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EMPLOYMENT AMONG IMMIGRANT WOMEN AND MEN IN DENMARK

- THE ROLE OF ATTITUDES

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Employment among immigrant women and men in Denmark - The role of attitudes

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Abstract:
We examine to what extent cultural factors contribute to explaining the employment gap between immigrants and Danes. We look at differences in attitudes defined by different indices and include these attitude indices in an estimation of the probability of employment. Attitudes are those towards working women, those towards distribution of housework, those towards the receipt of public transfers and religiousness. We find that immigrants have more traditional gender roles and are more religious than the Danes, while the Danes have a less judgemental attitude towards the receipt of public transfers than immigrants. The attitudes are more important women than men. Traditional attitudes towards gender roles have a negative influence on immigrants and Danish women's probability of employment, while less judgemental attitudes towards the receipt of transfers have a negative influence on Danish women's probability of employment. Religiousness does not seem to be important for the probability of employment.

JEL-classification: J15, J16, J22, J61
Keywords: Immigrants, Gender, Employment, Attitudes

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1. Introduction

In Denmark, as in most other Western European countries, employment among immigrants is considerably lower than employment in the native population. Immigrant women in particular have low employment rates (Constant et al. 2006; Tranæs and Zimmermann 2004; Dustman and Fabbri, 2005a and 2005b). According to Statistics Denmark, employment rates for Danish men and women were 80.1% and 74.4% in 2006, respectively. At the same time, employment rates for immigrants from non-Western countries were 56.2% and 42.4% for men and women[1].

Although well-known human capital factors like education, language skills and years since migration partly explain the differences in employment rates between immigrants and natives, several studies indicate that the human capital factors do not explain the entire gap (see e.g. Blackaby et al. 2002, Bevelander and Groeneveld 2006; Dustmann and Theodoropoulos 2007; Hummelgaard et al. 2002). Recently, studies in empirical labour economics have analysed whether 'cultural elements' – e.g. attitudes towards gender roles and religious beliefs – add to the explanation of the employment patterns and find some evidence for a relationship (e.g. Vella, 2004; Fernández and Fogli 2005; Guiso et al. 2006). Cultural factors may also contribute to explaining the employment gap between natives and immigrants: attitudes are framed by the context we live; hence, societal differences between the host country and the countries of origin may imply differences between natives and immigrants with respect to attitudes. However, studies analysing to what extent cultural factors contribute to explaining the employment patterns of immigrants are scarce; examples are Antecol (2000) and Fortin (2005).

In this paper we study whether cultural factors contribute to explaining the differences in employment rates between immigrants and Danes. The cultural factors we focus on are attitudes towards gender roles, towards the receipt of public transfers and towards religion. The purpose of the paper is twofold: to analyse ethnic and gender differences in attitudes and then to analyse whether the attitudes contribute to explaining the probability of employment. We use survey data from Denmark collected among 18-45 year-old immigrants from Iran, Pakistan and Turkey and 18-45 year-old Danes in 2006. The survey data is combined with administrative register data. As we

[1] Western countries are here defined as countries in the European Union, Iceland, Norway, Switzerland, North America, Australia and New Zealand. All other countries are defined as non-Western countries.

have cross-section data, the results describe the association between attitudes and employment rather than causal effects.

Since the 1960s, Denmark has experienced positive net immigration as opposed to the period between World War II and the 1960s, during which Denmark experienced net emigration (Bauer et al. 2004). The immigration from Turkey and Pakistan started in the late 1960s and the beginning of the 1970s, where male immigrants from the two countries (together with male immigrants from the former Yugoslavia) came to Denmark to work as unskilled workers ('guest workers') in the Danish manufacturing industry. In 1973, Denmark tightened its labour recruitment policy and introduced measures to reduce the influx of foreigners. After 1973, only two major channels of legal immigration from non-Western countries to Denmark remained: family reunification and asylum (Bauer et al. 2004). Many of the male guest workers stayed in Denmark and brought their families to the country; moreover, many of the children of these Turkish and Pakistani guest workers continued to find their spouses in the country of origin (Schmidt and Jakobsen 2000). Hence, family reunification has been an important source of immigration since the 1970s. The migration history of the immigrants from Iran is different, as immigration from Iran began in the mid 1980s, when a large number of asylum seekers from Iran obtained residence permits in Denmark. On average, the Iranian immigrants as a group have been in Denmark for a shorter period than the other two immigrant groups.

The paper is organised as follows. Section 2 reviews literature on attitudes in relation to economic outcomes and posits hypotheses based on the previous studies concerning attitudes and the relationship between attitudes and employment. Section 3 introduces the data, while section 4 defines and discusses the attitude indices. Section 5 presents the results of the empirical analysis, and section 6 concludes.

2. Previous literature and hypotheses

Guiso, Sapienza and Zingales define culture as 'those customary beliefs and values that ethnic, religious and social groups transmit fairly unchanged from generation to generation' (Guiso et al. 2006, 23). Culture may affect the individuals' beliefs and preferences, and these beliefs and

preferences may affect economic outcomes. By describing culture as affecting economic outcome through beliefs and preferences, the standard economic assumption that each individual has one identity and maximises the utility of this identity is maintained (Guiso et al. 2006). While culture tend to evolve slowly over time, it can suddenly shift as new information becomes more widely diffused – e.g. when a immigrant moves to a new country or when new stories become anecdotes in the neighbourhood (Fernadez and Fogli 2005). In Guiso et al. (2006) religion and ethnic background are treated as cultural factors that affect beliefs and preferences, e.g. attitudes toward working women. In this paper we describe and analyse the effect on the economic outcome of religion (more precisely, the degree of religiousness) as well as of attitudes towards gender roles and the receipt of public transfers. Both religion and ethnic background may affect attitudes in interaction with the context the immigrants live. This section includes a review of the existing literature, and presents our hypotheses about the attitudes among immigrants and Danes for gender roles, public transfers and degree of religiousness.

2.1 Attitudes towards gender roles

Only few studies have focused on the influence of attitudes towards gender roles on women's labour supply. In these studies are traditional attitudes defined to reflect the opinion that women and men should not behave identically in labour-market-related or in housework-related activities. Fortin analyses the relationship between women's probability of being employed and attitudes towards gender roles, using data from the World Value Survey for 26 OECD countries. She finds a significant negative relationship between traditional views on gender roles and the employment probability for women (Fortin, 2005).[2] In a study based on data from Australia, Vella finds that traditional attitudes towards gender roles have a large significant negative effect on weekly hours of work for women (Vella, 2004).

Vella's study also indicates that the gender roles are systematically related to characteristics of the individual's childhood household and that the attitudes are weakly exogenous to educational attainment and working hours. Other things being equal, the child's attitudes are more modern if the mother or the father has a high educational level, if the mother is working, or if only one parent is present in the household (Vella, 2004). These results agree with Thornton, Alwin and Camburn (1983), who using US data also find that the parental family affects gender roles. Both Vella and

[2] None of the attitude variables are significant for men, a finding which according to Fortin indicates that the attitude variables do not capture other economic effects.

Thornton et al. find that religious beliefs are important determinants of women's attitudes towards gender roles. Vella finds that non-religious individuals have more modern views on gender roles than Roman Catholics. He finds no difference with respect to attitudes for different Christian groups, but finds that individuals belonging to Islamic and Buddhist groups have more traditional views on gender roles (Vella 2004). Guiso et al. (2003) finds that all religions (e.g. Christianity, Hinduism, Islam) are associated with more conservative attitudes toward women.

