2. The Anatomy of the Guest-worker System

The German and Danish immigration systems share many experiences, and parallels can be drawn between them. Both countries have high rates of immigration, have applied the guest-worker system, have not had an overt and consistent immigration policy for a long time, and have experienced a shift in the composition of their immigrant populations. At the same time there are also some differences. For example, Denmark has been more liberal with its refugees and more generous with its welfare payments. In this section I review the immigration system in both countries.

2.1 Germany's Immigrants

From the second half of the 1950s until the early 1970s Germany initiated and experienced the "guest-worker migration" – demand-driven immigration. The term *guest-workers* reflects the notion that workers were invited to work in Germany but were not expected to stay permanently. They were to work temporarily in Germany and help alleviate the post-war labor shortages. The "*rotationprinzip*," or the idea that immigrants can be employed in rotation as they are needed in the labor market, provided an alibi to the German government not to take open position vis B vis an overt and consistent immigration policy. In other words, immigrants could come and go as part of a labor market scheme and not as part of an immigration policy.

The guest-workers were a subgroup of economic migrants in Germany who came from Turkey and certain countries in southern Europe, namely Italy, Greece, Spain, Portugal, and Yugoslavia. Under the auspices of the Federal Labor Institute (FLI) and in cooperation with labor unions and local authorities, German employers actively recruited foreign workers, without any quota limits being imposed by the government. According to the German law, immigrants were to be recruited into identical jobs at identical wages to Germans, and only when native Germans were not available.

These immigrants were recruited to fill a need in unskilled jobs. Since the ban on recruitment in 1973, migration to Germany has been mostly supply driven. The ban excludes immigrants from other EU member countries. The composition of the immigrant groups has shifted from young males to women and children who have arrived in Germany to join their husbands and fathers, creating a strong second generation of immigrants. Various geopolitical reasons have contributed to a still changing composition of immigrant groups to Germany. The number of asylum seekers skyrocketed in Germany in the 1980s and early 1990s. Iranians made up a large percentage of this group.¹ The high numbers of refugees and asylum seekers resulted in a more restrictive asylum

¹ The numbers of Vietnamese and Chinese immigrants were also on the high side.

law. The designation of safe countries of origin, among other measures, led to a decrease in the number of asylum seekers in Germany.²

After the fall of the iron curtain, Germany gave preferential treatment in the late 1980s and early 1990s to some countries from Eastern Europe, namely Yugoslavia and Poland. Under temporary contracts tied to specific projects and seasonal work, Germany allowed many Poles and people from former Yugoslavia to immigrate. By the year 2000, almost 9% of the German population were immigrants. Taking a pioneering stance, the German government introduced the Immigration Act (*Zuwanderungsgesetz*) in 2001, a reduced version of which passed in July 2004 and will come into effect on January 1st, 2005.

2.2 Denmark's Immigrants

Similar to Germany, Denmark experienced an economic upswing in the 1950s, with excess demand for labor. A version of a guest-worker system was put into practice in Denmark as well. Immigrants were mainly from Yugoslavia and Turkey, while Pakistanis were also recruited to a limited extent. The inflow of immigrants from non-Western countries has been increasing since the 1960s. In a nutshell, every person who could provide for themselves had free entry to Denmark. Guest-workers were mainly absorbed into unskilled jobs.

In 1973, following other European countries, Denmark enforced a ban on immigration. This ban excluded immigrants from other EU members and Nordic countries. As happened in Germany, the ban backfired and resulted in an increase of migration exclusively through family reunification. From the mid-1980s Denmark experienced another upsurge of immigration in the form of refugees and asylum seekers. The Danish liberal and humanitarian laws were the main cause of the high refugee inflows. The main countries of origin were Poland, Iran, Iraq, Lebanon, and Sri Lanka (Pedersen and Smith, 2001).

Global turbulence, especially unstable political circumstances in various nations, led to another wave of refugees coming to Denmark in the 1990s. These immigrants were mainly from the former Yugoslavia and Somalia. In 2002, the immigrant population in Denmark amounted to 8% of the Danish population. In recent years new measures have been enforced in an attempt to curb immigration flows. Important changes include the abolition of the "de-facto-refugee" status, the imposition of a "24-year rule", which means that both spouses have to be 24 years old or more before they can be eligible for family reunification in Denmark, and the "attachment-rule", which states that the two spouses all in all must have greater attachment to Denmark than to another country.

Similar to Germany and other countries with migration experiences, Denmark has not applied a consistent immigration policy. Denmark's liberal laws on refugees have attracted not only refugees but also other immigrants who try to label themselves as refugees in order to enter the country and enjoy the high welfare benefits provided. The social legislation is more favorable to refugees than to labor migrants. For example, refugees do not need to provide evidence of being able to support themselves and their family members, and have almost the same rights as Danish citizens to welfare programs. For labor migrants there are restrictions on the size of state pensions that they can receive which are related to the number of years of residence in Denmark.

² One undesirable consequence was the increase in illegal immigrants to Germany.

The 1998 immigration law was drafted with the integration of both immigrants and refugees in mind. Both groups have access to special 3 year programs where they can learn the language and participate in other training courses.

3. Data Sets and Methodology

3.1 Description of the Data Sets

The sample employed in the estimation of immigrant earnings is extracted from the *Rockwool Foundation Migration Survey - Denmark* (RFMS-D) in 2001 and the *Rockwool Foundation Migration Survey - Germany* (RFMS-G) in 2002. Both surveys are based on a similar questionnaire, enabling researchers to perform comparative analyses of the socio-economic characteristics and the living and working conditions of immigrants in Germany and Denmark. The interviews for the Danish survey were carried out by Statistics Denmark in Copenhagen; Infratest Sozialforschung in Munich collected the German data.

The RFMS-D includes immigrants from ex-Yugoslavia, Iran, Lebanon, Pakistan, Poland, Somalia, Turkey, and Vietnam. First and second generation immigrants from these countries account for around two thirds of all non-Western immigrants in Denmark. The most advantageous feature of this survey is that it is linked with administrative register data available from Statistics Denmark. The sample has been randomly drawn from the Danish Central Person Register on persons aged 16 to 70 years old, who had lived for at least two years in Denmark. The response rate of this representative sample was at a high 69.9 %, resulting to a sample of 3,262 immigrants.

The RFMS-G was collected in 2002 on 5,669 immigrants from Turkey, Ex-Yugoslavia, Poland, Iran, and Lebanon living in Germany. These five nationalities represent about 60 % of the foreign *non-Western* population living in Germany in 2001. A random process of selecting sampling points among the cities was applied. The response rate in the German survey is 43.5, a reasonable figure for Germany. While this survey is not fully representative, it is at an acceptable range.

For compatibility and comparison purposes, the sample selected in this study, includes only the same five immigrant nationalities in both countries: namely, immigrants from the former Yugoslavia, Poles, Iranians, Lebanese, and Turks. Here I focus on male and female respondents between the ages of 18 and 59 who are not students, in training/apprenticeship, or in self-employment. I include the second generation immigrants – those born in Germany/Denmark or those migrating as children – and those who have acquired German/Danish citizenship. Using these selection criteria, the German sample is reduced to 4,473 observations and the Danish sample to 1,623 observations. The final sample of individuals, based on those who reported positive earnings, hours of work, and years of experience (adjusted for outliers), is further reduced to 1,998 German immigrants and 879 Danish immigrants.

3.2 Analysis and Variables

The model specification is an augmented version of the Mincerian model (Mincer, 1974). Because workers might differ from non-workers in unobservable ways I adjust the mean of earnings for possible non-random selection of workers (Heckman, 1979). Earnings are a function of the same socioeconomic characteristics of all five groups of immigrants, specified in the following structural equation:

$$\ln W = \alpha + X'\beta + A\gamma_1 + A^2\gamma_2 + Z\delta_1 + Z^2\delta_2 + E\xi_1 + E^2\xi_2 + E^3\xi_3 + E^4\xi_4 + c\lambda + v$$

The dependent variable is the natural logarithm of the gross weekly wages as reported in the surveys (in Euros). The vector of socioeconomic characteristics, X, includes human capital, demographics, and labor market structures. The variables A and Z stand for age and age at date of entry in the host country. To capture the nonlinear effect of these variables on earnings, A^2 and Z^2 are entered as additional regressors. The coefficient γ_2 measures the rate at which the earnings of the immigrants increase with age, and δ_2 measures the rate at which earnings change as age of arrival increases. I expect to find that earnings increase with age, but at a decreasing rate.

