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IS THERE A DOUBLE-NEGATIVE EFFECT? GENDER AND ETHNIC WAGE DIFFERENTIALS

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Is there a Double-Negative Effect? Gender and Ethnic Wage Differentials

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Abstract

This paper investigates the gender and ethnic wage differentials for female immigrants, applying the Oaxaca decomposition to estimate the level of discrimination. The gender pay gap is quite small (7.42%), but it's not explained by observable differences, whilst the ethnic wage gap is larger (27.11%), but the explained components account for about 30%. Ultimately, we will evaluate how the multiple levels of discrimination (due to being a woman and a foreigner at the same time) intersect, following the decomposition suggested by Shamsuddin (1998). The double-negative effect is estimated to be 56-62%.

Key words: Immigration, gender, wage discrimination, Oaxaca decomposition, double-negative effect

JEL classification J16 J31 J61 J71

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1. Introduction

For years women have been invisible agents in the migration process, but from the early nineties, the “feminization of migration” has been considered one of the main trends, as pointed out by Castles and Miller (2003). This concept underlines the role held by women, that in 2010 make up 49% of 214 million international migrants (UNDESA, 2011), and that exceeds half of the migrants towards the most developed regions.

Even if women have been a significant part of all international migrants for a long time (about 47% in 1960, according to Zlotnik, 2003), in mainstream research they were almost invisible. The so-called “feminization of migration” is due on the one hand to scholars that have succeeded in bringing female migration out of the shadows in many disciplines (Morokvasic, 1984). On the other hand, that concept refers above all to the growth of independent female migration for work purposes, alongside of migrant women entering as the wife or dependent of men who sponsor their admission (Piper, 2005). Today there is also recognition for the mutual influence of migration and gender, seen as a matrix of identities, behaviours and power relationships (Boyd and Grieco, 2003).

This research aims to analyze the effects of gender for migrants' labour market integration, through the study of immigrant women's wages in Italy. This is a domain not much discussed in Italy, and in particular in economics, primarily because of the scarcity of available data. We will analyse the wage determinants for immigrant men and women and for Italian women, in order to identify the causes of wage differentials and to estimate the hypothetical ethnic- and gender-based discrimination against foreign women, using the Oaxaca decomposition. It will be finally evaluated the existence of multiple-discrimination, using the estimation of the double-negative effect as suggested by Shamsuddin (1998).

The rest of the paper is organised as follows: section 2 summarizes the participation of women in migration flow, especially in Italy; in section 3, the relevant economic literature is discussed. The methodology is presented in section 4, whilst section 5 describes the relevant features of the dataset and variables and provides descriptive statistics. The results are presented in section 6. Finally, section 7 concludes.

2. Women's migration to Italy

The decision to migrate is driven by economic, sociological and demographic factors, and they have different effects depending on the gender of the migrant. The growth of the labour market participation of women in developed countries and the gendered-based division of reproductive work¹ cause, especially in Southern Europe, an increasing demand for domestic and care labour, which attracts migrant women (Bettio *et al.*, 2006).

The gender composition of migration flows to Italy is determined by the intersection of demand-driven factors and the social legitimacy for women's international migration in their countries of origin. In 2011, 51.8% of foreign residents were women (ISTAT, 2011), slightly more than in previous years.

In the 1970s and 1980s, when Italy was no longer an exporter of labour but became an importer, the first women came to Italy from Cape Verde, Eritrea, the Philippines, followed by women from Latin America. During this period, Catholic missions played an important role through ties with bourgeois families, where female migrants were employed as domestic workers (Bettio *et al.*, 2006). The increasing demand for domestic work even in lower-income households stimulated female migration, and the establishment of migration networks ensured that newcomers would have easier access to the job market (Decimo, 2005). The collapse of Central and Eastern European regimes in the 1990s produced a significant growth of the female migration flow from those countries, which constituted 53.7% of the total female migration at the end of 2005 (IRES, 2009).

3. Labour market performance of female migrants: theoretical and empirical references

Immigrants are generally confined to low-qualification and low-paid jobs in Italy (Fullin and Reyneri, 2011) and they often have lower wages than natives (Husted *et al.*, 2000). The same is experienced by women (Flabbi, 2001), so one might have expected that female migrants face even more difficulties. The frameworks for interpreting this phenomenon are the economic theories of assimilation, discrimination and segregation.

¹ "Service occupations filled by migrant women tend to fall in the domain of sex-affective services, care-taking and social maintenance of labour, commonly referred to as reproductive labour" (Truong, 2000, p.67).

The assimilation literature, first introduced by Chiswick (1978), emphasizes that immigrants initially earn less than natives, but their wages rise more rapidly, letting them reach, or even outdo, the level of natives' wages. The initial gap is due to the lack of host country-specific skills, which migrants gradually acquire. Following models and empirical research highlighted that migrants almost never completely assimilate (Borjas, 1989; Borjas, 2009, Venturini and Villosio, 2008), and Field-Hendrey and Balkan (1991) estimated a similar pattern for migrant women.

On the other hand, the discrimination literature highlights differences in earnings or occupational opportunities due only to personal characteristics such as race, sex and origins (Borjas, 2009). The first theories on the economic causes of wage discrimination are suggested by Becker (1957) and Phelps (1972).

Another possible explanation for the pay gaps of disadvantaged groups is through segregation to less qualified and lower paid jobs (Cotter *et al.*, 2003). Employment segregation could be due to several causes, such as lower human capital, the choices made by workers, discrimination, or a dual labour market.²

Recently, scholars are stressing that discrimination in the labour market is based not only on the dichotomy between two sets of social groups, but also on several social attributes, which shape the multiple-identity of the individual (Ruwanpura, 2008). Consequently, we can speak of multiple-discrimination to refer to the cumulative negative effects of diverse social positions, such as race and gender for immigrant women (Brewer *et al.*, 2002).