The distribution and the impact of the attitudes on labour supply may differ between immigrants and Danes. Some studies show large variations in attitudes across different groups. Dustmann and Theodoropoulos (2006) show that Bangladeshi and Pakistani women in the UK have much more traditional views of gender roles than do black Caribbean women and white women, and for Norway Drøpping and Kavli (2002) show that Somalia and especially Pakistani immigrants have more traditional views of gender roles than do Vietnamese immigrants. Yet few studies have focused on the relationship between gender role attitudes and women's labour supply for immigrants. Fortin (2005) finds that the relationship between employment and attitudes towards gender roles is stronger for immigrant women than for all women. Zaiceva and Zimmerman (2007) also look at gender role attitudes, albeit indirectly. Using British time use data, they find that immigrant women spend more time on religious activities and housework than native women and interpret the time use difference as reflecting cultural differences. In the absence of variables on attitudes on gender roles or time use data, Antecol (2000) uses the gender gap in labour force participation in the home country as an indicator of cultural attitudes, finding that the gender gap in the home country explain more than half of the variation in the gender gaps among immigrant country groups in the U.S. Antecol interprets this finding as the immigrants having a cultural factor in addition to the human capital factors that matter for employment in the host country. Fernández develops this approach and finds that also attitudes towards gender roles in the countries of origin helps explaining the labour participation of second generation immigrants in the US (Fernández 2007).

In this study, we expect to find more traditional values among the immigrants from Turkey, Iran and Pakistan than among Danes. Generally, Denmark is considered a country with a high level of gender equality in both public and private spheres. Denmark is to a high extent a dual-earner society, in which both women and men typically participate in the labour market – including

women with young children (Geyer and Steiner 2007). The female employment rates are higher in Denmark compared to most other countries, including Turkey, Iran and Pakistan.[3] Moreover, Denmark is one of the most egalitarian countries in Europe with respect to the attitudes towards gender roles and the division of housework between husband and wife (Wilcox 1991 and Voicu et al. 2006). The immigrants in our study, who come from countries with more traditional gender division of work, may of course differ from the majority in their country of origin as a result of selection or adaptation to the general norms in the Danish society. However, given international studies we just have cited, we still expect immigrants to be more traditional in their views than Danes.

On the basis of the literature review, we expect women with traditional attitudes towards gender roles, whether they have children or not, to be less attached to the labour market than women with more modern attitudes because they are more oriented towards family and home values. We do not have an ex ante expectation about the men. We could expect men with more traditional attitudes towards women's work to be more attached to the labour market, because they to a larger extent see themselves as breadwinners. Alternatively, we could expect the attitude not to matter for men, because the male role is to work, irrespective of possible gender role attitudes.

2.2 Welfare dependence cultures

Some studies argue that a welfare dependence culture may develop through social networks, e.g. in deprived neighbourhoods and among ethnic groups with a high level of unemployment: if unemployed interact mainly with other unemployed individuals, the network can prevent upward mobility because the network supplies information about welfare eligibility or exerts negative peer pressure (Bertrand et al. 2002).

The Danish welfare state is based on universal, tax-financed social benefits and citizen rights to free social services, health care and education (Torfing 1999). While the level of job protection is low in Denmark (Kongshøj Madsen 2005), the relatively generous social benefits suggest that many of the

[3] In 2006 the employment rate for women in Denmark was 73.4% compared to 57.2% for women in the EU27 (Eurostat 2007). In Turkey, Iran and Pakistan the activity rates (and thus the employment rates) are very low for women compared to the EU27: the activity rate were 24.8% for women in Turkey in 2005, 19.2% for women in Iran in 2005, and 21.0% for women in Pakistan in 2006; while the activity rate was 72.2-84.0% for the men in the three countries in 2005/2006(ILO 2008).

(low paid) workers are able to maintain a reasonable standard of living even if they lose their jobs (the so-called flexicurity model, see Kongshøj Madsen 2005). The universal and generous coverage of the Danish welfare state depend on all citizens contributing, and there is a strong sense of personal societal responsibility in Denmark and an implicit judgement about individuals on public transfers as not pulling their own weight and being drains on the society.

The characteristics of the welfare system in Denmark mean that the immigrants historically have had relative easy access to welfare benefits. Our hypothesis is that immigrants have developed unemployment cultures to a higher extent than Danes and thereby differ from Danes with respect to attitudes towards the receipt of public transfers for two reasons: (1) immigrants in Denmark are more dependent on public transfers than Danes because immigrants historically have experienced lower employment rates than Danes (Blume and Verner 2007); and (2) the immigrants are concentrated in deprived neighbourhoods to a higher extent than Danes (Hummelgaard and Husted 2001). Furthermore, we expect that this difference in attitudes towards the receipt of public transfers contributes to explaining the Danes-immigrant employment gap.

Religious affiliation or degree of religiousness may affect attitudes towards work and thereby the attitudes towards welfare dependence. One much-discussed hypothesis is Max Weber's work ethic thesis, which attributes the higher economic prosperity of Protestant regions (compared to Catholic regions), to a Protestant work ethic. The strong sense of personal societal responsibility in Demark may be related to a protestant work ethic. However, Max Webers's thesis has not found support in empirical analyses (see e.g. Iannaccone 1998; Becker and Wossmann 2007).

2.3 Religion

As previously mentioned religion may affect attitudes towards gender roles and work ethics. In addition, religion may affect labour market outcomes through other attitudes or values, e.g. trust (in other people), and attitudes towards marriage and fertility (Iannaccone 1998; Guiso et al. 2006; Lehrer 2004). Therefore, we may find a direct effect of religion, in addition to the indirect effects through the other attitudes, on the employment situation among immigrants and Danes.

Several studies have looked at the relationship between religion and economic outcomes. Most studies have analysed the effects of religious affiliations (e.g. a comparison of Catholics, Protestants

and Jews), and have found a relationship between religious affiliation and economic outcomes such as wages (Iannaccone 1998).[4] A study by Tomes, for example, focuses on differences in level of earnings and returns to human capital investments for religious groups in Canada. Tomes finds that earnings in Canada are higher for male Jews than for male Catholics and male Protestants, while earnings are lower for female Jews have than for female Catholics and female Protestants (Tomes 1985). Few studies have focused on the influence of degree of religiousness. However, according to Lehrer (2004) the affect of religious affiliation is stronger for very religious individuals.

The majority of the population in Denmark (83% in 2006) is members of the state church, the Danish National Evangelical Lutheran Church (the Ministry of Ecclesiastical Affairs, 2008). However, being a member of the Lutheran Church in the Denmark is largely a matter of tradition and citizenship; it has little or no religious meaning (Halman and Pettersson 1999). Comparative studies show that the level of church attendance is low in Denmark and that few Danes are religious, when compared to the populations in many other European countries (Halman and de Moor 1994; Halman and Pettersson 1999). Therefore we expect the immigrants in this study to be more religious than the Danes.

In our analysis, one difference between the Danes and the immigrants is that the Danes are primarily Christians (Protestants), while the immigrants are primarily Muslims (80% of the immigrants are Muslims). Danes and immigrants (in our dataset) who are not Christians or Muslims are mostly without religious affiliation. Thus, instead of analysing the effect of religious affiliation, we analyse the effect of degree of religiousness. As most of the existing studies on the relationship between religion and economic outcome have focused on Christians and Jews, we do not have an ex ante expectation about the effect of religiousness on employment. Furthermore, the previously mentioned studies on the relationship between religion and employment/wages have not controlled for attitudes towards gender roles and work – factors that may also influence the relationship.

[4] Most of the studies are from the US or other Western countries and focus on Judeo-Christian beliefs (Iannaccone, 1998)

3. Data

The data in the study is a combination of survey data collected in 2006 and administrative register data from Statistics Denmark. Information about age and years since migration comes from the registers – in both cases, as status variables from the end of 2006 - while the attitudes and other variables come from the survey.