With respect to the age at date of entry, intuition suggests that the earnings of immigrants who arrived as children are likely to differ from the earnings of immigrants who arrived as adults and be similar to the earnings of natives or of those of the second generation (Piore, 1979). In line with other studies (Wilkins, 2003)³, I conjecture that earnings increase with each year older an immigrant is on arrival, although at a discounting rate. The rationale is that immigrants who are older on arrival have acquired more pre-migration human capital and accumulated more pre-migration experience. Even taking into account the non-perfect transferability of these assets, they are valuable assets that contribute to increased productivity and are expected to be rewarded in the labor market.

The years of actual labor market experience in the host country (E) is entered as a separate variable. The number of years the immigrant has accumulated in the host country's labor market is expected to be the most important variable in our estimation of immigrant earnings. This variable measures specific host country training and human capital acquired on the job, and includes seniority on the job. The quatric algebraic specification of this variable allows for a better approximation of the effect of experience, a higher degree of flexibility, and a more in-depth analysis of its non-linear impact on earnings (Murphy and Welch, 1990). The experience coefficients in ξ measure the rate at which earnings change over the productive life of the worker with additional years of labor market experience, above and beyond any age or cohort effects. For example, earnings can increase or decrease at an increasing or decreasing rate for certain ranges of labor market experience. I expect to find that post-migration labor market experience is a powerful predictor of earnings.

According to economic theory, the following independent variables in the vector X are expected to exert an impact on earnings. The first set of dummy variables pertains to pre- and post-migration education, language capability, health, and pre-migration em-

³ On the basis of Australian data, Wilkins (2003) found that initial immigrant wages increase with increased age on arrival but that the rate of wage growth decreases with age on arrival.

ployment. I expect to find that the better educated immigrants who are healthy and speak the host country's language well will command higher wages in the labor market. I also expect that immigrants who have experience before migration will be rewarded in the host country's labor market. In principle, labor productivity is determined by premigration investments in human capital, and this should be reflected in higher earnings in the host country, irrespective of whether these investments are formally recognized or not. The second group of variables in X refers to labor market structures. Including the variable "working in a small company of less than 200 employees" tests the hypothesis that large firms pay more than small firms (Schmidt and Zimmermann, 1991). I expect a negative coefficient for this variable. "Hours of work per week" is a continuous variable that captures the idea that immigrant earnings are tied to the number of hours they work. The types of job that immigrants are in reflects their hourly remuneration. I expect that immigrants who work more hours will earn more money. The type of industry that immigrants are in is also an important determinant of their earnings. Immigrants are often concentrated in occupations that do not require intellectual skills and the exercise of authority. I expect different returns to industry types and lower returns when immigrants are in "immigrant-intensive" industries, as immigrants are more frequently employed in sectors with strong business cycle fluctuations. I also expect higher earnings in private sector jobs, because the public sector offers more job security.

The next set of dummy variables refers to ethnicity. The five nationality variables in both data sets are constructed in such a way that they do not include naturalized immigrants. Turkish nationality is the reference category. I expect to find significant variations in earnings according to nationality. The citizenship variable includes people of all nationalities who have acquired host country citizenship. The goal here is to test the hypothesis that immigrants who are willing to adhere to the host country's political system and are granted citizenship are rewarded in the labor market. The variable "being born in the host country" is also included in order to capture additional acculturation and integration effects. I expect these variables to have a positive sign.

The last independent variables to be included in X are gender and lambda. The gender variable takes the value of 1 when the immigrant is a man and zero when the immigrant is a woman. I expect that men earn significantly more than women in both countries. The selection term lambda is included to adjust the mean of earnings from non-random labor force participation of workers. A significant coefficient would indicate that our wage earners are not a random sample of workers, and that a correction was therefore necessary. The error term v captures all other factors that affect earnings; we adjust for heteroscedasticity of errors.

4. Characteristics of the Sample Populations

In this section I present and contrast the characteristics of the German and Danish immigrants as indicated by the "raw" data in order to obtain a better picture of our sample. Selected labor market and various demographic and human capital characteristics are presented in Tables 1 and 2 for both German and Danish immigrants.

	Ger	Germany		Denmark	
Characteristics	Mean	St.Dev.	Mean	St. Dev.	