Immigrant wage differentials are well-described by several researchers for the US and Europe (Borjas, 2009). In the Italian case, Venturini and Villosio (2000) estimated the wage gap to be about 13%. Immigrants also suffer discriminations at the entrance to the labour market (Allasino *et al.*, 2004) and occupational segregation in low-paid jobs (Fullin and Reyneri, 2011).

In the same way, immigrant women experience a wage differential with respect to native women (Dustmann and Schmidt, 2000). Adsera and Chiswick (2007) estimate that in Europe the ethnic wage gap is 40% for men and 36% for women. Besides this, female immigrants suffer a gender pay gap compared to their male peers: in Italy they earn 39.7% less than immigrant male workers (Caritas/Migrantes, 2009). This could be

² For a comprehensive review of segregation theories, see Cotter *et al.*, 2003 and Blau and Jusenius, 1976.

partially due to the fact that immigrant women seem to be even more segregated than men (Cotter *et al.*, 2003; Fullin and Reyneri, 2011), as they are mainly employed as domestic or care workers, at the lowest rank in the earnings ladder.

4. Methodology

The present study aims to measure the size of discrimination against immigrant women in Italy. For the empirical investigation, we will compare the female immigrants' wage with those of male immigrants and with the wages of Italian women by analysing individual and market characteristics. For both comparisons, we will estimate through the Oaxaca decomposition (1973) the components of each gap explained by individual features, as well as the unexplained components, which can be considered "discrimination". It's necessary to note that we refer to the unexplained component as discrimination, even if it may overstate discrimination if there are important omitted variables, such as ability or education quality (Oaxaca, 1973; Nielsen *et al.*, 2004), or understate it if discrimination itself affects some explanatory variables (Flabbi, 2001).

Finally, the decomposition suggested by Shamsuddin (1998) will be applied to measure the double-negative effect of being foreign-born and female at the same time.

First of all, we estimate the unadjusted wage gaps between the fourth groups (Italian men, Italian women, foreign-born men, foreign-born women), as follows:

$$\Delta\bar{W} = \frac{\bar{W}_h - \bar{W}_l}{\bar{W}_h} \quad (1)$$

where $\Delta\bar{W}$ is the wage gap, \bar{W}_h the average wage of the group with the highest wage and \bar{W}_l the average wage of the other group.

Afterwards we estimate an earnings function, on the basis of human capital theories, for foreign-born male and female, including *sex* as a dummy variable:

$$\ln(W_i) = \alpha + \beta_s \text{sex}_i + \beta_x X_i + \nu_i \quad (2)$$

This function links the log hourly wage $\ln(W_i)$ with observable individuals and market characteristics (X_i) and it allows a first measure of the effect of being a woman on the level of wages, through the coefficient associated to the variable *sex*.

Independent variables included as continuous variables are years of education, work experience, squared experience, partner's hourly wage, and the following discrete variables, as dummies: region of residence, age, marital status, sector of employment,

main area of origin, legal status, and tertiary education attended whilst resident in Italy. We regress using two kinds of function, with and without individual's occupation. The results of this regression allow us to estimate the linear increment of wages as other independent variables change.

Thereafter we elaborate two distinct earnings functions for foreign-born men (equation 3) and women (equation 4). Thus, it's possible to isolate the different effect of each variable for men and women.

$$\ln(W_{m_i}) = \alpha_{m_i} + \beta_{m_i} X_{m_i} + \nu_{m_i} \quad (3)$$

$$\ln(W_{w_i}) = \alpha_{w_i} + \beta_{w_i} X_{w_i} + \nu_{w_i} \quad (4)$$

where m indicates men and w indicates women.

The average pay gap can be written as:

$$\Delta \bar{W} = \frac{\bar{W}_m - \bar{W}_w}{\bar{W}_m} = \ln(\bar{W}_m) - \ln(\bar{W}_w) = \alpha_m + \hat{\beta}_m \bar{X}_m - \alpha_w - \hat{\beta}_w \bar{X}_w \quad (5)$$

Equation 5, through some algebra, can be written as (see Oaxaca, 1973):

$$\Delta \bar{W} = \ln(\bar{W}_m) - \ln(\bar{W}_w) = \underbrace{(\bar{X}_m - \bar{X}_w) \hat{\beta}_m}_{\text{Estimated effects of differences in qualifications}} + \underbrace{(\alpha_m - \alpha_w) + (\hat{\beta}_m - \hat{\beta}_w) \bar{X}_w}_{\text{Estimated effect of different returns ("discrimination")}} \quad (6)$$

This equation represents the decomposition of the wage differentials into the estimated effects of differences in qualifications (or endowments), weighted by the coefficient of the reference group (explained difference), and the estimated effects of differences in coefficient (or return) across gender. The second term of the r.h.s is usually called "discrimination": it represents the part of the earning gap not explained by different individual characteristics, and it can account for unobserved variables but also for discrimination itself.

The use of dummy variables for big categories can have a negative effect on the explained component, leading to an overestimation of the unexplained gap, and hide differences within groups. This has been called *composition effect*, and was well described by Bonjour and Pacelli (1998).

We used men as reference groups, considering that in the absence of gender discrimination, immigrant women would earn as much as men.

The same methodology previously described for comparing foreign women and men will be used in comparing Italian and foreign women (estimating the average pay gap earnings function with a dummy for being foreign, using Oaxaca decomposition). The relevant variable in the earnings function will be *foreign* (1 if foreign people, 0 if Italian). Moreover, some characteristics peculiar to migrants have been removed, because it was not possible to compare them. On the other hand, we add the number of children of different ages (0-5; 6-10; 11-14), the use of Italian in the workplace, in the family and with friends (not included in the Oaxaca decomposition because there is no coefficient for Italian women). Equation 7 describes the Oaxaca decomposition in comparing women:

$$\Delta \bar{W} = \ln(\bar{W}_I) - \ln(\bar{W}_F) = (\bar{X}_I - \bar{X}_F) \hat{\beta}_I + (\alpha_I - \alpha_F) + (\hat{\beta}_I - \hat{\beta}_F) \bar{X}_F \quad (7)$$

where *I* and *F* are respectively Italians and foreign people.