The 2006 survey includes both 18-45-year-old immigrants from Turkey, Iran and Pakistan and 18-45-year-old Danes. The selection of respondents into immigrants and Danes is based on Statistics Denmark's classification of the population into three groups: immigrants, descendents of immigrants and Danes (Poulsen and Lange 1998). Statistics Denmark defines immigrants as persons who are foreign born, and whose parents are foreign born or have foreign citizenship. Descendants of immigrants are defined as persons born in Denmark, and whose parents are foreign born or have a foreign citizenship. Danes are defined as persons, who have at least one parent, who is a Danish citizen and is born in Denmark.[5] All the immigrants in the survey had immigrated to Denmark before 2006 (December 2005 at the latest). Roughly 4,050 individuals were selected for interviews – about 1,000 from each of the immigrant groups and about 1,100 Danes. While the response rate for the survey was 61% overall, it varied considerably across the country groups: it was lowest for the Pakistanis (42%) and highest for the Danes (80%). For a discussion about response rates in the survey see Deding et al. (2007).[6]

For the analysis, we pool the immigrants from the three countries (Iran, Pakistan, and Turkey) and analyse them separately from the Danes. The total survey sample consists of responses from 1,575 immigrants and 873 Danes. The outcome variable in the empirical analysis is whether the individual is employed or not at the time of the survey. Because this is relevant only for individuals with the potential to be part of the labour force, we exclude 229 immigrants and 115 Danes who were students. In addition, we eliminate those from whom information on employment or explanatory variables is missing (with a few exceptions discussed later), ending up with an analysis data set of

[5] Note that descendants are not included in this analysis.
[6] Non-response is not distributed evenly across population groups. While we have experimented with sample weights in order to correct for differences in response rates, the results of the analyses for the immigrants do not differ from the un-weighted results. Hence, the analyses in the paper use the unweighted survey data.

1,259 immigrants (707 men and 556 women) and 732 Danes (344 men and 383 women). We analyse men and women separately.

Table 1 shows employment in the sample. Employment is self-reported (i.e. main activity last week) and includes both wage earners and self-employed. The rates are higher than the average employment rates in the population, primarily because the sample is quite young with early retirement not being an issue. We see a large employment gap between Danes and immigrants, especially for women (about 14% for men and 25% for women), and a large gender gap in employment rates (about 11% for the Danes and 22% for the immigrants). Although unemployment rates in Denmark in 2006 were the lowest since the 1970s (unemployment was only 4.5%), employment among immigrants, especially the female immigrants, is still lagging behind.

Table 1 around here

Our main variables of interest are the attitudes, which we operationalise by constructing indices. These are defined and discussed in the next section. In addition, we include some basic control variables in the empirical analyses (Table 2). The immigrant and Danish women are about the same age, whereas the immigrant men are about two years older than the Danish men. As for family status, a higher share of the immigrants than the Danes lives in couples. On average, a higher share of the immigrants than the Danes has children (defined as children under 18 years and living at home). The difference in average family status reflects earlier family formation among the immigrants than among the Danes.

Age at immigration may affect the employment probabilities of the immigrants. A general finding is that age at immigration is negatively related to the educational attainment, employment and earnings of immigrants (Schaafsma and Sweetman 2001; Jakobsen and Smith 2006). An analysis by Cahan et al. (2001) indicates that the foreign language acquisition factor plays a central role in the negative relationship between age at immigration and education. Young children both acculturate and learn foreign languages more easily than older children and adults (Cahan et al. 2001; Schaafsma and Sweetman 2001). In our study age at migration is categorised in three groups: 0-6

years (pre-school age), 7-16 year (school age) and 17+ years. Table 2 shows that most of the immigrants immigrated to Denmark as adults.

Formal qualifications in terms of education are very important for employment possibilities. We use survey information about education obtained both in Denmark and outside (in the home country or elsewhere). Education is categorised in four groups: lower Danish education, higher Danish education, lower foreign education and higher foreign education.[7] We rank the four so that education in Denmark is superior to education obtained abroad, because studies have shown that especially Danish education is very important for getting into the Danish labour market (Blume, 2003). Thus immigrants with both Danish and foreign education are categorised according to their Danish education. For the Danes, 71% of the women and 66% of the men have a higher education. These numbers are much lower for the immigrants, where 34% of the women and 41% of the men have a higher education. Most of the immigrants with a higher education have completed their education in Denmark (Table 2).

As previously described, earlier studies have found that age at immigration and education is strongly related. This relationship will be especially strong when we categorise education according to whether it is Danish or foreign. For instance, none of the immigrants who came to Denmark in the pre-school or school age have a higher foreign education. Consequently, including education and age at immigration separately in the estimations is meaningless. Instead, we use indicator variables that combine information on education and age at immigration (see table 2).

Finally, Table 2 shows the distribution of the immigrants across the three countries of origin. For the women, close to 30% come from Iran and Pakistan, respectively, while 40% come from Turkey. For the men, about 40% come from Iran, 25% come from Pakistan, and 35% come from Turkey. This unequal distribution across countries reflects the differences in response rates across the sample mentioned earlier.

The survey data includes information about the immigrants' proficiency in Danish. Nonetheless, we have chosen not to include information on language skills in the estimations. The reason is that age at migration, education and language skills are all strongly correlated – the longer the immigrant has

[7]Lower education corresponds to primary school or high school (*Studenter-eksamen*), and higher education corresponds to vocational or post-secondary education. 'Foreign' here simply refers to an education obtained outside of Denmark.

been in Denmark, the better language skills; and the longer affiliation to the Danish educational system, the better language skills. Therefore, we cannot identify the impact of language skills simultaneously with the impact of age at migration and education. In addition, we consider age at migration and education more exogenous than language skills.

Table 2 around here

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4. The attitude indices

4.1 Constructing the attitude indices

The survey data in this analysis includes a wide range of attitude questions. Many of the questions are strongly correlated and reflect the same underlying attitudes for such factors as gender roles. Therefore, we construct attitude indices by combining similar questions, where factor analysis determines 'similarity'. We end up defining three different attitude indices: the attitude towards working women, the attitude towards the distribution of housework and the attitude towards public transfer payments. In addition, we use a question about degree of religiousness as an attitude indicator.

We use 12 questions to construct the three attitude indices. For each question, we assign a value to each response category. Within each attitude category, we add the scores to construct an index value for each individual.[8] In constructing the index this way, we follow Vella (1994) and Farré and Vella (2007). Even though we assign equal weights to each question and score the responses as if the distances between them were equal, the main advantage of constructing the index in this manner is that it is transparent and easy to replicate.

A special question in constructing attitude indices relates to handling 'don't know'-answers. Because these answers are relatively common on attitude questions, we want to avoid deleting all these observations. When the response categories represent a scale from negative to positive with a

[8] Scores for all questions in the index must be non-missing for calculating a value of the specific index.

neutral midpoint (where the 'don't know' answer can be assumed to be equal to the neutral midpoint answer) we thus choose to assign a value to the 'don't know' category. However, in questions without a neutral midpoint we treat the 'don't know' answer as a missing value.

4.1.1 Attitude towards working women (Index on women's work)

For the attitude towards women's work, we use five questions concerned with whether women with or without children in different age groups should work-full time, par-time or not at all (see box 1). Full-time is assigned the highest score and not working at all is assigned the lowest score. Accordingly, a high value of the index can be interpreted as representing modern views on female employment and low values as representing more traditional views. We do not assign a value to the 'don't know' answers, as we cannot be certain what type of attitude these reflect.

Box 1. Index on Women's work

Questions:	**Response categories (scores)**			
How much do you think a woman without children should work?	Full time (3)	Part-time (2)	Not at all (1)	Don't know (missing)
How much do you think a woman with a child aged 1-2 years old should work?	Full time (3)	Part-time (2)	Not at all (1)	Don't know (missing)
How much do you think a woman with a child aged 3-5 years old should work?	Full time (3)	Part-time (2)	Not at all (1)	Don't know (missing)
How much do you think a woman with a child going to school should work?	Full time (3)	Part-time (2)	Not at all (1)	Don't know (missing)
How much do you think a woman whose children have left home should work?	Full time (3)	Part-time (2)	Not at all (1)	Don't know (missing)

4.1.2 Attitude towards the distribution of housework (Index on housework)

The index describing the attitude towards the distribution of housework is constructed with four questions focusing on the distribution of housework in a family (see box 2). The first question concerns whether fathers can be caregivers as well as mothers, with a high score assigned to answers 'I totally agree that fathers are just as good as mothers to take care of the children'. For this question, we interpret a 'don't know' answer as a neutral answer (i.e. a midpoint value). The following three questions concern the possible sharing of housework tasks such as cooking, cleaning and childcare. The lowest score is assigned to 'the mother should be responsible for …',

while the highest score is assigned to both 'the mother and father should share the responsible for … equally' and 'the father should be responsible for …'. As very few respondents answered that the father should be responsible for the tasks, we interpret this answer as an expression of extreme support for gender equality. For the questions on the sharing of housework, the meaning of a 'don't know' answer is not obvious; hence we do not assign scores to these answers. A high value of the index on housework can be interpreted as representing modern views on the division of housework in the family.