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Working in Service, Banking, or Insurance Industries283%0.380.390.34Working in Government or Non -Profit Industries219%0.3913%0.34Working in Government or Non -Profit Industries28%0.275%0.22Working in Manufacturing12%0.3314%0.35Working in Construction or Mining25%0.222%0.13Working in Other Industries25%0.2117%0.37Working in Other Industries23%0.178%0.28Primary/Secondary School in Host Country19%0.3017%0.37Abitur/University in Host Country76%0.4267%0.47Vocational Training in Host Country13%0.3417%0.37Speak Host Country Language Well55%0.5056%0.50Disability15%0.3616%0.37Pre-Migration Education76%0.4384%0.37Pre-Migration Employment49%0.5049%0.50Non-Wage Assets60%0.4965%0.48Married74%0.4477%0.42Children under 14 at Home50%0.5051%0.50Live in Enclaves44%0.307%0.25Gained Residence on basis of Employment Status33%0.4741%0.49Gained Residence on basis of Chargue/Asylum Status33%0.4741%0.49Gained Residence on basis of Chargue/Asylum Status <t< td=""><td>Not Employed</td><td>33%</td><td>0.47</td><td>24%</td><td>0.43</td></t<>	Not Employed	33%	0.47	24%	0.43
Working in Service, Banking, or Insurance Industries'19% 0.39 13% 0.34 Working in Commerce, Maintenance, or Repair Industries'8% 0.27 5% 0.22 Working in Government or Non -Profit Industries'7% 0.25 16% 0.37 Working in Construction or Mining'12% 0.33 14% 0.35 Working in Other Industries'5% 0.22 2% 0.13 Working in Other Industries'3% 0.17 8% 0.28 Primary/Secondary School in Host Country19% 0.30 17% 0.37 No education in Host Country5% 0.21 17% 0.37 No education in Host Country76% 0.42 67% 0.47 Vocational Training in Host Country13% 0.34 17% 0.37 Speak Host Country Language Well55% 0.50 56% 0.50 Disability15% 0.36 16% 0.37 Pre-Migration Education 76% 0.43 84% 0.37 Pre-Migration Employment49% 0.50 49% 0.50 Non-Wage Assets 60% 0.49 65% 0.48 Married 74% 0.33 6% 0.23 Children under 14 at Home 50% 0.50 51% 0.50 Live in Enclaves 44% 0.50 32% 0.46 Gained Residence on basis of Family Reunion Status 35% 0.48 39% 0.49 Gained Residence on basis of being Born i	Working in a Small Company	83%	0.38	85%	0.35
Working in Commerce, Maintenance, or Repair Industries" 8% 0.27 5% 0.22 Working in Government or Non -Profit Industries2 7% 0.25 16% 0.37 Working in Manufacturing 12% 0.33 14% 0.35 Working in Onstruction or Mining2 5% 0.22 2% 0.13 Working in Other Industries2 5% 0.22 2% 0.13 Working in Other Industries2 5% 0.22 2% 0.13 Working in Host Country 19% 0.30 17% 0.37 Abitur/University in Host Country 5% 0.21 17% 0.37 No education in Host Country 5% 0.21 17% 0.37 Speak Host Country Language Well 55% 0.50 56% 0.50 Disability 15% 0.36 16% 0.37 Pre-Migration Education 76% 0.43 84% 0.37 Pre-Migration Education 76% 0.43 84% 0.37 Non-Wage Assets 60% 0.49 65% 0.44 Married 74% 0.44 77% 0.42 Children under 14 at Home 50% 0.50 51% 0.50 Live in Enclaves 44% 0.30 7% 0.25 Gained Residence on basis of Employment Status 12% 0.38 9% 0.49 Gained Residence on basis of Fendigee/Asylum Status 10% 0.30 7% 0.25 Gained Residence on basis of being Born in Host Cou	Working in Service, Banking, or Insurance Industries ²	19%	0.39	13%	0.34
Working in Government or Non -Profit Industries 7% 0.25 16% 0.37 Working in Manufacturing 12% 0.33 14% 0.35 Working in Construction or Mining ² 5% 0.22 2% 0.13 Working in Other Industries ³ 3% 0.17 8% 0.28 Primary/Secondary School in Host Country 19% 0.30 17% 0.37 Abitur/University in Host Country 5% 0.21 17% 0.37 No education in Host Country 76% 0.42 67% 0.47 Vocational Training in Host Country 13% 0.34 17% 0.37 Speak Host Country Language Well 55% 0.50 56% 0.50 Disability 15% 0.36 16% 0.37 Pre-Migration Education 76% 0.43 84% 0.37 Pre-Migration Employment 49% 0.50 49% 0.50 Non-Wage Assets 60% 0.44 77% 0.42 Children under 14 at Home 50% 0.50 51% 0.50 Live in Enclaves 44% 0.50 32% 0.46 Gained Residence on basis of Employment Status 35% 0.48 39% 0.49 Gained Residence on basis of Family Reunion Status 35% 0.47 41% 0.49 Gained Residence on basis of being Born in Host Country 10% 0.29 7% 0.25 Gained Residence on basis of being Born in Host Country 10% 0.29 7% </td <td>Working in Commerce, Maintenance, or Repair Industries²</td> <td>8%</td> <td>0.27</td> <td>5%</td> <td>0.22</td>	Working in Commerce, Maintenance, or Repair Industries ²	8%	0.27	5%	0.22
Working in Manufacturing12%0.3314%0.35Working in Construction or Mining25%0.222%0.13Working in Other Industries23%0.178%0.28Primary/Secondary School in Host Country19%0.3017%0.37Abitur/University in Host Country5%0.2117%0.37No education in Host Country76%0.4267%0.47Vocational Training in Host Country13%0.3417%0.37Speak Host Country Language Well55%0.5056%0.50Disability15%0.3616%0.37Pre-Migration Employment49%0.5049%0.50Non-Wage Assets60%0.4965%0.48Married74%0.4477%0.42Children under 14 at Home50%0.5051%0.50Live in Enclaves44%0.5032%0.46Gained Residence on basis of Employment Status35%0.4839%0.49Gained Residence on basis of Other Status10%0.307%0.25Gained Residence on basis of Other Status10%0.307%0.25Gained Residence on basis of Other Status10%0.307%0.25Gained Residence on basis of Other Status10%0.336%0.23Gained Residence on basis of Other Status10%0.355%0.22Lize of Host Country5%0.2344%0.50 <td>Working in Government or Non -Profit Industries²</td> <td>7%</td> <td>0.25</td> <td>16%</td> <td>0.37</td>	Working in Government or Non -Profit Industries ²	7%	0.25	16%	0.37
Working in Construction or Mining2 5% 0.22 2% 0.13 Working in Other Industries2 3% 0.17 8% 0.28 Primary/Secondary School in Host Country 19% 0.30 17% 0.37 Abitur/University in Host Country 5% 0.21 17% 0.37 No education in Host Country 5% 0.21 17% 0.37 Vocational Training in Host Country 13% 0.34 17% 0.37 Speak Host Country Language Well 55% 0.50 56% 0.50 Disability 15% 0.36 16% 0.37 Pre-Migration Education 76% 0.43 84% 0.37 Pre-Migration Employment 49% 0.50 49% 0.50 Non-Wage Assets 60% 0.44 77% 0.42 Children under 14 at Home 50% 0.50 51% 0.50 Live in Enclaves 44% 0.50 32% 0.46 Gained Residence on basis of Employment Status 35% 0.48 39% 0.49 Gained Residence on basis of Nerfuge/Asylum Status 35% 0.48 39% 0.49 Gained Residence on basis of being Born in Host Country 10% 0.29 7% 0.25 Gorn in Host Country 5% 0.23 44% 0.50 Citizen of Host Country 10% 0.29 7% 0.25 Gained Residence on basis of Deing Born in Host Country 10% 0.29 7% 0.25 Gai	Working in Manufacturing	12%	0.33	14%	0.35
Working in Other Industries2 3% 0.17 8% 0.28 Primary/Secondary School in Host Country 19% 0.30 17% 0.37 Abitur/University in Host Country 5% 0.21 17% 0.37 No education in Host Country 76% 0.42 67% 0.47 Vocational Training in Host Country 13% 0.34 17% 0.37 Speak Host Country Language Well 55% 0.50 56% 0.50 Disability 15% 0.36 16% 0.37 Pre-Migration Education 76% 0.43 84% 0.37 Pre-Migration Employment 49% 0.50 49% 0.50 Non-Wage Assets 60% 0.49 65% 0.48 Married 74% 0.44 77% 0.42 Children under 14 at Home 50% 0.50 51% 0.50 Live in Enclaves 44% 0.50 32% 0.46 Gained Residence on basis of Employment Status 35% 0.48 39% 0.49 Gained Residence on basis of Refugee/Asylum Status 33% 0.47 41% 0.49 Gained Residence on basis of being Born in Host Country 10% 0.29 7% 0.25 Born in Host Country 5% 0.23 44% 0.50 Citizen of Host Country 5% 0.23 44% 0.50 Citizen of Host Country 5% 0.23 44% 0.50 Citizen of Host Country 5% 0.23 <td< td=""><td>Working in Construction or Mining²</td><td>5%</td><td>0.22</td><td>2%</td><td>0.13</td></td<>	Working in Construction or Mining ²	5%	0.22	2%	0.13
Primary/Secondary School in Host Country19%0.3017%0.37Abitur/University in Host Country5%0.2117%0.37No education in Host Country76%0.4267%0.47Vocational Training in Host Country13%0.3417%0.37Speak Host Country Language Well55%0.5056%0.50Disability15%0.3616%0.37Pre-Migration Education76%0.4384%0.37Pre-Migration Employment49%0.5049%0.50Non-Wage Assets60%0.4965%0.48Married74%0.4477%0.42Children under 14 at Home50%0.5051%0.50Live in Enclaves44%0.5032%0.46Gained Residence on basis of Employment Status35%0.4839%0.49Gained Residence on basis of Family Reunion Status35%0.4839%0.49Gained Residence on basis of Other Status10%0.307%0.25Gained Residence on basis of being Born in Host Country10%0.297%0.25Citizen of former Yugoslavia17%0.3819%0.39Polish20%0.409%0.2917%0.25Lebanese18%0.387%0.2512%Untry5%0.2344%0.5012%Citizen of former Yugoslavia17%0.3819%0.39Pol	Working in Other Industries ²	3%	0.17	8%	0.28
Abitur/University in Host Country 5% 0.21 17% 0.37 No education in Host Country 76% 0.42 67% 0.47 Vocational Training in Host Country 13% 0.34 17% 0.37 Speak Host Country Language Well 55% 0.50 56% 0.50 Disability 15% 0.36 16% 0.37 Pre-Migration Education 76% 0.43 84% 0.37 Pre-Migration Employment 49% 0.50 49% 0.50 Non-Wage Assets 60% 0.49 65% 0.48 Married 74% 0.44 77% 0.42 Children under 14 at Home 50% 0.50 51% 0.50 Live in Enclaves 44% 0.50 32% 0.46 Gained Residence on basis of Employment Status 12% 0.33 6% 0.23 Gained Residence on basis of Other Status 10% 0.39 7% 0.25 Gained Residence on basis of Other Status 10% 0.29 7% 0.25 Gained Residence on basis of Other Status 10% 0.29 6% 0.25 Citizen of Host Country 10% 0.29 6% 0.25 Citizen of Host Country 10% 0.38 19% 0.39 Polish 20% 0.40 9% 0.29 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 25% 0.43 <	Primary/Secondary School in Host Country	19%	0.30	17%	0.37
No education in Host Country 76% 0.42 67% 0.47 Vocational Training in Host Country 13% 0.34 17% 0.37 Speak Host Country Language Well 55% 0.50 56% 0.50 Disability 15% 0.36 16% 0.37 Pre-Migration Education 76% 0.43 84% 0.37 Pre-Migration Employment 49% 0.50 49% 0.50 Non-Wage Assets 60% 0.49 65% 0.48 Married 74% 0.44 77% 0.42 Children under 14 at Home 50% 0.50 51% 0.50 Live in Enclaves 44% 0.50 32% 0.46 Gained Residence on basis of Employment Status 12% 0.33 6% 0.23 Gained Residence on basis of Refugee/Asylum Status 33% 0.47 41% 0.49 Gained Residence on basis of Other Status 10% 0.30 7% 0.25 Gained Residence on basis of Deing Born in Host Country 10% 0.29 6% 0.25 Citizen of Host Country 5% 0.23 44% 0.50 Citizen of former Yugoslavia 17% 0.38 19% 0.39 Polish 20% 0.40 9% 0.29 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 25% 0.43 16% 0.37	Abitur/University in Host Country	5%	0.21	17%	0.37