In order to estimate the double-negative effect on wages of immigrant women we apply the methodology suggested by Shamsuddin (1998), which extends Oaxaca decomposition.

We decompose the difference between average log wage of Italian men and immigrant women, as follows:

$$\Delta \bar{W} = \ln \bar{W}_m^I - \ln \bar{W}_w^F = \underbrace{(\ln \bar{W}_m^I - \ln \bar{W}_m^F)}_{\text{Ethnic differential}} + \underbrace{(\ln \bar{W}_m^F - \ln \bar{W}_w^F)}_{\text{Gender differential}} \quad (8)$$

where *I* indicates Italians, *F* foreign people, *m* men and *w* women.

The overall wage differential between Italian men and foreign women is decomposed in ethnic pay gap (between Italian and foreign men) and gender pay gap (between foreign men and women).

Following Oaxaca decomposition, equation 8 can be further decomposed:

$$\begin{aligned} \Delta \bar{W} &= \ln \bar{W}_m^I - \ln \bar{W}_w^F = (\ln \bar{W}_m^I - \ln \bar{W}_m^F) + (\ln \bar{W}_m^F - \ln \bar{W}_w^F) = \\ &= \underbrace{[(\alpha_m^I - \alpha_m^F) + (\hat{\beta}_m^I - \hat{\beta}_m^F) \bar{X}_m^F]}_{\text{Unexplained ethnic differential (b)}} + \underbrace{(\bar{X}_m^I - \bar{X}_m^F) \hat{\beta}_m^I}_{\text{Explained ethnic differential (a)}} + \underbrace{[(\alpha_m^F - \alpha_w^F) + (\hat{\beta}_m^F - \hat{\beta}_w^F) \bar{X}_w^F]}_{\text{Unexplained gender differential (d)}} + \underbrace{(\bar{X}_m^F - \bar{X}_w^F) \hat{\beta}_m^F}_{\text{Explained gender differential (c)}} \end{aligned} \quad (9)$$

Hence, the decomposition suggested by Shamsuddin (1998) allows for the identification of four different components of the overall differential:

- (a) explained ethnic differential, due to differences in native-immigrants endowments, $(\bar{X}_m^I - \bar{X}_m^F)\hat{\beta}_m^I$;
- (b) unexplained ethnic differential, due to differences in native-immigrants returns (ethnic discrimination within males), $(\alpha_m^I - \alpha_m^F) + (\hat{\beta}_m^I - \hat{\beta}_m^F)\bar{X}_m^F$;
- (c) explained gender differential, due to differences in male-female endowments within immigrants, $(\bar{X}_m^F - \bar{X}_w^F)\hat{\beta}_m^F$;
- (d) unexplained gender differential, due to differences in male-female returns between immigrants, (gender discrimination between immigrants), $(\alpha_m^F - \alpha_w^F) + (\hat{\beta}_m^F - \hat{\beta}_w^F)\bar{X}_w^F$.

The double-negative effect is given by the two “discrimination” components, that is the sum of (b) and (d).

Alternatively, the overall wage gap can be decomposed in gender pay gap (between Italian men and women) and ethnic pay gap (between Italian and foreign women):

$$\begin{aligned}
 \Delta \bar{W} &= \ln \bar{W}_m^I - \ln \bar{W}_w^F = (\ln \bar{W}_m^I - \ln \bar{W}_w^I) + (\ln \bar{W}_w^I - \ln \bar{W}_w^F) = \\
 &= \underbrace{[(\alpha_m^I - \alpha_w^I) + (\hat{\beta}_m^I - \hat{\beta}_w^I)\bar{X}_w^I]}_{\text{Unexplained gender differential (b)}} + \underbrace{(\bar{X}_m^I - \bar{X}_w^I)\hat{\beta}_m^I}_{\text{Explained gender differential (a)}} + \underbrace{[(\alpha_w^I - \alpha_w^F) + (\hat{\beta}_w^I - \hat{\beta}_w^F)\bar{X}_w^F]}_{\text{Unexplained ethnic differential (d)}} + \underbrace{(\bar{X}_w^I - \bar{X}_w^F)\hat{\beta}_w^F}_{\text{Explained ethnic differential (c)}}
 \end{aligned}
 \tag{10}$$

The double-negative effect is once again the sum of the unexplained components (b) and (d). The estimated double disadvantage is in the range between the two measured values.

Besides allowing an estimation of the double-negative effect, the Shamsuddin decomposition enables us to estimate if the gap is due more to a gender or ethnic discrimination.

In this case, we will use the same earnings function for the four groups, excluding those variables peculiar to foreign people and including the number of children. As a consequence, the gender decomposition between immigrants may be slightly different with respect to the Oaxaca decomposition.

5. The data

The scarcity of data on regular work undertaken by immigrant women has been one of the causes for the lack of economic research on their labour market position (Zorlu, 2003). In Italy there are now datasets available with enough observations on immigrants thanks to the increasing number of male and female immigrants in recent years. Today, foreign people are 7.5% of the Italian population (ISTAT, 2011).

For the empirical analysis, we use the Labour Force Survey conducted by ISTAT in the second quarter of 2008 (later referred to as LFS), which has 169,775 observations (about 70,000 households). Among the available datasets, the LFS seems to be the richest in order to analyse female migrants in the Italian labour market (Fullin and Reyneri, 2011). Other datasets are sectorial or partial surveys (as those produced by research institutes ISMU and IRES), or incomplete for our purposes (the Inps dataset has no data on domestic work, the most relevant sector of employment for female immigrants). Moreover, since 2007, the Labour Force Survey has had a question on net wage. We decided to use the LFS of 2008 (2nd quarter) because it also includes some specific questions for foreign people, allowing for a deeper analysis. It is important to bear in mind that these data refer to a period before the ongoing downturn³ erupted in autumn 2008, a downturn which would get considerably worse in Italy over the following years.