Both this index and the previous index consider gender roles, but from different perspectives – one focuses on women in the labour market; the other on gender equality in the family. However, as it is not clear that the impact of the two gender perspectives on employment should be identical, we analyse them separately.

Box 2. Index on Housework

Questions:	**Response categories (scores)**					
Fathers are just as good as mothers to take care of their children	Totally agree (3)	Partly agree (3)	Neither… nor (2)	Partly disagree (1)	Totally disagree (1)	Don't know (2)
Should the mother or the father be responsible for cooking?	Only the father (3)	Mostly the father (3)	Share equally (3)	Mostly the mother (2)	Only the mother (1)	Don't know (missing)
Should the mother or the father be responsible for cleaning and laundry?	Only the father (3)	Mostly the father (3)	Share equally (3)	Mostly the mother (2)	Only the mother (1)	Don't know (missing)
Should the mother or the father be responsible for caring for the children?	Only the father (3)	Mostly the father (3)	Share equally (3)	Mostly the mother (2)	Only the mother (1)	Don't know (missing)

4.1.3 Attitude towards public transfer payments (Index on transfers)

The third index concerns attitudes towards the receipt of public transfers such as unemployment benefits or social benefits. We construct the index on attitude towards transfers from three questions reflecting to what extent unemployed people (i.e. those on public transfer payments) should be geographically-mobile or income-mobile in the interests of getting a job, and whether receiving cash benefits makes them unworthy (see box 3). The following answers to the three questions are assigned a high value: it is unworthy to receive social benefits; unemployment persons should be willing to move to obtain employment; and unemployment persons should be willing to accept a job

with a lower income than the unemployment benefits. Thus, a higher value on the index reflects a less judgemental attitude towards the receipt of public transfers. For the three questions in the index, we interpret a 'don't know' answer as a neutral answer (i.e. a midpoint value).

Box 3. Index on Transfers

Questions:	**Response categories (scores)**					
An unemployed person should be willing to move to obtain a permanent job	Totally agree (3)	Partly agree (3)	Neither… nor (2)	Partly disagree (1)	Totally disagree (1)	Don't know (2)
An unemployed person should be willing to accept a job with a lower income than the unemployment benefits	Totally agree (3)	Partly agree (3)	Neither… nor (2)	Partly disagree (1)	Totally disagree (1)	Don't know (2)
Receiving cash benefits is unworthy	Totally agree (3)	Partly agree (3)	Neither… nor (2)	Partly disagree (1)	Totally disagree (1)	Don't know (2)

4.1.4 Degree of religiousness

In addition to the three attitude indices, we include a measure of the degree of religiousness by using the question 'How religious are you?'. The response categories are 'very religious', somewhat religious', 'slightly religious' and 'not religious'. We use the answers to construct three dummy-variables that describe the self-reported degree of religiousness (see box 4). The omitted category in the estimation is 'not religious'. Although church attendance and participation in other religious activities is sometimes used to measure religiousness (see e.g. Lehrer 2004; Guiso et al. 2003), some individuals conceive themselves as very religious even though they never or seldom attend religious services or otherwise enter a house of worship. Therefore we think self-reported religiousness is a better measure for the degree of religiousness.

Box 4. Dummy variables on degree of religiousness

Dummy variables:	Values	
Very religious	Yes (1)	Otherwise (0)
Somewhat religious	Yes (1)	Otherwise (0)
Slightly religious	Yes (1)	Otherwise (0)

4.1.5 Validity of the indices

We have tested the validity of the indices by deleting one variable at a time from an index and looking at the resulting change in the index. The indices proved relatively robust towards these changes. We also checked the correlation between each question in the index and the index itself: if this correlation is very low for specific questions, this implication is that this specific question expresses something different from the other questions in the index. Table A1 in the Appendix shows that in general the correlations between the attitude indices and the variables used in constructing the indices are relatively high. One exception is the housework index, where the correlations for Danish women are lower. Overall, however, the correlations suggest a high validity of the indices (see also Vella, 2004).

4.2 Comparing the attitude indices

Table 3 shows the descriptive statistics for the three attitude indices. For each index, we show the mean and the standard deviation across the four population groups in the analysis. In addition, we show the range of each index (i.e. minimum and maximum values). As the index range shown is the actual range for the specific population group, it can consequently differ across the groups (for the complete distribution of indices, see the appendix, table A2). For the attitude towards women's work and the attitude towards the distribution of housework, we find that the index range is larger for the immigrants than for the Danes, indicating a larger dispersion in the index values. In Table 3, unless stated otherwise in the text the differences in means across the population groups are all significant (using a t-test with a 5 pct. significance level).

Table 3 around here

The mean values of the index describing the attitude towards women's work show that Danes on average score higher than the immigrants (although the difference between immigrant men and Danish women is not significant), i.e. Danes on average have more modern views on women's participation in the labour market than the immigrants. This difference is expected, because the immigrants come from countries with more traditional gender roles. Nevertheless, that the dispersion is larger for the immigrants than for the Danes indicates that some immigrants have views as modern as the Danes, while other immigrants are more traditional. Interestingly, we also

find that Danish men are more modern in their view of women's work than Danish women (the difference between immigrant women and immigrant men is insignificant). This finding may indicate that the Danish women have a more traditional view of motherhood than their actual behaviour suggests.

For this index, a very high share of individuals answered 'don't know' to the questions regarding mothers' work – approximately 9% for the immigrant women and 14-16% for the three other groups. Because of the large number of missing values, we do not eliminate these observations from the empirical analyses in the next section but identify them with an indicator variable.

As in the previous index, the attitude towards the distribution of housework within the family reflects gender role attitudes. Again, a higher value indicates a more modern view towards more sharing of housework tasks. As expected, for this index we also find that the immigrants are more traditional than the Danes but with a much higher standard deviation. Furthermore, we find that Danish women score higher than Danish men (the difference between immigrant women and immigrant men is not significant). The Danish women are very close to the top value of the index.

As mentioned earlier, one of our hypotheses is that the large share of immigrants on public support could create a 'welfare dependence culture' as reflected in less judgemental attitudes towards the receipt public cash benefits. Our hypothesis is not supported by the data: the mean value of the transfer index is significantly higher for the immigrants than for the Danes. Indeed, immigrant men have the highest score on this index, while Danish women have the lowest score. Thus, the immigrants to a higher extent than the Danes think that receiving public cash benefits is unworthy, and that unemployed individuals should make a serious effort to be self-supporting. Contrary to the other indices, the standard deviations for this index are similar across the groups: even though the immigrants on average have higher values of the index than the Danes, the dispersion is the same among both groups.

Studies have shown that few Danes are religious compared to the populations in other countries. Therefore, we expect the immigrants to be more religious than Danes, and this expectation is confirmed (see table 4). The immigrants answered to a higher extent than Danes that they are very religious or somewhat religious. Both among immigrants and Danes the women show a higher

degree of religiousness than men. Thus the immigrant women have the highest degree of religiousness while the Danish men have the least degree of religiousness (table 4).

Table 4 around here

A natural question concerning the attitude indices is to what extent they express the same attitude. For instance, attitudes towards women's work and towards the distribution of housework are related, as they both reflect some kind of gender role attitude. However, as shown in Table 5 the correlations between the indices are small. This suggests that the indices do measure different things. On the basis of earlier research we would expect religious persons to be more traditional with respect to gender roles than others, but this is not confirmed in Table 5: the correlations between the indices on gender roles and religiousness are small. The strongest correlation between religiousness and gender roles is found for the immigrants, where the correlation between religiousness and the index on attitudes towards the distribution of housework is -0.20.