Vocational Training in Host Country13%0.3417%0.37Speak Host Country Language Well 55% 0.50 56% 0.50Disability15%0.3616%0.37Pre-Migration Education 76% 0.43 84% 0.37Pre-Migration Employment 49% 0.50 49% 0.50Non-Wage Assets 60% 0.49 65% 0.48Married 74% 0.44 77% 0.42Children under 14 at Home 50% 0.50 51% 0.50Live in Enclaves 44% 0.50 32% 0.46Gained Residence on basis of Employment Status 12% 0.33 6% 0.23Gained Residence on basis of Family Reunion Status 33% 0.47 41% 0.49Gained Residence on basis of Other Status 10% 0.30 7% 0.25Gained Residence on basis of Deing Born in Host Country 10% 0.29 7% 0.25 Gori in Host Country 5% 0.23 44% 0.50 Citizen of Host Country 5% 0.23 44% 0.50 Citizen of former Yugoslavia 17% 0.38 19% 0.39 Polish 20% 0.40 9% 0.29 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 25% 0.43 16% 0.27	No education in Host Country	76%	0.42	67%	0.47
Speak Host Country Language Well 55% 0.50 56% 0.50 Disability 15% 0.36 16% 0.37 Pre-Migration Education 76% 0.43 84% 0.37 Pre-Migration Employment 49% 0.50 49% 0.50 Non-Wage Assets 60% 0.49 65% 0.48 Married 74% 0.44 77% 0.42 Children under 14 at Home 50% 0.50 51% 0.50 Live in Enclaves 44% 0.50 32% 0.46 Gained Residence on basis of Employment Status 12% 0.33 6% 0.23 Gained Residence on basis of Family Reunion Status 35% 0.48 39% 0.49 Gained Residence on basis of Other Status 10% 0.30 7% 0.25 Gained Residence on basis of Deing Born in Host Country 10% 0.29 7% 0.25 Gained Residence on basis of being Born in Host Country 10% 0.29 6% 0.25 Critizen of Host Country 5% 0.23 44% 0.50 Critizen of for	Vocational Training in Host Country	13%	0.34	17%	0.37
Disability 15% 0.36 16% 0.37 Pre-Migration Education 76% 0.43 84% 0.37 Pre-Migration Employment 49% 0.50 49% 0.50 Non-Wage Assets 60% 0.49 65% 0.48 Married 74% 0.44 77% 0.42 Children under 14 at Home 50% 0.50 51% 0.50 Live in Enclaves 44% 0.50 32% 0.46 Gained Residence on basis of Employment Status 12% 0.33 6% 0.23 Gained Residence on basis of Family Reunion Status 35% 0.48 39% 0.49 Gained Residence on basis of Refugee/Asylum Status 33% 0.47 41% 0.49 Gained Residence on basis of Other Status 10% 0.30 7% 0.25 Gained Residence on basis of being Born in Host Country 10% 0.29 6% 0.25 Gritzen of Host Country 10% 0.23 44% 0.50 Citizen of former Yugoslavia 17% 0.38 19% 0.39 Polish 20% 0.40 9% 0.29 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 25% 0.43 16% 0.37	Speak Host Country Language Well	55%	0.50	56%	0.50
Pre-Migration Education 76% 0.43 84% 0.37 Pre-Migration Employment 49% 0.50 49% 0.50 Non-Wage Assets 60% 0.49 65% 0.48 Married 74% 0.44 77% 0.42 Children under 14 at Home 50% 0.50 51% 0.50 Live in Enclaves 44% 0.50 32% 0.46 Gained Residence on basis of Employment Status 12% 0.33 6% 0.23 Gained Residence on basis of Family Reunion Status 35% 0.48 39% 0.49 Gained Residence on basis of Refugee/Asylum Status 33% 0.47 41% 0.49 Gained Residence on basis of Other Status 10% 0.30 7% 0.25 Gained Residence on basis of being Born in Host Country 10% 0.29 7% 0.25 Born in Host Country 10% 0.29 6% 0.25 Citizen of Host Country 5% 0.23 44% 0.50 Citizen of former Yugoslavia 17% 0.38 19% 0.39 Polish 20% 0.40 9% 0.29 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 25% 0.43 16% 0.25	Disability	15%	0.36	16%	0.37
Pre-Migration Employment 49% 0.50 49% 0.50 Non-Wage Assets 60% 0.49 65% 0.48 Married 74% 0.44 77% 0.42 Children under 14 at Home 50% 0.50 51% 0.50 Live in Enclaves 44% 0.50 32% 0.46 Gained Residence on basis of Employment Status 12% 0.33 6% 0.23 Gained Residence on basis of Family Reunion Status 35% 0.48 39% 0.49 Gained Residence on basis of Refugee/Asylum Status 33% 0.47 41% 0.49 Gained Residence on basis of Other Status 10% 0.30 7% 0.25 Gained Residence on basis of being Born in Host Country 10% 0.29 7% 0.25 Born in Host Country 10% 0.29 6% 0.25 Citizen of Host Country 5% 0.23 44% 0.50 Citizen of former Yugoslavia 17% 0.38 19% 0.39 Polish 20% 0.40 9% 0.29 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 25% 0.447 16% 0.37	Pre-Migration Education	76%	0.43	84%	0.37
Non-Wage Assets 60% 0.49 65% 0.48 Married 74% 0.44 77% 0.42 Children under 14 at Home 50% 0.50 51% 0.50 Live in Enclaves 44% 0.50 32% 0.46 Gained Residence on basis of Employment Status 12% 0.33 6% 0.23 Gained Residence on basis of Family Reunion Status 35% 0.48 39% 0.49 Gained Residence on basis of Refugee/Asylum Status 33% 0.47 41% 0.49 Gained Residence on basis of Other Status 10% 0.30 7% 0.25 Gained Residence on basis of being Born in Host Country 10% 0.29 7% 0.25 Gorin in Host Country 10% 0.29 6% 0.25 Citizen of Host Country 5% 0.23 44% 0.50 Citizen of former Yugoslavia 17% 0.38 19% 0.39 Polish 20% 0.40 9% 0.22 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 20% 0.43 16% 0.37	Pre-Migration Employment	49%	0.50	49%	0.50
Married 74% 0.44 77% 0.42 Children under 14 at Home 50% 0.50 51% 0.50 Live in Enclaves 44% 0.50 32% 0.46 Gained Residence on basis of Employment Status 12% 0.33 6% 0.23 Gained Residence on basis of Family Reunion Status 35% 0.48 39% 0.49 Gained Residence on basis of Refugee/Asylum Status 33% 0.47 41% 0.49 Gained Residence on basis of Other Status 10% 0.30 7% 0.25 Gained Residence on basis of being Born in Host Country 10% 0.29 7% 0.25 Born in Host Country 10% 0.29 6% 0.25 Citizen of Host Country 5% 0.23 44% 0.50 Citizen of former Yugoslavia 17% 0.38 19% 0.39 Polish 20% 0.40 9% 0.29 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 25% 0.43 16% 0.37	Non-Wage Assets	60%	0.49	65%	0.48
Children under 14 at Home 50% 0.50 51% 0.50 Live in Enclaves 44% 0.50 32% 0.46 Gained Residence on basis of Employment Status 12% 0.33 6% 0.23 Gained Residence on basis of Family Reunion Status 35% 0.48 39% 0.49 Gained Residence on basis of Refugee/Asylum Status 33% 0.47 41% 0.49 Gained Residence on basis of Other Status 10% 0.30 7% 0.25 Gained Residence on basis of Deing Born in Host Country 10% 0.29 7% 0.25 Gorn in Host Country 10% 0.29 6% 0.25 Citizen of Host Country 5% 0.23 44% 0.50 Citizen of former Yugoslavia 17% 0.38 19% 0.39 Polish 20% 0.40 9% 0.29 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 25% 0.43 16% 0.37	Married	74%	0.44	77%	0.42
Live in Enclaves 44% 0.50 32% 0.46 Gained Residence on basis of Employment Status 12% 0.33 6% 0.23 Gained Residence on basis of Family Reunion Status 35% 0.48 39% 0.49 Gained Residence on basis of Refugee/Asylum Status 33% 0.47 41% 0.49 Gained Residence on basis of Other Status 10% 0.30 7% 0.25 Gained Residence on basis of being Born in Host Country 10% 0.29 7% 0.25 Born in Host Country 10% 0.29 6% 0.25 Citizen of Host Country 5% 0.23 44% 0.50 Citizen of former Yugoslavia 17% 0.38 19% 0.39 Polish 20% 0.40 9% 0.29 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 25% 0.43 16% 0.37	Children under 14 at Home	50%	0.50	51%	0.50
Gained Residence on basis of Employment Status 12% 0.33 6% 0.23 Gained Residence on basis of Family Reunion Status 35% 0.48 39% 0.49 Gained Residence on basis of Refugee/Asylum Status 33% 0.47 41% 0.49 Gained Residence on basis of Other Status 10% 0.30 7% 0.25 Gained Residence on basis of being Born in Host Country 10% 0.29 7% 0.25 Born in Host Country 10% 0.29 6% 0.25 Citizen of Host Country 5% 0.23 44% 0.50 Citizen of former Yugoslavia 17% 0.38 19% 0.39 Polish 20% 0.40 9% 0.29 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 25% 0.43 16% 0.37	Live in Enclaves	44%	0.50	32%	0.46
Gained Residence on basis of Family Reunion Status 35% 0.48 39% 0.49 Gained Residence on basis of Refugee/Asylum Status 33% 0.47 41% 0.49 Gained Residence on basis of Other Status 10% 0.30 7% 0.25 Gained Residence on basis of being Born in Host Country 10% 0.29 7% 0.25 Born in Host Country 10% 0.29 6% 0.25 Citizen of Host Country 10% 0.29 6% 0.25 Citizen of former Yugoslavia 17% 0.38 19% 0.39 Polish 20% 0.40 9% 0.29 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 25% 0.43 16% 0.37	Gained Residence on basis of Employment Status	12%	0.33	6%	0.23
Gained Residence on basis of Refugee/Asylum Status 33% 0.47 41% 0.49 Gained Residence on basis of Other Status 10% 0.30 7% 0.25 Gained Residence on basis of being Born in Host Country 10% 0.29 7% 0.25 Born in Host Country 10% 0.29 6% 0.25 Citizen of Host Country 10% 0.29 6% 0.25 Citizen of former Yugoslavia 17% 0.38 19% 0.39 Polish 20% 0.40 9% 0.29 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 25% 0.43 16% 0.37	Gained Residence on basis of Family Reunion Status	35%	0.48	39%	0.49
Gained Residence on basis of Other Status 10% 0.30 7% 0.25 Gained Residence on basis of being Born in Host Country 10% 0.29 7% 0.25 Born in Host Country 10% 0.29 6% 0.25 Citizen of Host Country 5% 0.23 44% 0.50 Citizen of former Yugoslavia 17% 0.38 19% 0.39 Polish 20% 0.40 9% 0.29 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 25% 0.437 16% 0.37	Gained Residence on basis of Refugee/Asylum Status	33%	0.47	41%	0.49
Gained Residence on basis of being Born in Host Country 10% 0.29 7% 0.25 Born in Host Country 10% 0.29 6% 0.25 Citizen of Host Country 5% 0.23 44% 0.50 Citizen of former Yugoslavia 17% 0.38 19% 0.39 Polish 20% 0.40 9% 0.29 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 25% 0.43 16% 0.37	Gained Residence on basis of Other Status	10%	0.30	7%	0.25
Born in Host Country 10% 0.29 6% 0.25 Citizen of Host Country 5% 0.23 44% 0.50 Citizen of former Yugoslavia 17% 0.38 19% 0.39 Polish 20% 0.40 9% 0.29 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 25% 0.43 16% 0.37	Gained Residence on basis of being Born in Host Country	10%	0.29	7%	0.25
Citizen of Host Country5%0.2344%0.50Citizen of former Yugoslavia17%0.3819%0.39Polish20%0.409%0.29Iranian15%0.355%0.22Lebanese18%0.387%0.25Turk25%0.4316%0.37	Born in Host Country	10%	0.29	6%	0.25
Citizen of former Yugoslavia17%0.3819%0.39Polish20%0.409%0.29Iranian15%0.355%0.22Lebanese18%0.387%0.25Turk25%0.4316%0.37	Citizen of Host Country	5%	0.23	44%	0.50
Polish 20% 0.40 9% 0.29 Iranian 15% 0.35 5% 0.22 Lebanese 18% 0.38 7% 0.25 Turk 25% 0.43 16% 0.37	Citizen of former Yugoslavia	17%	0.38	19%	0.39
Iranian15%0.355%0.22Lebanese18%0.387%0.25Turk25%0.4316%0.37	Polish	20%	0.40	9%	0.29
Lebanese 18% 0.38 7% 0.25 Turk 25% 0.43 16% 0.37	Iranian	15%	0.35	5%	0.22
Turk 25% 0.43 16% 0.37 Number of Observations 1.622 1.622 1.622 1.622	Lebanese	18%	0.38	7%	0.25
	Turk	25%	0.43	16%	0.37
Number of Observations 4475 1022	Number of Observations	-27.0	473	16	22