On the other hand, LFS has some disadvantages. First of all, the sample is based on population registers, underestimating the number of non-nationals: in fact not only irregular immigrants, but also seasonal immigrants, and about 10% of regular immigrants are not recorded in the population registers (Fullin and Reyneri, 2011). Secondly the survey concerns regular work, but about 50% of domestic jobs are irregular (IRES, 2009). Last but not least, the survey is based on resident “households”, and thus doesn't sample live-in workers, since they are not considered part of the household⁴. This has consequences on the sampling of immigrant women, if we consider that about 40%-50% of care givers live together with the person with whom they care for (IRES, 2009; Strozza *et al.* 2003).

³ For the impact of the economic downturn on immigrants' labour market outcomes in Italy, by gender, see Paggiaro (2013).

⁴ For more details on sampling methodology, questionnaires and classifications see on-line: <http://www.istat.it/it/archivio/3901> (Italian only).

The sample used for the empirical analysis is a sub-sample of the overall observations. It is composed by working age population (15-64 years old), excluding those individuals with missing data on variables used in the regressions (e.g. family id., monthly wage, hours worked). We also exclude people born abroad but descended from Italian emigrants, because they probably experience different labour outcomes with respect to both Italian citizens and foreign people (see Venturini and Villosio, 2008). We defined *foreigners* people being born abroad, but also people born in Italy with a foreign citizenship; whilst people born in Italy with Italian citizenship are defined as *Italians*.

Moreover, since in the LFS wages above 3,000€ are registered equal to 3,000€ and wages below 250€ are registered equal to 250€, we exclude from our sub-sample all people with wages equal to 3,000€ and equal to 250€. As individuals are not equally distributed in this wage range (above 3,000€ or below 250€), it is likely that the results on pay gaps are biased downwards, especially when comparing Italian women and men. When we compare female and male immigrants, this is not a big issue, since almost none of them have a high salary (though some of them, especially women, earn less than 250€). Similarly, this is not a big issue when comparing Italian and foreign women, because also Italian women earning a high wage are few, as it is often denounced (see Bonjour and Pacelli, 1998). However, it can reduce the gap between Italian men and Italian women, and Italian men and foreign women, used in the estimation of the double-negative effect.

Before continuing, it is worthwhile to have a glance at the indicators of labour market participation (Table 1).

-- Table 1 about here --

Note that female and male immigrants have a higher activity rate and employment rate than their Italian counterparts, but also a higher unemployment rate, especially among women, who are more at risk of unemployment, regardless of their level of education (see also Tastsoglou and Preston, 2005).

To summarise, the sub-sample is composed of the working-age population (15-64 years old), including both Italians and foreigners (excluded descendants of Italian emigrants), with a wage within 250€ and 3,000€ (excluded). With respect to the ISTAT sample of 169,775 individuals, individuals included in the sub-sample are 34,579, of which 32,683 are Italians (94.52%) and 1,896 immigrants (5.48%). Among Italians, 17,778 are men

(54.40%) and 14,905 are women (45.60%), while among foreigners, 1,008 are men (53.16%) and 888 are women (46.84%).

5.1. Variables

The variable of interest is *wage* (hourly), which has been constructed using the monthly wage from the LFS, divided by hours worked per month (weekly hours of work multiplied by 4.3). The log wage is the dependent variable in the model.

The independent variables used in the regression are: foreigners (0 if Italians, 1 if foreigners) or gender (0 if men, 1 if women), depending on whether we're comparing Italian and foreign women, or male and female immigrants; some variables including personal characteristics (age, years of education, work experience, children, partner's wage, marital status, region of residence), work characteristics (sector of employment, type of occupation). For each regression we used two specifications, one without occupations as a control variable, the other with it, in order to see if and how occupational segregation may affect wage gaps.

We included in the regression the use of a foreign language instead of Italian at work, within the family or with friends as a proxy for the level of knowledge of Italian, which can reduce wages if it's low (Foroutan, 2008). However, as explained in the methodological section, it was not possible to include this variable in the Oaxaca decomposition.

Only in the comparison of foreign men and women can we also include some specific control variables: tertiary education in Italy; legal status (Italian citizenship, European citizenship, permit to stay for long period; permit of stay; visa, none); origin (most developed countries, Western Balkans, Central and Eastern Europe, Asia, the Philippines, Northern Africa, Southern Africa, Latin America; grouping done according to ISTAT, 2007), chiefly on the basis of the country of birth and, when this is missing, on citizenship. Some articles do separate analysis for each group of origin (see Husted *et al.*, 2000; Zorlu, 2003), but in our case the sample is too small, and we simply include dummy variables for the macro-area of origin.

5.2 Descriptive statistics

Table 2 presents descriptive statistics for continuous variables in each group, for foreigners and for women. Table 3 summarizes statistics for categorical variables.

It seems strange that the hourly wage of Italian women is higher than for their male counterparts, in contrast with research that highlights the wage gap between Italian men and women (Flabbi, 2001; Centra and Venuleo, 2007). However, this is very likely a consequence of wages clumping to the central range (excluding those above 3,000€, where the gap between men and women enlarges) and to the underestimation of hours worked in teaching.

-- Table 2 about here--

Table 3 shows the descriptive statistics for discrete variables.

It is interesting to note the high numbers of foreign women who are neither married nor cohabiting (42.79%), of whom many are divorced or widowed. In fact, as pointed out in several reports, the probability of migration for women is much higher after the end of a relationship (Morokvasic, 1984; Zlotnik, 2000).