Table 5 around here

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5. Empirical results

In the empirical analysis, we investigate whether the different attitudes significantly affect the probability of employment. However, before looking at the attitude indices we estimate and discuss the baseline model without the attitude variables. That labour supply depends on both human capital factors and family factors is well known. Furthermore, human capital factors like education are likely to be correlated with attitudes. By controlling for human capital and family factors, we aim at estimating the direct effect of the attitudes rather than the indirect effect through the baseline factors. All estimated effects should be interpreted as partial correlations, because our data do not

allow for identification of causal effects. We use probit models for all estimations and report marginal effects rather than coefficients, so that we can directly compare the magnitude of the (partial) effects.

5.1 The baseline model

Table 6 presents the results for the baseline model. The control variables include age, family status, Danish education; for the immigrants they also include foreign education, age at immigration and country of origin. For the immigrants, we interact age at immigration with education. We begin by discussing the results for Danes as these also serve as a baseline for the results for the immigrants.

For the Danish men, we find that education is the most important factor related to the probability of employment; indeed it is the only significant variable: Danish men with a higher education are more likely to be employed than Danish men with a lower education. In interpreting this finding, we should keep in mind both the age group of the sample (18-45 years) and the exclusion of full-time students from the analysis. In effect, our sample constitutes the core group of workers, as the sample population is too young for retirement issues to play a role. The result for the Danish men shows that they work regardless of age and family situation, but that having education matters – a finding probably reflecting that unemployment rates are higher among the lower-skilled.

For the Danish women, the education variable is not significant. Instead, the only significant coefficient relates to having children: the probability of employment for Danish women with children is about 10 %-points lower than for Danish women without children. This difference indicates that although gender equality is high in Denmark, women are primary caregivers for children. However, the single significant coefficient reflects the very high employment rates – and very little variation – among the Danish women.

For the immigrants, the results differ to some extent in that both education and personal factors come into play. Table 6 shows that age and employment are not correlated for the immigrant men, while age matters for the probability of employment for the immigrant women (with a positive effect until about 36.6 years, followed by a negative effect). One reason for the result for the immigrant women may be that when the immigrant women in their 20s have more family obligations than the older women; but that e.g. language skills are a greater barrier for the

immigrant women in their 40s. The result is then that employment peaks for the immigrant women in their 30s. As for the Danish women, having children is for immigrant women associated with lower employment rates, but with a much larger marginal effect (31% compared to 10%). This finding shows that having children is a much larger barrier for the immigrant women than for the Danish women in terms of employment – the immigrant women are to a lesser extent able to combine work and family obligations. In addition, the immigrant women on average have more children than Danish women, thereby partly explaining the lower employment rate.

In contrast with the Danish men, we find that immigrant men living in couples have a higher probability of being in employment than immigrant men not living in couples. From the previous section, we know that the immigrants in general have more traditional gender role attitudes than the Danes. This traditional attitude might suggest that immigrant men in couples are more employed than single immigrant men and vice versa for the immigrant women. This expectation, however, is not fulfilled in case of the women, where the coefficient to living in a couple is insignificant.

For both immigrant men and women, education in combination with age at immigration plays an important role for the probability of employment. A higher Danish education increases the immigrant women's employment probability irrespective of age at immigration (compared to the reference group, which is immigrant women who have lower foreign education and who immigrated to Denmark as adults). Similar results are found for lower Danish education, even though the positive effect on the immigrant women's employment probability is smaller than for higher Danish education. Turning to education obtained outside Denmark, we find for the immigrant women that having a higher foreign education has no effect on the employment probability relative to having a lower foreign education. However, immigrant women who came to Denmark between the ages 7-16 and who have some lower foreign education, but no Danish education, have lower employment probabilities than immigrant women who came to Denmark after age 16 – perhaps because the former have not completed their education in either the country of origin or in Denmark.

For the immigrant men, we find a similar positive effect of Danish education, but smaller than that for the immigrant women. The effect of foreign education differs for immigrant men and women. As opposed to the effect on the immigrant women:, (1) a higher foreign education has a positive

effect on the immigrant men's employment probability compared to immigrant men with a lower foreign education, and (2) the immigrant men with a lower foreign education, who came to Denmark in the school age, have a higher employment probability than immigrant men with a lower foreign education, who came to Denmark as adults. The findings on education thus, first, suggest that the immigrant men are less sensitive than the immigrant women to the educational level in terms of probability of employment, and second, that the immigrant men are better at using their foreign education in Denmark than the immigrant women. One reason underlying this finding may be that immigrant men find it easier to obtain employment through their ethnic network than do immigrant women because of the traditional norms associated with female employment in this network.

Within the immigrant group, we find that male immigrants from Iran have a lower probability of employment than male immigrants from Turkey (the reference group). Hence, after we control for the other factors in the model, Iranian men are less employed than Turkish or Pakistani men. A plausible reason for this finding is that many Iranians are refugees, while the immigrants from Turkey and Pakistan are labour immigrants or family reunification immigrants with an ethnic networks from their first day in Denmark to help them finding employment. For the women, after controlling for the other factors, we find that those from Pakistan have a lower probability of employment than women from Turkey and Iran. The distribution of the attitude indices across countries shows that the Pakistani women have the most traditional attitudes towards female employment, which partly explains the findings.

Table 6 around here

5.2 Empirical models including attitude variables

We now turn to the estimations including the attitude indices and the religiousness variable (Table 7). Including the attitude variables results only in minor changes in the coefficients of the control variables: the only essential change is that the indicator variable for Pakistani women becomes insignificant, supporting the hypothesis that attitude differences underlie the result in Table 6.

Looking first at the attitude towards women's work, we as expected find that the index for women's work matters for the probability of employment for both immigrant women and Danish women, i.e. the more favourable the women (mothers or not) are towards female employment the higher probability of employment (with a marginal effect of nearly 3% both for immigrant and Danish women). For both immigrant and Danish men, on the other hand, we do not find a significant effect of the attitude towards women's work. This finding is as expected because the questions used constructing this index include only female behaviour.

As mentioned earlier, in addition to the women's work index we include an indicator variable for a missing index value in the estimation, because the index is missing for many respondents. The coefficient to the missing index indicator is significantly positive for Danish women and immigrant men. This finding suggests that individuals with a missing women's work index are more likely to be employed than individuals without a missing index. One interpretation could be that answering 'don't know' to the questions about women's work implies not having a position against women's employment. For the Danish women in particular, this interpretation is reasonable given the very high employment rates for this group. For the immigrant men, one explanation might be that the employed men are sometimes caught between traditional and modern values regarding women's work and thus to a higher extent reply 'don't know' to these questions.

Table 7 around here

The attitude index towards the distribution of housework within a family likewise shows a positive correlation between this index and the probability of employment for both immigrant women and Danish women. As expected we find that women with more traditional attitudes have lower probabilities of employment. The size of the marginal effect indicates that the Danish women respond more to changes in the index (the marginal effect is 6.7% compared to 2.5% for the immigrant women). As the standard deviation for this index is much smaller for the Danish women than for the immigrant women (see table 3) one explanation can be that it is more of a statement for the Danish women to express traditional views about the distribution of housework within a family resulting in larger employment effects. Likewise for the immigrant men, we find a significantly

positive coefficient to the housework index. This finding may indicate that the immigrant men with more modern views of the distribution of housework in families find it easier to get on in the labour market.

In the index describing the attitude towards receipt of public transfers the only significant coefficient is for the Danish women. Danish women with a higher value on the index (a more judgemental attitude towards the receipt of public cash benefits) have a higher probability of employment compared to women with a lower value on the index. However, the employment of neither immigrant women, immigrant men nor Danish men is associated to this particular index. This finding is in line with the finding from the descriptive analysis, where the Danish women turned out to have the least judgemental attitude towards the receipt of public cash benefits; but is contrary to our expectations based on the existence of unemployment cultures among immigrants.

Finally, we turn to the religiousness variables. We do not find any significant effects for the variables on degree of religiousness for any of the groups. Thus, a higher degree of religiousness among immigrants does not appear to have a direct effect on their employment probability. As discussed earlier, we expect religiousness to have indirect effect, because religiousness is correlated with factors such as education, family formation and gender role attitudes. Thus the finding does not imply that religiousness is without importance, but rather that we cannot identify a direct impact on the probability of employment.