Table 1. Selected Labor Market and other Characteristics

¹ Based on observations with positive wages and working hours. N=2,020 for Germany. N=886 for Denmark.

² Based on observations of workers

The first row of Table 1 shows that, on average, immigrants in Germany earn considerably less (approximately 34% less) than Danish immigrants. Put differently, Danish immigrant workers earn \notin 200 more per week than the German immigrant workers. German immigrant workers have almost twice as many years of labor market experience in Germany as Danish immigrant workers have in Denmark. Nonetheless, they work fewer hours per week.

In general, immigrants in Germany have accumulated more years of residence in Germany than the immigrants in Denmark. The statistics presented in Table 1 also reveal that immigrants in Germany are of the same average age as the Danish immigrants but they migrated at a younger age: the average age at entry is 22 years. This younger age could be due to the larger proportion of second generation immigrants in Germany. In the Danish immigrant sample 51% are males, while in the German immigrant sample 47% are males.

The following rows of Table 1 show that in comparison to the Danish sample, the sample group of immigrants in Germany has a lower labor force participation rate, a lower percentage of them are employed, and a lower percentage of them are registered as unemployed. This shows that in this sub-sample, immigrants in Denmark have a higher attachment to the labor market.⁴ Statistics on the composition of the immigrant population by industrial category show that the most important sector in terms of employment for immigrant workers in Germany is the Service, Banking and Insurance sectors, while in Denmark it is the Government and Non-Profit sectors. This could be linked to the higher citizenship rates for immigrants in Denmark, which gives them access to public sector jobs. The manufacturing industry is the next largest employer of immigrants in both countries.

With respect to human capital variables, German immigrants as a group have less pre- and post-migration education than observationally equivalent Danish immigrants. For example, 76% of the German immigrants do not have an education from the host country, as opposed to 67% of the Danish immigrants. This educational deficit is partially compensated for, however, by the greater amount of work experience among the German immigrants. While more German immigrants have primary/secondary schooling in Germany (19%), Danish immigrants have more upper level schooling in Denmark (17% are high school graduates or have a university degree). Danish immigrants also have more vocational training in Denmark than the German immigrants have in Germany. Similarly, looking at their pre-migration human capital, I find that a smaller percentage of the German immigrants have pre-migration schooling. However, the same proportions of immigrants to each of the two countries worked before migration.

Statistics for their wealth show that the majority of our sample of immigrants in both countries do not have any non-wage assets, though as a group immigrants in Germany have comparatively more non-wage assets than immigrants in Denmark. The spatial distribution of immigrants shows that a larger percentage of the German immigrants live in neighborhoods with more than 50% ethnic make-up than is the case for Danish immigrants (44% live in enclaves in Germany, versus 32% in Denmark). These average statistics provide evidence that immigrants in Germany are not as well adjusted and spatially integrated as the Danish immigrants in Denmark. A smaller proportion of immigrants in Germany are married than is the case for immigrants in Denmark. However, in both countries more than half of the immigrants have children less than 14 years of age living at home, testifying to a degree of permanency in the immigrant population.

The next rows of Table 1, show the basis for obtaining a residence permit in the host country. It is clear that in Germany, immigrants have most frequently acquired residence through family reunification. However, a large percentage of them gained their right of residence through their refugee status. The opposite is the case for immigrants in Denmark, where immigrants have most frequently gained residence through

⁴ The average labor market attachment for the entire immigrant population in Denmark is low by international standards and markedly lower than in Germany.

refugee status. There is a noticeable difference in the proportions who have gained right of residence through employment status; twice as many immigrants in Germany have gained residence rights through their employment status as is the case for immigrants in Denmark, and a larger percentage have gained residence through being born in the host country.

The ethnic composition of the German immigrant sample shows that Turks make up the largest share (25%) of immigrants. Poles and people from former Yugoslavia are the next largest groups in the sample. In the Danish sample, immigrants from the former Yugoslavia rank first, followed by the Turks. While more immigrants in Germany were born in Germany (indicating a larger second generation), it is the immigrants in Denmark who have most frequently become Danish citizens. There is a remarkable gap in citizenship between the 2 countries; 5% versus 44% for Germany and Denmark respectively.⁵ Overall, while immigrants in Denmark have more frequently arrived as refugees, they manage to fare better than immigrants in Germany with regard to labor force participation, earnings, spatial integration, and pre- and post-migration education. The statistics on these 18- to 59-year-old workers indicate that immigrant groups in Denmark earn more money than the equivalent immigrant groups in Germany, though they have fewer years of labor market experience.