It is also worthwhile to note the strong concentration of immigrants in low-qualification and poorly paid sectors. In particular, women are mainly employed as unqualified workers in domestic jobs, healthcare and social and personal services (which includes care givers). The Italian labour market, in fact, demands mainly unqualified workers and marginalizes immigrants in jobs with low possibility of careers (Venturini and Villosio, 2008), which limits their earnings.

-- Table 3 about here--

6. Results

First of all we report the unadjusted wage gap, monthly, hourly and logarithmic between the four groups (Tables 4 and 5). In Table 4 (put 100 the wage of Italian men) we can see wages of each group with respect to Italian men: foreign women, with the lowest wage, earn 62.24% of the monthly wage of Italian men and 74.76% of the hourly wage. It is meaningful to remember that there is a difference in the supply of labour. The observed differentials concern only those who have a salary, hence there exists a selection issue (Flabbi, 2001).

-- Table 4 about here --

Table 5 shows wage gaps as a percentage difference between the group with the highest wage and that with the lowest one, computed according to equation 1, in the “methodology” section. Concerning the log, we report average differences. The data are the same as the data just presented, but instead of being compared to the wages of Italian men, they are computed between the groups. On a monthly basis, foreign women earn 25% less than foreign men, 24% less than Italian women, and more than 37% less than Italian men.

-- Table 5 about here --

The hourly gender wage gap is smaller than the monthly one, since women work in general fewer hours than men (Centra and Venuleo, 2007). On the contrary, the ethnic wage gap increases if we look at the hourly specification, because foreign people earn less than an Italian even if they work more hours.

According to our data, the ethnic wage gap between women is larger than between men, and the gender wage gap is larger between foreign people than between Italians. These results seem the opposite from the usual results, which highlight a larger ethnic wage gap for male and larger gender differences in wages between native people (see Brewer *et al.*, 2002; confirmed by empirical analysis in Shamsuddin, 1998, and Adsera and Chiswick, 2007). Our different findings may be a consequence of an underestimation of the Italian male average wage, due to the exclusion of wages higher than 3,000€. This element, in fact, reduces the gender differential for Italians and the ethnic differentials for men. Moreover, it is likely that the occupational segregation of foreign women increases their wage gap with respect to other groups (see Bayard *et al.*, 1998).

In our analysis we will use the log of hourly wages to calculate the gender wage gap between foreign people and the ethnic wage gap between women; to measure the double disadvantage we will use the differential between foreign women and Italian men. It can be noticed that the hourly wage difference between foreigners is relatively small (7.4%), while between Italian and foreign women it is much larger (27.11%). Now we can investigate how much of the differential can be explained.

6.1 Foreign people: gender wage gap and discrimination

Foreign people accounted for 1,885 individuals, of which 1,003 were men and 882 were women. Descriptive statistics change with respect of the group of 1,896 foreign people by a few hundredths, so we can refer to the reported descriptive statistics. The monthly

wage gap between foreign men and women is 26.08%, the hourly wage gap 7.42%, with minimum differences with what the gap is as reported above. The analysis is conducted on 1,885 people and not 1,896 because 11 people had the legal status missing, and this is one of our control variables.

Foreign women are older and more educated than men, but they have less work experience, with a lower probability of having obtained a degree of tertiary education in Italy, and they are also less concentrated in Northern Italy.

Starting from the unadjusted wage gap, the first improvement in order to understand the effect of being a woman is to estimate the earning function and see the effect of being a woman on hourly wages, *ceteris paribus*. Results are shown in Table 6.

The first specification (see column (a)), without the type of occupation as a control variable, shows that being a woman reduces wage by 10.68%, which is statistically different from 0 at 1%. All other variables have the expected effect on wages (positive or negative) and almost all of them are significant at 5% (many also at 1%).

Note that years of education and work experience increase salary only by 0.7% and 0.6% respectively, a very small rise. A lot of research has shown the low return of education for migrants (Dustmann and Schmidt, 2000; Husted *et al.*, 2000; Nielsen *et al.*, 2004), whilst having obtained a degree of tertiary education in Italy increases the salary by 25.3%. This is a consequence of the rare recognition of foreign qualifications, due to economic and bureaucratic difficulties and to the fact that employers do not have enough information on education abroad. On the other hand, migrants informally acquire country-specific skills studying in Italy (Chiswick, 1978).

Between foreign people, Eastern Europeans earn the lowest salary (-26%) compared with people from the most developed countries (whose wages are much closer to those of Italians, see Fullin and Reyneri, 2011).

When we consider the second specification, which includes type of occupation (see column (d)), being a woman reduces the wage by 9.48%, slightly less than in the first specification. The fact that the dummy *sex* has a lower impact now shows that the wage gap between men and women is partially due to the higher percentage of foreign women employed in low-paid sectors (more than 40% of them in elementary occupations), even between foreign people (Blau and Jusenius, 1976; Cotter *et al.*, 2003). In this case, however, the difference is very low. It would be useful to deepen the analysis to understand if the segregation is justified by different observable characteristics or not. For example, in Anderson and Shapiro (1996) compared white and black women and

found that the latter were discriminated against in access to high-paid jobs. When comparing foreign men and women, it is also relevant that jobs undertaken by migrant women are stereotypically female jobs, mainly what is defined as reproductive work, socially undervalued and less paid even with respect to typically male unqualified occupations (Cheng, 2000).

We can now compare wage determinants between female and male migrants. Firstly, we can notice that more variables are statistically significant for men than for women. In the first specification, education has a stronger impact on wages for women than for men, which is also confirmed by the higher effect of having obtained a university degree in Italy for women. On the other hand, experience - which however is not statistically significant - and age have a stronger effect for men. The fact that the impact of age on women's wages is not statistically different from zero, with the only exception being the 25-34 age bracket, could be a signal for the large difficulties in career advancement in the occupations undertaken by female immigrants (Strozza *et al.*, 2003).