As mentioned earlier, the estimation of the control variables is very robust towards the inclusion of the attitude indices. In particular, after including the attitude indices, we find that men from Iran have a lower probability of employment than men from Turkey and Pakistan. This finding suggests that the factors behind this lower employment probability are not correlated with the attitude variables. On the other hand, the finding from the baseline model of the Pakistani women having a lower probability of employment does not hold in the estimation that includes the attitude indices. This finding suggests as expected that the attitudes variables contribute to explaining the lower probability of employment for the Pakistani women in the baseline model.

5.3 Predicted employment probabilities

The results from including attitudes indices in the estimation of the probability of employment clearly indicate that attitudes have some significance in explaining employment rates. To analyse how much the attitude variables matter for the probability of employment relative to the other variables in the model, we calculate the estimated probability of employment in various scenarios (see Table 8). The top line of Table 8 presents the predicted probability of a person with the average sample characteristics for all variables. We then calculate the predicted probability, changing one variable at the time. Table 8 includes only predicted probabilities based on significant coefficients (as a consequence the variables on the degree of religiousness are not included because these variables are insignificant for both immigrants and Danes).

Table 8 around here

For each of the attitude indices, we calculate the predicted employment probability when changing the average value of the attitude index by one standard deviation. For the first index, concerning women's work, there is a little twist to the calculation because of the indicator variable for a missing value of the index. For this index, we calculate the predicted employment probability using the sample average for the index (and setting the indicator variable for a missing index equal to zero): the 'real mean'. This mean is then the baseline for a one-standard deviation change.

The previous section indicates that the attitudes analysed in this study are more important for the employment probability of the women than of the men (more of the attitudes indices are significant for the women, see table 7). Although our indices are naturally limited by the information available in the data, the results in table 8 suggest that the magnitude of the effects of attitudes is sizeable for women of both Danish and immigrant origin.

Table 8 makes clear that the two indices concerned with gender equality have a non-trivial impact on the probability of employment for both the Danish and the immigrant women. Looking at +/- one standard deviation, the predicted variation in the employment probability is 9 %-points for the immigrant women for both indices, while the variation for the Danish women is slightly smaller.

Even though the effect of attitudes towards gender roles on the probability of employment is similar for immigrant and Danish women, the attitudes towards gender roles contribute to explain the immigrant-native employment gap for the women: the immigrant women has on average more traditional views than Danish women and the difference in views contribute to the employment gap. For example, the predicted employment probability for immigrant women would increase with 3 %-points if the value of the index on attitudes towards distribution of housework corresponded to the average value for the Danish women. For the immigrant men we find a variation of about 7 %-points for the index describing the attitude towards housework, likewise a non-trivial effect.

Looking at +/- one standard deviation on the index on the attitude towards transfers, the predicted variation in the employment probability is close to 11 %-points for the Danish women. Thus, as opposed to our expectations the findings indicate that the attitudes towards the receipt of public transfers contribute to reducing the employment gap between Danish women and immigrant women.

The results for the other variables show that two other factors contribute to explain the observed gap between Danish and immigrant women. One factor is children, where the estimated marginal effect for the immigrant women is very large – also after controlling for own attitudes towards gender roles. The difference in the predicted employment probability for immigrant women with and without children is more than 30 %-points. Because the share with children is very large (80%), we find that the predicted employment probability would increase to more than 80% if the immigrant women had no children. If the share of immigrant women with children was the same as for Danish women; their predicted employment probability would increase by 3 %-points. The Danish women are also sensitive to having children but to smaller extent (about 10 %-points). That children have a negative influence on women's employment and no influence on men's employment may be related to gender roles (the women is the primary caregivers for children) despite their own attitudes.

The other main factor behind the low employment among the immigrant women is education, where the variation in the predicted employment probability is very large. For immigrant women with higher Danish education (irrespective of age at migration), the predicted employment probability is above 80%, i.e. very close to the level of the Danish women. On the other hand, immigrant women with lower foreign education, who came to Denmark when they were 7-16 years

old, only have a predicted employment probability of 24%. This finding clearly shows the importance of education for the probability of employment in the Danish labour market.

Education is also important for the immigrant men's employment probability – even though the variation in predicted employment probability is smaller for the immigrant men than for the immigrant women. For immigrant men with a higher Danish education, the predicted employment probability is around 85-90% (i.e. only slightly lower than the level of the Danish men), while immigrant men with lower foreign education, who came to Denmark when they were 17 years old or older, only have a predicted employment probability of 66%. Thus lack of Danish education seems to contribute to explaining the employment gap between Danish and immigrant men, although the immigrant men are less sensitive towards this lack then the immigrant women.

6. Concluding remarks

In many countries, employment rates for immigrants are lower than employment rates for the native population. Furthermore, the immigrant-native gap is typically larger for women than for men. In this paper, we analyse whether cultural factors contribute to explaining this gap in employment rates. The analysis falls into two parts: First, we analyse the distribution of the different cultural factors among a sample of immigrant women and men from Iran, Pakistan and Turkey, and compare it to a sample of Danish women and men. Second, we estimate the probability of employment including the cultural factors.

The cultural factors in the analysis are operationalised by defining three different attitude indices based on several survey questions: (1) attitude towards women's work, (2) attitude towards the distribution of housework and (3) attitude towards the receipt of public transfers. In addition to the three attitude indices, we include a question about degree of religiousness.

As the immigrants in our study come from countries with more traditional gender division of work than in Denmark and as few Danes are religious compared to the population in most other countries our hypotheses are that immigrants are both more traditional than the Danes with respect to gender roles and that immigrants are more religious than the Danes. Both hypotheses are supported in our

analysis. For the attitude towards women's work, the Danish men are the most 'modern' while the immigrant women and men are the least modern. However, the standard deviation in the index values is larger for the immigrants, indicating that not all immigrants share the traditional view. For the attitude towards the distributions of housework, the Danish women have the most modern attitudes while the immigrant women have the most traditional attitudes. Regarding degree of religiousness, the immigrants self-report being more religious than the Danes. Within each group women are more religious than men.

Another hypothesis in our study is that immigrants to a higher extent have developed unemployment cultures than Danes and thereby are less judgemental towards receiving public transfers. This hypothesis is not supported in the data: the group being the least judgemental about receiving public transfers is Danish women, followed by Danish men and immigrant women, while the immigrant men are the most judgemental of all.

When the attitude variables are included in a probit estimation of the probability of employment, we find that gender role attitudes are correlated with employment for both immigrant women and Danish women. Regardless of origin, we find that women with more traditional views on gender roles are less likely to be employed than women with more modern views. The variation in predicted employment probability when changing the index value from minus one standard deviation to plus one standard deviation is around 10 percentages-points for both groups, i.e. a non-trivial effect. Thus, it seems that the immigrant and the Danish women are affected similarly by attitudes towards gender roles – a result opposed to Fortin (2005), who find that the relationship between attitudes and employment is strongest for immigrants (see section 2.1). However, because the immigrant women on average have more traditional attitudes towards gender role than Danish women, the attitudes contribute to the explanation of the gap in employment rates between the two groups of women.

Unemployment culture and degree of religiousness among immigrants do - according to our findings – not contribute to explaining the employment gap between immigrants and Danes. For the impact of the attitude towards receiving public transfers, the Danish women stand out as the only group for whom this attitude has a significant impact. Not only are the Danish women the less judgemental in the attitude itself; but they are also the only group for which being less judgemental

actually implies a lower employment probability. The degree of religiousness has no direct impact on the probability of employment for immigrants or Danes. These findings are interesting because the public debate seems to assume that unemployment cultures and religiousness among immigrants affect their behaviour in the labour market.

Other significant variables in the analysis are education and children. Education – in particular Danish education – has an important influence on the employment probability for both immigrant men and immigrant women. Having children has a negative affect on the women's employment probability – in particular the employment probability of immigrant women.