In Table 2 I present the earnings dispersion by nationality and gender. I also disaggregate the immigrant samples by ethnicity and German/Danish citizenship. I present the wages and years of work experience in the host country of the wage earners in the bi-national sample for all six nationalities. To gain more insight I present these statistics by gender. The statistics in this table are based on workers with valid values of wages and years of work experience. The table illustrates four points: (1) earnings vary widely among the six nationalities within each country, with citizens of the host country being at the top; (2) there is a strong wage disparity between German and Danish immigrants with each nationality earning more in Denmark than in Germany, for both sexes; (3) there are pronounced wage differences between the sexes, with men earning more than women; and (4) the relationship between wages and years of experience in the host country is spurious, both within and across countries.

For immigrant men in Germany and Denmark, I find naturalized citizens at the top of the earnings distribution. In Germany, Lebanese nationals at the bottom of the earnings distribution; Lebanese immigrant men earn 47% less than the German citizens and 41% less than the Poles, the next highest earning group. In Denmark, I also find Polish immigrant men earning the highest wages after the naturalized citizens. Lebanese men are again at the bottom, earning 26% less than the Danish citizens and 19% less than the Poles.

Furthermore, I find that men from the former Yugoslavia and German citizens have the longest years of work experience in Germany. Except in the case of the naturalized citizens, there is no relationship between additional years of experience and earnings. For example, the Poles, who have fewer years of work experience in Germany than the Turks and the citizens of the former Yugoslavia, earn a lot more than either of those groups. In Denmark, the Turks have the longest labor market tenure and the Lebanese have the shortest. Once again, I cannot establish a clear relationship between labor market experience and wages. The Poles, for example, who have fewer years of experience than the Turks, earn almost €100 more per week than them.

⁵ The greater proportion with host-country citizenship in Denmark could be a reflection of the sampling design of the surveys.

	Turkish	From former Yugoslavia	Polish	Iranian	Lebanese	Citizens
	Men					
Weekly Wages in Germany (Euro)	455.45	468.34	513.71	468.53	304.08	578.54
Work Experience in Ger- many (yrs)	11.81	12.25	9.70	8.80	6.06	12.01
Number of Observations	308	213	196	180	161	65
As % of Total Observations	27%	19%	17%	16%	14%	5%
Weekly Wages in Denmark (Euro)	557.48	552.65	630.90	511.06	529.70	694.64
Work Experience in Den- mark (yrs)	6.78	3.00	4.95	1.70	0.95	5.80
Number of Observations	82	109	21	17	10	261
As % of Total Observations	16%	22%	4%	3%	2%	52%
	Women					
Weekly Wages in Germany (Euro)	237.99	314.86	273.16	294.06	249.15	386.08
Work Experience in Ger- many (yrs)	9.26	11.27	6.99	6.57	4.94	10.99
Number of Observations	202	144	319	109	50	73
As % of Total Observations	22%	16%	35%	12%	5%	8%
Weekly Wages in Denmark	423.03	429.20	495.32	405.57	351.67	557.20
(Euro)						
Work Experience in Den- mark (yrs)	3.38	2.44	3.78	0.41	0	6.87
Number of Observations	61	54	72	14	3	182
As % of Total Observations	16%	14%	19%	4%	1%	47%

Table 2. Immigrant Wages and Years of Experience in the Host Country by Nationality and Gender

A similar pattern pertains to the wages of immigrant women. In both countries, immigrant workers who have a German/Danish passport rank higher and fare better than other nationalities. Among immigrant women in Germany, Turkish women are at the bottom of the distribution (just below the Lebanese) and women from the former Yugo-slavia are at the top (competing with the German citizens). In Denmark, I find the Polish women at the top of the earnings distribution, although still behind the immigrant citizens, and the Lebanese women at the bottom.

Table 2 reveals not only ethnic differences but a pronounced gender difference as well. On average, every immigrant woman earns less than her male counterpart in each country. In addition, although immigrant women in Denmark earn more than immigrant women in Germany, they still earn less than comparable immigrant men in Germany. An exception is the Lebanese women, who earn more than the Lebanese men in Germany. However, due to the very small sample size of the female Lebanese workers in Denmark, this finding should be seen with caution. Women from the former Yugoslavia and naturalized citizens have the longest years of work experience in Germany. In

Denmark, it is the women who have obtained citizenship and Polish women who have the longest years of work experience.

In sum, these statistics reveal pronounced ethnic and gender differences within each country, and in a bi-national comparison. For both sexes and in both countries, the immigrants who have taken German/Danish citizenship earn the highest wages. This could be because these immigrants are positively selected, or that citizenship helps immigrants to fare better monetarily in the labor market, or both. For the remaining five nationalities, the Poles stand out with high earnings, although they do not have as many years of work experience. Among immigrants in Germany, Polish men and women from the former Yugoslavia earn the highest wages. In Denmark, it is the Polish men and women who earn the highest wages. At the bottom are the Lebanese men in both countries. Turkish women and women from Lebanon are at the bottom of the distribution for Germany and Denmark respectively.

5. Estimation Results

5.1 Selection-Adjusted Earnings Profiles

In this section I present the results for the earnings of immigrant workers in Germany and Denmark aged 18 to 59. Table 3 reports the coefficients and standard errors of the selection-adjusted earnings regression, after I have applied the Heckman 2-stage technique and controlled for labor force participation selection. The asterisk denotes the statistical significance level at 5% in a two-tailed test. In the discussion that follows I will concentrate on the significant results. The first two columns of Table 3 pertain to the immigrant sample in Germany and the last two columns to the immigrant sample in Denmark. The dependent variable is the natural logarithm of the gross weekly earnings.

The larger estimated intercept indicates higher starting wages for immigrants in Denmark. The first two rows in Table 3 show that, for immigrants in both countries, earnings increase at a decreasing rate with age. The coefficients for age and age squared are significant and support the expected inverted U-shape. Figure 1 depicts the estimated average age-earnings profile of German and Danish immigrants for the relevant age range. The estimated profiles have been calculated at the means of all variables for each country. This figure reveals that the age-earnings profile of the Danish immigrants lies entirely above that of German immigrants, and that the gap widens with increasing age. The earnings of the immigrants in Denmark increase at an increasing rate, peaking at around 43 years of age, and decline slightly after that. German immigrants' earnings increase steadily and slowly at an increasing rate, reach a maximum much earlier (at 37 years of age), and decline faster thereafter.

To find the effect of age on the earnings of German and Danish immigrants, I calculated the partial effect of age at 20 and 40 years of age. Holding other variables constant, the earnings of Danish immigrants at ages 20 and 40 increase by 2.6% and 0.3% respectively. The earnings of German immigrants at ages 20 and 40 increase by 2.9% and 0.5% respectively. While the earnings of German immigrants increase a little faster, this is not enough for them to approach the earnings of Danish immigrants.

Table 3. Selection-Adjusted Earnings Equation

Germany Denmark

Variable	Coeff.	St. Error	Coeff.	St. Error
Age	0.063*	0.012	0.050*	0.009
Age Squared	-0.001*	0.0002	-0.001*	0.0001
Age at Entry	0.01	0.008	0.005	0.005
Age at Entry Squared	-0.00003	0.0002	-0.0001	0.0001
Years of Experience in Host Country Linear	-0.007*	0.001	0.142*	0.024
Years of Experience in Host Country Squared	0.008*	0.001	-0.026*	0.006
Years of Experience in Host Country Cubic	-0.0004*	0.0001	0.002*	0.001
Years of Experience in Host Country Quatric	0.00001*	0.000001	-0.00005*	0.00001
Male	0.438*	0.035	0.122*	0.024
Primary/Secondary School in Host Country	0.145*	0.068	-0.030	0.034
Abitur/University in Host Country	0.274*	0.066	0.185*	0.034
Vocational Training in Host Country	0.272*	0.040	0.056	0.028
Speak Host Country Language Well	0.079*	0.035	0.064*	0.030
Disability	-0.153*	0.046	0.009	0.075
Pre-Migration Schooling	0.009	0.053	-0.026	0.041
Pre-Migration Employment	0.051	0.038	-0.028	0.029
Hours of Work per Week	0.001*	0.0001	0.024*	0.002
Working in a Small Company	-0.101*	0.032	-0.098*	0.026
Working in Commerce industry	0.081	0.044	-0.031	0.045
Working in Government or Non-Profit Industry	0.228*	0.047	-0.066*	0.031
Working in Manufacturing	0.320*	0.041	-0.011	0.032
Working in Construction or Mining	0.320*	0.055	0.030	0.069
Working in Other Industries	0.053	0.068	-0.036	0.037
Born in the Host Country	0.235*	0.082	0.092	0.061
Host Country Citizen	0.227*	0.060	0.058	0.035
From former Yugoslavia	0.136*	0.045	0.073	0.042
Polish	0.096*	0.043	0.061	0.036
Iranian	0.108*	0.055	-0.047	0.068
Lebanese	-0.117*	0.056	-0.107	0.094
Lambda Selection Term	-0.055	0.345	-0.051	0.098
Intercept	3.553*	0.23	4.129*	0.172
Log Gross Weekly Wage (Mean, Std. Dev.)	5.708	0.779	6.264	0.428
Number of Observations	1998		879	
R ²	0.38		0.48	
Log-Likelihood	-1839.86		-194.81	
F	39.15		26.34	