-- Table 6 about here --

Peculiar immigrant characteristics, like region of origin and legal status, have a strong impact on their wage. Migrants from the Western Balkans (mainly from Albania) are less disadvantaged with respect to people coming from the most developed countries, a result which can incorporate the years passed since migration and a consolidated network. Between men, the most disadvantaged are Filipinos and Latin Americans, a result in accordance with Adsera and Chiswick (2007). This can be explained by the prevalence of female networks from those countries, which gives little information for integration in male-dominated sectors. Between women, the most disadvantaged are migrants from Central and Eastern Europe, which could be surprising since they are relatively more educated. However, since female migration from Central and Eastern Europe is for primarily for work purposes, the reserve wage can be lower.

Moreover, most of them have a temporary migration project, leading them to accept harsher work conditions in order to earn quicker, but at a lower hourly salary. This can be seen in the fact that they work mainly in the domestic and care sectors, which are less well-paid (IRES, 2009).

When we look at the second specification, we can notice that a lot of variables have a smaller effect, or lose their significance. Including occupations as a regressor, in fact, may reduce the impact of human capital variables (see Zorlu, 2003). Women in a professional or technical role have their wages increased slightly more than men, but all

other occupations don't have an impact statistically different from working in elementary occupations, a result which is impressive.

On the basis of these regressions, we can now look at the Oaxaca decomposition, reported in Table 7.

-- Table 7 about here --

In the first specification more than 100% results to be unexplained wage gap: even if the gender wage gap is quite small, 113.61% of it can be ascribed to non-observed characteristics. As we anticipated in the methodological session, it can be attributed to relevant omitted variables (such as education, or preferences, etc. - see Husted *et al.*, 2000) influencing other coefficients, or to real “discrimination” (Oaxaca, 1973), since the same characteristics are rewarded differently.

The fact that the explained component is negative (-13.61%) means that female migrants should earn more than - or at least as much as - their male counterparts. It might seem unusual to have a negative explained component, but this can happen (see Husted *et al.*, 2000; Strozza *et al.*, 2003; Bonjour and Pacelli, 1998). Also, it is possible that using dummy variables with different percentage of men and women lead to a negative sign for some variables because of the composition effect previously explained, which could thus lead to an overestimation of the unexplained gap. This could be correct in estimating different equations for each group, but this is only possible with bigger samples.

If we look to the second specification, which includes also the type of occupation, the unexplained component reduces to 97.3%. We can infer that the female occupational segregation influences, if only slightly, the wage gap between male and female migrants.

The coefficients which can explain the wage gap are those related to having obtained a university degree in Italy, work experience, marital status and to some extent, the country of origin. A relevant part of the unexplained component is due to the difference in the constant and to the legal status, which is badly rewarded for women.

Our results agree with the those of Shamsuddin (1998) and Husted *et al.* (2000), while they contrast with the results of Strozza *et al.* (2003), with the exception of migrants from Morocco.

6.2 Italian and foreign women: ethnic wage gap and discrimination

We now compare the wages of foreign women with those of Italian women, to see if there exists an ethnic discrimination beside the gender one. The earning functions are in Table 8.

The monthly ethnic pay gap for foreign women is 24.50%, less than the gender one, but when we consider the hourly wage, it increases to 27.11% (the logarithm differential is 0.292).

Ceteris paribus, being a foreign woman decreases the hourly wage by 15%, more than being a woman when comparing foreign people. Almost every variable is statistically significant at 1%, also thanks to the bigger sample (15,793 women, where 14,905 are Italians and 888 foreigners).

With respect to the earning function between foreigners, most characteristics have a different effect (compare column (a) of Table 6 and Table 8). Education and work experience have a stronger effect, respectively 4.55% and 1.35% (at 1% significance level), and sectors of employment have a statistically significant impact on wage. This result is probably due to the strong imbalance in the total sample, with Italian women accounting for the larger share.

Unexpectedly, having children (of every age bracket) is associated with a statistically significant increase in wage. Probably the number of children affected in this case the job market participation of women - for which we're not controlling - more than their wages did (Dustmann and Schmidt, 2000; Husted *et al.*, 2000, Foroutan, 2008) and women who are working even if they have children are more work-oriented. Thus, the positive effect on wages can be indicative of a higher engagement at work, as is usually assumed for men (Adsera and Chiswick, 2007).

Finally, it is interesting to note the impact of using a foreign language on wages. Since questions on this subject were only in the *ad hoc* module for foreigners, for Italian women we safely assumed that they speak Italian. Speaking a foreign language at work has a positive effect on wage (26%). Probably this is not a good proxy for the knowledge of Italian; on the contrary the fact of speaking a foreign language is rewarded, and maybe exploited in some specific occupations. Nevertheless, this happens rarely (0.30% of the total sample, 5.29% of foreign women). Not even speaking a foreign language at home seems to be a good proxy of the knowledge of Italian: it is not statistically significant. What reduces the wage (9.8%) is speaking a

foreign language with friends, which could detect the level of Italian proficiency and also the level of integration in Italian society.

When we also include the type of occupation between the regressors (column (d)), the impact of being a foreign woman reduces to 9.49%. The difference with its effect in the first specification (without occupation) is larger than the difference between foreign men and women. Surely, the occupational segregation in low-skilled and badly paid jobs has a larger effect on the ethnic wage gap than the gender wage gap. Consequently, one of the main reasons of the ethnic wage gap is the difference in access to better-paid jobs, which could itself be caused by discrimination (Anderson and Shapiro, 1996). Working in an elementary occupation reduces wages by 5.57% with respect to working in services and sales; note that being a professional increases the wage more than being a manager does.

-- Table 8 about here--

When we split the earning function for Italian and foreign women and compare the results, the included variables explain much more of the Italians' wage than the foreigners' wage.