The analyses in this paper thus underline that it is important to focus on education if we want to increase the employment assimilation of immigrant men and women. Furthermore, the analyses indicate that it is important to find a way to overcome the barriers from gender roles and the family situation for the immigrant women, while the development of unemployment cultures and religion do not seem to be important barriers for the labour market assimilation of immigrants. To get further knowledge about the cultural barriers for immigrants' employment assimilation, further research on the effect of attitudes on employment for both immigrants and natives is relevant, e.g. about the robustness of the findings to different measures of attitudes. In addition, the availability of panel data for attitudes as well as employment would make it possible to estimate causal effects – an important methodologic contribution.

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Table 1. Average employment rates

	Women		Men	
	Mean	Std. Dev	Mean	Std. Dev
Immigrants	57.91	49.41	80.20	39.88
Danes	83.03	37.59	93.90	23.98

Table 2. Means of background variables

	Immigrant women		Immigrant men		Danish women		Danish men	
	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev
Age	34.306	6.853	35.818	6.922	34.099	7.038	33.680	7.089
Family:								
Living in a couple	0.770	0.421	0.744	0.437	0.728	0.445	0.712	0.453
Children	0.797	0.403	0.620	0.486	0.676	0.469	0.544	0.499
Age at immigration:								
0-6 years	0.086	0.281	0.088	0.283	-	-	-	-
7-16 years	0.185	0.389	0.214	0.410	-	-	-	-
17- years	0.718	0.451	0.692	0.462	-	-	-	-
Missing value	0.011	0.103	0.007	0.084	-	-	-	-
Education:								
Lower Danish education	0.268	0.443	0.264	0.441	0.285	0.452	0.337	0.473
Higher Danish education	0.270	0.444	0.324	0.468	0.715	0.452	0.663	0.473
Lower foreign education	0.388	0.488	0.322	0.468	-	-	-	-
Higher foreign education	0.072	0.259	0.088	0.283	-	-	-	-
Missing value	0.002	0.042	0.001	0.038	-	-	-	-
Age at immigration and education:								
Higher Danish education/ 0-6 years	0.041	0.199	0.025	0.158	-	-	-	-
Higher Danish education/ 7-16 years	0.063	0.243	0.074	0.261	-	-	-	-
Higher Danish education/ 17+ years	0.160	0.367	0.223	0.417	-	-	-	-
Lower Danish education/ 0-6 years	0.045	0.207	0.059	0.237	-	-	-	-
Lower Danish education/ 7-16 years	0.083	0.276	0.099	0.299	-	-	-	-
Lower Danish education/ 17+ years	0.135	0.342	0.102	0.303	-	-	-	-
Higher foreign education/ 7-16 years	0	0	0	0	-	-	-	-
Higher foreign education/ 17+ years	0.072	0.259	0.088	0.283	-	-	-	-
Lower foreign education/ 7-16 years	0.040	0.195	0.041	0.198	-	-	-	-
Lower foreign education/ 17+ years	0.349	0.477	0.277	0.448	-	-	-	-
Missing value	0.013	0.112	0.008	0.092	-	-	-	-
Country of origin:								
Pakistan	0.286	0.452	0.257	0.438	-	-	-	-
Iran	0.320	0.467	0.395	0.489	-	-	-	-
Turkey	0.394	0.489	0.348	0.477	-	-	-	-
Number of observations	556		707		383		344	

Table 3. Descriptive statistics for the attitude indices

Index: Women's work	Mean	Std. Dev	Min	Max	# Obs.
Immigrant women	12.937	1.612	6	15	505
Immigrant men	13.040	1.815	5	15	607
Danish women	13.141	1.532	7	15	320
Danish men	13.684	1.361	9	15	291
Missing for immigrant women	0.092	0.289	0	1	556
Missing for immigrant men	0.141	0.349	0	1	707
Missing for Danish women	0.164	0.371	0	1	383
Missing for Danish men	0.154	0.362	0	1	344

Index: Housework	Mean	Std. Dev	Min	Max	# Obs.
Immigrant women	10.371	1.737	4	12	556
Immigrant men	10.508	1.764	4	12	707
Danish women	11.755	0.649	8	12	383
Danish men	11.628	0.812	7	12	344

Index: Transfers	Mean	Std. Dev	Min	Max	# Obs.
Immigrant women	6.103	1.663	3	9	556
Immigrant men	6.304	1.779	3	9	707
Danish women	5.026	1.662	3	9	383
Danish men	5.238	1.735	3	9	344

Table 4. Descriptive statistics for the religiosity-variables

	Immigrant women		Immigrant men		Danish women		Danish men	
Variable	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Not religious	0.153	0.360	0.281	0.450	0.141	0.348	0.302	0.460
Slightly religious	0.218	0.413	0.264	0.441	0.525	0.500	0.477	0.500
Somewhat religious	0.399	0.490	0.315	0.465	0.274	0.447	0.186	0.390
Very religious	0.230	0.421	0.139	0.346	0.060	0.238	0.035	0.184
Average (1-4 scale)	2.707	0.988	2.311	1.028	2.253	0.770	1.953	0.792

Table 5. The correlation between the attitude indices

Immigrant women	Index: Housework	Index: Women's work	Index: Transfers
Index: Women's work	0.131		
Index: Transfers	0.089	0.083	
Religiosity (1-4 scale)	-0.207	-0.094	-0.046
Immigrant men	**Index: Housework**	**Index: Women's work**	**Index: Transfers**
Index: Women's work	0.053		
Index: Transfers	0.075	0.024	
Religiosity (1-4 scale)	-0.190	-0.111	-0.061
Danish women	**Index: Housework**	**Index: Women's work**	**Index: Transfers**
Index: Women's work	-0.007		
Index: Transfers	-0.055	0.132	
Religiosity (1-4 scale)	0.072	-0.094	-0.028
Danish men	**Index: Housework**	**Index: Women's work**	**Index: Transfers**
Index: Women's work	0.055		
Index: Transfers	-0.109	0.116	
Religiosity (1-4 scale)	-0.004	-0.0042	0.0167

Table 6. Baseline estimation of the probability of employment, marginal effects (Probit model)

	Immigrant women	Immigrant men	Danish women	Danish men
Age	0.081**	-0.008	0.014	-0.002
	(0.036)	(0.023)	(0.029)	(0.013)
Age sq/100	-0.111**	0.002	-0.017	0.004
	(0.053)	(0.034)	(0.043)	(0.020)
Living in a couple	0.093	0.147**	-0.006	0.039
	(0.061)	(0.059)	(0.048)	(0.036)
Single	-	-	-	-
Children	-0.309***	-0.020	-0.103**	0.034
	(0.053)	(0.045)	(0.044)	(0.031)
No children	-	-	-	-
Higher Danish education/ 0-6 years	0.321***	0.122**		
	(0.062)	(0.048)		
Higher Danish education/ 7-16 years	0.341***	0.148***		
	(0.050)	(0.028)		
Higher Danish education/ 17+ years	0.366***	0.205***		
	(0.044)	(0.025)		
Lower Danish education/ 0-6 years	0.306***	0.141***		
	(0.064)	(0.034)		
Lower Danish education/ 7-16 years	0.123*	0.077**		
	(0.074)	(0.039)		
Lower Danish education/ 17+ years	0.211***	0.142***		
	(0.056)	(0.027)		
Higher foreign education/ 17+ years	-0.053	0.111***		
	(0.090)	(0.033)		
Lower foreign education/ 7-16 years	-0.213*	0.099**		
	(0.123)	(0.047)		
Missing value	0.002	0.107		
	(0.219)	(0.080)		
Lower foreign education/ 17+ years	-	-		
Higher education			0.065	0.067**
			(0.048)	(0.031)
Lower education			-	-
Pakistan	-0.095*	-0.003		
	(0.056)	(0.040)		
Iran	-0.055	-0.070*		
	(0.062)	(0.043)		
Turkey	-	-		
Observations	556	707	383	344
Pseudo – R^2	0.157	0.102	0.021	0.121

Standard errors in parentheses

* significant at 10pct.; ** significant at 5pct.; *** significant at 1pct.