Table 3. Selection-Adjusted Earnings Equation

Notes: 1) Results are adjusted for heteroscedasticity. 2) Comparison group: Female, no school in host country, not disabled, no pre-migration schooling or pre-migration employment, working in a bigger company in the service industry, born in home country, have Turkish citizenship. * indicates significance at the 5 per cent level in a two-tailed test (p < 0.05)

The coefficients for all four powers of work experience in the host country are significant for both countries. However, earnings as a function of work experience exhibit a different pattern in Germany than in Denmark. In Figure 2 I plot these profiles evaluated at the means of all other variables for 0 to 25 years of work experience in the host country. Overall, the earnings profile of the German immigrants is up-sloping, indicating that additional years of work experience pay off in the German labor market. After the first 5 years of experience (where their earnings increase at an increasing rate) the earnings increase at a decreasing rate and reach a maximum at 22 years of experience in Germany. After that, earnings start decreasing at a very slow rate.

The earnings-experience profile of the Danish immigrants is rather flat, indicating that their earnings do not increase with experience. The earnings of immigrants in Denmark start higher than those of the German immigrants at zero years of labor market experience in the host country. They reach a local maximum at 5 years of experience in Denmark, dip slightly after that, and increase slowly thereafter to reach another maximum at 18 years of experience. The earnings of the Danish immigrants decrease precipitously after 18 years of experience. This steep drop in immigrant earnings beyond 18 years of labor market experience is in fact a statistical artifact. The number of observations with experience greater than 18 years is very small, and I find practically no observations with more than 20 years of experience.

Comparing the two profiles in Figure 2, we see that Danish immigrants have higher earnings than German immigrants at every year of experience. When immigrants first enter the labor market, immigrants in Germany start with lower earnings and stay entirely below the Danes for a good part of their working lives. This indicates that there are disparate wage structures and no prospect that the German immigrants will achieve the higher earnings level of the Danish immigrants. While Figure 2 shows that after 22 years of experience German immigrants appear to be able to catch up with the Danish immigrants, this crossover occurs because the earnings of Danish immigrants start decreasing after 18 years of experience. While there are sufficient observations for German immigrants with more than 20 years of labor market experience in Denmark.

The rest of the earnings determinants in Table 3 show that male immigrants earn more than female immigrants. The gender wage disparity is larger in Germany than in Denmark, with men earning 44% more than women in Germany but only 12% more in Denmark. Post-migration human capital is rewarded in general in Germany, but in Denmark only for those who have finished high school or university. Compared to those immigrants who have no education in Germany or Denmark, immigrants with Abi-tur/University earn 27 and 19% more respectively. Completion of vocational training is rewarded only in Germany, with immigrants earning 27% more than those who do not have a vocational training qualification. This indicates that vocational training is a powerful asset in the German labor market, and the immigrants who acquire it are better off.

Speaking the host country's language well is a plus in the labor market for both countries. Immigrant workers who speak German well earn 8% more than those who do not speak German well. In Denmark, immigrants who speak Danish well earn 6% more than those who do not speak Danish well. As expected, immigrants with disabilities earn 15% less than immigrants with no disabilities in Germany. The disability variable is not a significant determinant of the earnings of Danish immigrants.

With regard to labor market determinants, we find that immigrants who work more hours per week earn higher wages. However, earnings increase more with hours of work in Denmark than in Germany. As predicted, we find that employment in a small firm has a negative impact on the earnings of immigrants in both countries. Being employed in a small company lowers earnings by 10% relative to employment in a large company in both Germany and Denmark.

Immigrants in Germany who work in construction and mining as well as those working in manufacturing earn 32% more than immigrants in service industries. The differences between these industrial sectors are not statistically significant for the earn-

ings of Danish immigrants. Working in the government or non-profit sectors (relative to service industries, which is the omitted category) has a significant effect on the earnings of immigrants in both countries. While this effect is positive in Germany and immigrant earnings are 23% higher for those in this sector, the effect is negative in Denmark. In fact, there is a penalty of 7% for employment in the government sector relative to the services sector. While I acknowledge that in this analysis I do not control for the distribution of jobs, a possible explanation for the case of Germany could be that jobs in the public sector pay extra because of strongly enforced labor union contracts and less discrimination. In the case of Denmark, the slightly lower wages in the public sector could be related to the fact that the public sector in general pays less, but instead offers more security in the job and better maternity or vacation packages. At the same time, it could be that because more immigrants in Denmark are citizens and thus have access to the government jobs, and since they are in general working in clerical jobs, they earn less.

Controlling for everything else, the estimated results for the nationality variables show differences between Germany and Denmark. Among the immigrants in Germany, those who were born in Germany and have acquired German citizenship are significantly rewarded in the labor market, earning about 23% more than the foreign-born and the non-citizens (the reference groups). Interestingly, these variables are not statistically significant for the earnings of Danish immigrants. For the remaining nationalities I find that all four groups, except the Lebanese, earn significantly more than the Turks, who are the reference group. Immigrants from the former Yugoslavia earn 14% more than Turks, followed by the Iranians with 11% more than Turks, and the Poles with 10% more than Turks. Lebanese immigrants in Germany, however, earn 10% less than Turks. Results for Denmark show that, once we separate the naturalized immigrants from their respective nationalities, none of the foreign nationals are significantly different than the Turks, the reference group.

Taken as a whole, these results from Table 3 and Figures 1 and 2 indicate that immigrants in Denmark fare better in terms of earnings than comparable immigrants in Germany. Not only do they earn more on average (5.7 versus 6.3 in log wages) but they earn more throughout their working lives and their labor market experience. Comparing Figure 1 to Figure 2 we see that the earnings-experience profiles lie above those of age in both countries. An explanation is that quatric specification of experience could be a better representation, or that years of labor market experience are better rewarded, or both.

The question I pose next is whether this wage disparity between immigrants in the two countries is due to the specific country structures or to the characteristics of the immigrants themselves. In the next section I apply a counterfactual analysis and try to address this question.

5.2 Counterfactual Analysis of the Immigrant Earnings Profiles

The rationale behind this analysis is that I might be able to explain with more certainty whether immigrants in Denmark fare better because of the conditions in Denmark or because of the quality of immigrants to Denmark if I could exchange the immigrant populations of the two countries. To that end I undertake a counterfactual analysis where I take the immigrants from Denmark and place them in Germany. Similarly, I take the German immigrants and place them in Denmark, and I then compare their earnings.

Figures 3, 4, 5, 6, and 7 illustrate this counterfactual analysis based on the ageearnings profiles. Figure 1 is the reference figure. These profiles are calculated at the means of all other variables. First I perform a complete swap of the immigrant populations. In Figure 3 I compare the German immigrants' earnings, when they are transplanted into Denmark, to Danish immigrants' earnings, when they are transplanted into Germany. On the basis of this figure, it is clear that Danish immigrants in Germany would fare better than German immigrants in Denmark. Their earnings-age profile lies entirely above that of German immigrants in Denmark during their entire working lives. At first sight this pure swapping of the populations might lead us to conclude that it is the quality of immigrants to Denmark that makes a difference in the labor market. Not only do Danish immigrants excel in Denmark (Figure 1), but they also excel, comparatively, when they are moved to Germany.

Next, I investigate this finding further by exchanging the two immigrant populations and keeping the economic systems the same. In other words, I experiment by bringing both the German and Danish immigrant groups into the same country. First I place both the Danish and German immigrants in Germany and compare their earningsage profiles. Figure 4 shows that the earnings-age profile of the Danish immigrants entirely overlaps with that of German immigrants. This occurs because the Danish profile shifts down (in comparison to Figure 1), indicating that the Danish immigrants suffer a great financial loss when they are moved to Germany. Their earnings drop at every age, showing that Germany does not offer the right environment for these immigrant workers and Danish immigrants cannot cope well in the new environment.