Education has a very different impact, increasing Italian women's wages by 4.9%, with respect to 0.8% for foreigners. It is well known that education has a lower return for foreigners with respect to native people (above others: Dustmann and Schmidt, 2000; Foroutan, 2008; Venturini and Villosio, 2008). Similarly, experience and age have a stronger (positive) impact for Italian women, while on the other hand, the place of residence has a larger negative effect on the foreigners' wage.

The type of occupation, compared with elementary occupations, has a stronger positive impact for foreign women, in the case of professionals (+90.6%), technicians (+24.6) and clerks (+10%) (for Italian women the effects are +51.6%, +20.9%, +5.8%). However, for foreign women to be employed as service and sales workers, where they are highly represented, is not statistically different than being employed in an elementary occupation.

We can now apply the Oaxaca decomposition, exploiting these regressions.

-- Table 9 about here--

As it can be seen in Table 9, the 33.33% of the ethnic wage gap between women is explained by the included variables (specification I). Recall that the unexplained component could include omitted variables and the Italian-language proficiency, which has an impact, but which couldn't be included in the Oaxaca decomposition (see par.

5.1). Thus we need to pay particular attention to the usage and meaning of “discrimination”.

In the second specification, which includes occupation, the explained gap increases (to more than 58%). However, it is important to remember that in Italy there is also a strong discrimination in access to jobs (confirmed by Allasino *et al.*, 2004). These results agree with the ones by Husted *et al.*(2000), and Zorlu (2003).

Education and work experience play a big role in explaining the wage gap, since Italian women are more educated and have more experience, but also in the unexplained component, since Italian women are also much better-rewarded than foreigner women.

We also compare Italian and foreign men, which will be used in the Shamsuddin decomposition. We report this in order to compare the ethnic disadvantage for women and men. In the simple regression, being a foreigner reduces wages by 10.94% (specification I) to 8.43% (specification II). The wage gap due to difference in returns (unexplained gap) is 63.16% (specification I) to 44.73% (specification II), very close to the results for women (Table 10). The second specification also shows very similar results to Venturini and Villosio (2000) who used administrative data.

--Table 10 about here --

To sum up, we verified that there exists a wage gap for foreign women with respect to foreign men (gender) and with respect to Italian women (ethnic). The gender wage gap is much smaller, but mainly unexplained, while the ethnic wage gap is larger, but mostly due to difference in characteristics. In both cases, however, there exists a part of the differential due to differences in returns, which allows us to speak of a “double disadvantage” for immigrant women, as measured below.

6.3 Multiple discrimination: estimation of the double-negative effect

The decomposition suggested by Shamsuddin (1998) can be applied to measure the double negative impact (and the unexplained component of it) of being an immigrant and a woman at the same time.

Before continuing, it is important to note that when comparing Italian women and men, the hourly wage differential apparently favors women, who earn 2.57% more than men. We motivated this result with the construction of the hourly wage variable (par. 5.2). Moreover, when we estimate the earning function, this result disappears: *ceteris paribus*, being a woman decreases the wage for an Italian by 7.20 (specification I) to 6.37

(specification II). Even if the unadjusted pay gap seems to favor women, when we include controls, Italian women are in fact disadvantaged with respect to men (as confirmed by Bonjour and Pacelli, 1998).

The Shamsuddin decomposition is presented in Table 11: it splits the wage gap between Italian men and foreign women into an ethnic wage gap between men and a gender wage gap between foreigners (left hand side of Table 11). Alternatively, the same wage gap can be split into a gender wage gap between Italians and an ethnic wage gap between women (right hand side of Table 11). We present the two specifications, with and without occupation as explanatory variables. As laid out in the methodology section, for the four groups we used the earning function without specific foreigners' variables (origin, legal status, university degree obtained in Italy, spoken language), because they are absent for Italian groups, and we require the results to be comparable.

Looking at the results, we can say that there exists a double disadvantage for immigrant women in Italy, due to the fact of being both foreign and women. Without controlling for the type of occupation, the double negative effect is estimated to be 76.65% to 89.75%. When occupations are included as regressors, the double negative effect reduces to 56.61% - 62.13%. In other words, more than half of the wage differential between Italian men and foreign women is due to the double negative effect, which can be considered an estimation of "multiple discrimination" (Brewer *et al.*, 2002; Ruwanpura, 2008).

These results are in line with the Shamsuddin estimations (1998), on Canadian data, without occupation, of the double effect to be 71%-79%. In Husted *et al.* (2000) and Zorlu (2003) the effects change for the different ethnic group considered.

Contrary to Shamsuddin (1998) and Husted *et al.* (2000), which found that the wage gap is mainly due to gender discrimination, in our case it seems to be predominantly due to the ethnic discrimination. This is mainly caused by the fact that the ethnic wage gap is much larger than the gender one, so the unexplained component has more effect on the total decomposition. However, the explained gap is also larger in the ethnic case than in the gender one. Hence we can conclude that ethnic discrimination affects more the wage gap of foreign women with respect to Italian men, but it is in the gender wage gap that we observe the higher relative discrimination.

7. Conclusion

Through the link between gender and migration, the aim of this paper is to analyse the labour outcomes of migrant women, with a focus on the wage gap, in order to investigate the ethnic and gender inequalities.

The research estimates and explains the wage gap of foreign women with respect to Italian women (ethnic) and foreign men (gender); moreover, it tries to detect the presence of different kinds of wage discrimination, using the Oaxaca decomposition, and compares these components: ethnic, gender and double discrimination. In Italy, few economic studies have investigated the labour outcomes of female migrants, due to the scarcity of data.

The results show that the gender wage gap between foreigners is quite small (7.42%), but it is not explained by the included characteristics. We can conclude that, without discrimination, foreign women would earn as much as foreign men. The ethnic wage gap between women is larger (27.11%), but also a larger part of it is explained by the difference in qualification. In this second comparison, to be employed in different occupations increases the explained component of the wage gap much more than in the first comparison: the occupational segregation of foreign women into low-skilled and badly paid jobs arises especially in the comparisons with Italian women, whilst foreign men are also employed in low-paid occupations.