Table 7. Estimation including the attitude indices and dummy-variables for religiosity, marginal effects (Probit model)

	Immigrant women		Immigrant men		Danish women		Danish men	
Index: Women's' work	0.028	*	0.013		0.025	*	0.001	
	(0.015)		(0.009)		(0.013)		(0.008)	
Missing-Women's' work	0.195		0.149	**	0.202	***	-0.017	
	(0.166)		(0.063)		(0.058)		(0.141)	
Index: Housework	0.025	*	0.019	**	0.067	***	-0.000	
	(0.014)		(0.009)		(0.026)		(0.012)	
Index: Transfers	0.004		0.006		0.031	**	0.004	
	(0.014)		(0.008)		(0.012)		(0.006)	
Slightly religious	-0.135		0.049		0.021		0.031	
	(0.085)		(0.039)		(0.057)		(0.022)	
Somewhat religious	0.039		0.000		-0.035		-0.002	
	(0.083)		(0.044)		(0.066)		(0.026)	
Very religious	0.010		-0.003		-0.110		-0.069	
	(0.092)		(0.054)		(0.113)		(0.094)	
Not religious	-		-		-		-	
Age	0.076	**	-0.010		0.023		-0.002	
	(0.037)		(0.023)		(0.029)		(0.012)	
Age sq/100	-0.103	*	0.004		-0.026		0.005	
	(0.054)		(0.034)		(0.043)		(0.018)	
Living in a couple	0.085		0.147	**	-0.010		0.033	
	(0.062)		(0.059)		(0.047)		(0.032)	
Singles	-		-		-		-	
Children	-0.304	***	-0.019		-0.100	**	0.030	
	(0.054)		(0.045)		(0.044)		(0.029)	
No children	-		-		-		-	
Higher Danish education/ 0-6 years	0.301	***	0.112	**				
	(0.071)		(0.052)					
Higher Danish education/ 7-16 years	0.328	***	0.134	***				
	(0.056)		(0.032)					
Higher Danish education/ 17+ years	0.354	***	0.192	***				
	(0.047)		(0.027)					
Lower Danish education/ 0-6 years	0.287	***	0.137	***				
	(0.071)		(0.035)					
Lower Danish education/ 7-16 years	0.091		0.070	*				
	(0.080)		(0.040)					
Lower Danish education/ 17+ years	0.188	***	0.136	***				
	(0.059)		(0.028)					
Higher foreign education/ 17+ years	-0.053		0.109	***				
	(0.091)		(0.034)					
Lower foreign education/ 7-16 years	-0.224	*	0.105	**				
	(0.124)		(0.044)					
Missing value	-0.002		0.119	*				
	(0.221)		(0.072)					
Lower foreign education/ 17+ years	-		-					
Higher education					0.043		0.064	**
					(0.047)		(0.029)	
Lower education					-		-	
Pakistan	-0.092		-0.001					
	(0.059)		(0.041)					
Iran	-0.056		-0.084	*				
	(0.070)		(0.045)					
Turkey	-		-					
Observations	556		707		383		344	
Pseudo – R^2	0.182		0.119		0.077		0.160	

Standard errors in parentheses
* significant at 10pct.; ** significant at 5pct.; *** significant at 1pct.

Table 8. Predicted probabilities of employment

	Immigrant women	Immigrant men	Danish women	Danish men
Average person	*0.601*	*0.826*	*0.850*	*0.965*
Women's work				
Real mean	0.633	-	0.896	-
+ 1 std dev	0.677	-	0.922	-
- 1 std dev	0.588	-	0.865	-
Housework				
+ 1 std dev	0.644	0.857	0.889	-
- 1 std dev	0.558	0.790	0.810	-
Transfers				
+ 1 std dev	-	-	0.896	-
- 1 std dev	-	-	0.789	-
Age				
25 years	0.515	-	-	-
35 years	0.651	-	-	-
45 years	0.582	-	-	-
Couple				
No	-	0.711	-	-
Yes	-	0.857	-	-
Children				
No	0.838	-	0.912	-
Yes	0.528	-	0.812	-
Education/Age at immigration				
Higher Danish education/ 0-6 years	0.801	0.846		
Higher Danish education/ 7-16 years	0.833	0.878		
Higher Danish education/ 17+ years	0.838	0.923		
Lower Danish education/ 0-6 years	0.781	0.890		
Lower Danish education/ 7-16 years	-	0.772		
Lower Danish education/ 17+ years	0.651	0.875		
Higher foreign education/ 17+ years	-	0.832		
Lower foreign education/ 7-16 years	0.241	0.829		
Lower foreign education/ 17+ years	*0.450*	*0.662*		
Higher education				0.979
Lower education				0.915
Country				
Turkey	-	*0.858*		
Pakistan	-	-		
Iran	-	0.771		

Appendix

Table A1: Correlation between indices and variables

Index: Women's work	Danish men	Danish women	Immigrant men	Immigrant women
How much do you think a woman without children should work?	0.770	0.762	0.619	0.618
How much do you think a woman with a child aged 1-2 years old should work?	0.788	0.781	0.768	0.589
How much do you think a woman with a child aged 3-5 years old should work?	0.799	0.782	0.756	0.645
How much do you think a woman with a child going to school should work?	0.739	0.780	0.718	0.605
How much do you think a woman whose children have left home should work?	0.731	0.739	0.750	0.785
Index: Housework	Danish men	Danish women	Immigrant men	Immigrant women
Fathers are just as good as mothers to take care of their children	0.589	0.699	0.577	0.629
Should the mother or the father be responsible for cooking?	0.434	0.360	0.712	0.614
Should the mother or the father be responsible for cleaning and laundry?	0.579	0.576	0.705	0.629
Should the mother or the father be responsible for caring for the children?	0.479	0.350	0.657	0.593
Index: Transfers	Danish men	Danish women	Immigrant men	Immigrant women
An unemployed person should be willing to move to obtain a permanent job	0.671	0.591	0.598	0.511
An unemployed person should be willing to accept a job with a lower income than the unemployment benefits	0.636	0.561	0.518	0.472
It is unworthy to receive cash benefits	0.523	0.534	0.532	0.466

Table A2: Attitude indices: distribution of values (percentages)

Index: Women's work	5	6	7	8	9	10	11	12	13	14	15	Total	Total
Danish men	0.0	0.0	0.0	0.0	0.3	2.4	4.8	10.0	25.1	18.2	39.2	100.0	291
Danish women	0.0	0.0	0.3	0.0	1.3	3.1	9.1	20.6	21.9	18.4	25.3	100.0	320
Immigrant men	0.7	0.5	0.3	0.8	1.8	4.8	6.3	16.3	23.2	21.4	23.9	100.0	607
Immigrant women	0.0	0.2	0.6	0.8	1.4	4.0	9.3	18.4	27.5	18.6	19.2	100.0	505
Total	0.2	0.2	0.3	0.5	1.3	3.8	7.4	16.7	24.6	19.5	25.4	100.0	1,723

Index: Housework	4	5	6	7	8	9	10	11	12	Total	Total
Danish men	0.0	0.0	0.0	0.3	0.9	1.5	8.7	10.5	78.2	100.0	344
Danish women	0.0	0.0	0.0	0.0	0.3	1.6	5.5	7.8	84.9	100.0	383
Immigrant men	1.3	0.7	1.7	3.8	4.5	9.6	21.9	14.0	42.4	100.0	707
Immigrant women	0.7	0.4	2.2	4.7	7.0	9.4	24.8	12.6	38.3	100.0	556
Total	0.7	0.4	1.2	2.7	3.8	6.6	17.3	11.8	55.6	100.0	1,990

Index: Transfers	3	4	5	6	7	8	9	Total	Total
Danish men	23.0	10.5	28.2	10.8	18.9	3.2	5.5	100.0	344
Danish women	25.6	11.7	30.0	10.7	15.1	2.6	4.2	100.0	383
Immigrant men	8.1	7.4	21.1	13.6	24.9	9.6	15.4	100.0	707
Immigrant women	7.2	8.6	24.5	15.8	24.5	9.2	10.3	100.0	556
Total	13.8	9.1	25.0	13.2	21.9	7.0	10.1	100.0	1,990