Second, I compare the earnings of the Danish and the German immigrants when they are both in Denmark. That is, keeping the Danish immigrants where they are, I bring the German immigrants to Denmark. I find that the Danish immigrants fare better than the German immigrants. Figure 5 illustrates that when German immigrants go to Denmark they lose, and their earnings will never catch up with the earnings of the Danish immigrants. The wage disparity is, in fact, larger than in Figure 1, and there are no prospects for convergence. This disparity is larger because the German immigrants who are moved to Denmark perform worse than if they had remained in Germany. On the basis of this figure, I cannot confirm that it is a country effect that makes a difference in the earnings of immigrants. Figures 4 and 5 illustrate that the hypothetical swapping of the immigrant populations is detrimental to both the German and the Danish immigrants.

I proceed with the counterfactual analysis by comparing the earnings of the same immigrant groups in the two different countries. That is, I study the earnings profile of the immigrants in Germany to the profile they would have if they were to live in Denmark. Figure 6 depicts the results of this exercise. Clearly, when the German immigrants are transferred to Denmark they earn less than if they had stayed in Germany. German immigrants suffer a loss when they are moved to Denmark, throughout their entire lives. However, the wage gap decreases with age and there is some prospect of convergence close to retirement age.

Likewise, in Figure 7 I experiment by comparing Danish immigrants in Denmark to the same Danish immigrants if they were to move to Germany. This transplant seems to be even more detrimental. The immigrants who are moved from Denmark to Germany sustain a bigger loss than the German immigrants who move to Denmark. The earnings profiles of Figure 7 show an indisputable widening. The earnings of the immigrants who are moved from Denmark to Germany are a lot lower than the earnings of these same immigrants if they were to stay in Denmark; they reach a maximum much earlier, and decrease much faster afterwards. These pictures illustrate that the immigrant groups under study are better off staying in the country where they are.

From the last five figures we see that it is probably not the quality of people that makes the difference (as was initially inferred from Figure 3) but neither is it the country. Taken together, these experimental exercises seem to suggest that some invisible hand has managed to make the right allocation of people in the respective countries. Although German immigrants in Germany fare worse than Danish immigrants in Denmark, they would fare even worse if they were to move to Denmark. However, there is something in Denmark that can partly alleviate the detrimental effect of the move (better labor market conditions). Similarly, I find that the Danish immigrants would perform a lot worse if they were to move to Germany. In that case, Danish immigrants would suffer a great loss. The German labor market is not the right place for these immigrant workers.

I repeat this counterfactual analysis on the basis of the work experience earnings profiles. Figure 2 is now the reference figure. Figures 8, 9, 10, 11, and 12 show a similar story to that told in the previous experiments. Figure 8 shows that if German immigrants were to go to Denmark and Danish immigrants were to go to Germany, the former would be gainers and the latter losers. Thus, it might appear that there is something in Denmark that can provide an earnings advantage to the German immigrant workers. German immigrants in Denmark would increase their earnings. The earnings of German immigrant workers who go to Denmark fit a flat line until 18 years of labor market experience. Their drop after that is probably a statistical artifact due to the small number of observations at the tail. Danish immigrants in Germany lose in that they experience lower earnings in relation to labor market experience. There is, however, some convergence after 15 years of experience.



In Figures 9 and 10 I experiment with placing the two different immigrant populations in the same countries. First I compare the earnings of the Danish immigrants to the German immigrants when they are both in Germany (Figure 9). This exercise shows that the Danish immigrants fare better, since their earnings-experience profile lies entirely above that of the German immigrants in Germany. This figure might lead us to believe that Germany is a better place for the Danish immigrants. However, when I compare the earnings of the German immigrants to the Danish immigrants when they are both in Denmark, the German immigrants fare worse (Figure 10). This leads us to suspect that this is not a country effect.

In the last step I keep the immigrant populations constant and I place them in the different countries. In Figure 11 I look at the earnings of German immigrants in Germany and the earnings of the same German immigrants if I place them in Denmark. Here we observe a clear gain from the move. German immigrant workers who move to Denmark start with an earnings advantage which continues until 20 years of experience. Although the earnings advantage decreases with additional years of experience, German immigrants benefit from a move to Denmark. Once again, the earnings-experience profile of the immigrants in Denmark is rather flat until 20 years of experience, indicating that additional years of labor market experience are not rewarded in Denmark.

In the last figure I compare the same Danish immigrants in Denmark and in Germany (Figure 12). When Danish immigrants join the German labor market they suffer an earnings loss that is sustained throughout their working lives. While the profile is upsloping and there is a crossover at 22 years of experience, the earnings of the Danish immigrants in Germany never reach the level of the higher earnings that they could have had if they had stayed in Denmark.

In sum, Danish immigrants in Denmark fare better than German immigrants in Germany, better than German immigrants in Denmark, and better than Danish immigrants in Germany, for both the age and experience analysis. Danish immigrants would suffer a total financial loss if they were to move to Germany. The Danish labor market works well for these immigrants. While the labor market conditions might be better in Denmark, it could also be that the immigrants who go to Denmark and decide to work are more productive people and are rewarded accordingly.

German immigrants in Germany, on the other hand, fare worse than Danish immigrants in Denmark, worse than the Danish immigrants in Germany, and in the experience analysis even worse than they themselves would do in Denmark. Based on this sample of immigrant workers and their earnings-experience profile, we see that German immigrants who moved to Denmark would see an improvement in their earnings compared to their earnings in Germany. This earnings advantage is especially large in the beginning of their careers and lasts for 20 years. It could be, therefore, that the Danish labor market can offer an earnings-experience advantage to its immigrants who are willing to work in paid employment.

6. Summary and Conclusions

In this paper I study the earnings of immigrants in paid employment in Germany and Denmark. Specifically, I estimate the earnings dispersion among immigrant groups both within a country and across countries in a bi-national comparison based on fresh data, the RFMS-G and RFMS-D. The analysis focuses on the same five immigrant groups in both countries. These surveys give us the opportunity to introduce the following fresh contributions in the earnings literature: (1) employ the actual years of labor market experience in the host country, along with age, and age at entry. The years of labor market experience is specified as a 4th degree polynomial and better captures the change in earnings. (2) employ an objective measure of host country language proficiency. (3) create a "pure" nationality variable by extracting the immigrants who acquire host-country citizenship from their corresponding national groups. I, thus, end up with six national groups.

The brief overview of the migration framework in both countries shows that there are some commonalities. Both countries initiated guest-worker migration, but in both cases this was abandoned in the early 1970s and has been followed by kinship migration ever since. Many of these guest-workers are still living in Germany and Denmark with their families. At the same time, international political instabilities and generous asylum laws in both countries have resulted in considerable inflows of refugees. While since the late 1990s both countries have been trying to devise laws to curb the influx of asylum seekers, both countries are characterized by high percentages of immigrants in their populations.

The descriptive analysis shows that the earnings of immigrants vary widely among the six nationalities within each country. I consistently find that naturalized citizens (for both sexes and in both countries) are at the top of the earnings distribution. Immigrants in Denmark earn more than immigrants in Germany both on average and by each respective nationality. There are pronounced wage differences between the sexes with men earning more than women.

Taken as a whole, the results from the econometric analysis indicate that immigrants in Denmark fare better financially than comparable immigrants in Germany, and earn higher wages throughout their working lives. The quatric experience approximation shows that years of work experience are not as well rewarded in the Danish labor market, but that immigrants in Denmark start with an earnings advantage that is sustained throughout their labor market tenure. Human capital invested in the host country offers immigrants an undeniable earnings premium in both countries. While earnings increase with additional hours of work, there is a penalty in earnings for working in a small company. Lastly, while there are significant differences among the nationalities in Germany, there are none in Denmark. Keeping all else constant, once we isolate the naturalized immigrants from their respective national groups, the earnings of all other groups in Denmark are not significantly different from those of the Turks.

Several exercises in a counterfactual analysis framework show that Denmark may be more effective in enhancing the immigrants' capacity to succeed in the labor market when it comes to earnings. Danish immigrants in Denmark fare better than German immigrants in Germany, better than German immigrants in Denmark, and better than Danish immigrants in Germany for both the age-earnings and experience-earnings analyses. If Danish immigrants were to move to Germany, they would suffer a total financial loss. On the other hand, I find that German immigrants in Germany fare worse than Danish immigrants in Denmark, worse than Danish immigrants in Germany, and in the experience analysis even worse than German immigrants in Denmark. Based on their earnings-experience profile, if German immigrants were to move to Denmark they would experience an improvement in their earnings compared to their earnings in Germany. This earnings advantage is especially large at the beginning of their careers and lasts for 20 years. It could be, therefore, that the Danish labor market can offer an earnings-experience advantage to its immigrants who are willing to work in paid employment.

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