Using the decomposition suggested by Shamsuddin (1998) the double discrimination is estimated to be between 56%-62% (controlling for occupation) and 76%-89% (without occupation), of which a large part is due to ethnic discrimination.

The understanding of the topic could be improved with a larger sample, which would allow different estimates by group of origin. Moreover, it would be interesting to analyze the occupational segregation, to evaluate if it is caused by different characteristics or by discrimination in the labour market.

It is worthwhile to identify some policies to reduce the underemployment and brain-waste of female immigrants and to decrease the wage gap.

References

- Adsera A. and Chiswick B. R. (2007) 'Are There Gender and Country of Origin Differences in Immigrant Labor Market Outcomes Across European Destinations?', *Journal of Population Economics* 20(3): 495-526.
- Allasino E., Reyneri E., Venturini A. and Zincone G. (2004) 'Labour Market Discrimination Against Migrant Workers in Italy', Geneva: ILO International Migration Papers No. 67.
- Anderson D. and Shapiro D. (1996) 'Racial Differences in Access to High-Paying Jobs and the Wage Gap Between Black and White Women', *Industrial and Labor Relations Review* 49(2): 273-286.
- Bayard K., Hellerstein J., Neumark D. and Troske K. (1998) 'Why are Racial and Ethnic Wage Gaps Larger for Men than for Women? Exploring the Role of Segregation using the New Worker-Establishment Characteristic Database', NBER Working Paper No. 6997.
- Becker G. S. (1957) *The Economics of Discrimination*, Chicago: University of Chicago Press.
- Bettio F., Simonazzi A. and Villa P. (2006) 'Change in Care Regimes and Female Migration: the 'Care Drain' in the Mediterranean', *Journal of European Social Policy* 16(3): 271-285.
- Blau F. D. and Jusenius C. L. (1976) 'Economists' Approaches to Sex Segregation in the Labour Market: An Appraisal', *Signs* 1(2): 181-199.
- Bonjour D. and Pacelli L. (1998), 'Wage Formation and the Gender Wage Gap: Do Institutions Matter? Italy and Switzerland Compared', UCL discussion paper No. 12.
- Borjas G. J. (1989) 'Economic Theory and International Migration', *International Migration Review* 23(3): 457-485.
- Borjas G. J. (2009) *Economia del lavoro*, it. ed. Del Boca A. Del Boca D., Cappellari L. and Venturini A. (eds.), Milano: Brioschi (orig. ed. (2008) *Labor Economics*, New York: McGraw Hill).
- Boyd M. and Grieco E. (2003) 'Women and Migration: Incorporating Gender into International Migration Theory', *Migration Information Source*. Available on-line at: <http://www.migrationinformation.org/Feature/display.cfm?ID=106>.
- Brewer R. M., Conrad C. A. and King M. C. (2003) 'The Complexities and Potential of Theorizing Gender, Caste, Race and Class', *Feminist Economics* 8(2): 3-17.

- Caritas/Migrantes (2009) *Immigrazione. Dossier statistico 2009. XIX rapporto*, Roma: IDOS.
- Castles S. and Miller M. J. (2003) *The Age of Migration: International Population Movements in the Modern World*, 3rd ed., New York: The Guilford Press.
- Centra M. and Venuleo C. (2007) 'Differenziali retributivi: un'analisi dello scenario italiano', in Rustichelli E. (ed.) *Esiste un differenziale retributivo di genere in Italia? Il lavoro femminile tra discriminazioni e diritto alla parità di trattamento. I Libri del Fondo Sociale Europeo*, Roma: Isfol: 117-128.
- Cheng S. A. (2000) 'Labor Migration and the International Sexual Division of Labor: A Feminist Perspective', in Kelson G. A. and DeLaet D. (eds.) *Gender and Immigration*, New York: New York University Press: 38-58.
- Chiswick B. R. (1978) 'The Effect of Americanization on the Earnings of Foreign-born Men', *Journal of Political Economy* 86(5): 897-921.
- Cotter D. A., Hermsen J. M. and Vanneman R. (2003) 'The Effects of Occupational Gender Segregation across Race', *The Sociological Quarterly* 44(1): 17-36.
- Decimo F. (2005) *Quando emigrano le donne. Percorsi e reti femminili della mobilità transnazionale*, Bologna: Il Mulino.
- Dustmann C. and Schmidt C. M. (2000) 'The Wage Performance of Immigrant Women: Full-Time Jobs, Part-Time Jobs, and the Role of Selection', IZA Discussion Paper No. 233.
- Field-Hendrey E. and Balkan E. (1991) 'Earnings and assimilation of female immigrants', *Applied Economics* 23(10): 1665-1672.
- Flabbi L. (2001) 'La discriminazione: evidenza empirica e teoria economica', in Brucchi Luchino (eds.) *Manuale di economia del lavoro*, Bologna: Il Mulino: 381-405.
- Fullin G. and Reyneri E. (2011) 'Low Unemployment and Bad Jobs for New Immigrants in Italy', *International Migration* 49(1): 118-147.
- Foroutan Y. (2008) 'Migration Differentials in Women Market's Employment: An Empirical and Multicultural Analysis', *International Migration Review* 42(3): 675-703.
- Husted L., Nielsen H. S., Rosholm M. and Smith N. (2000) 'Hit Twice? Danish Evidence on the Double-negative Effect on the Wages of Immigrant Women', Centre for Labour Market and Social Research, Working Paper No. 00-06.

- ISTAT (2007) 'La presenza straniera in Italia: caratteristiche socio-demografiche', *Informazioni* No. 7.
- ISTAT (2011) 'La popolazione straniera residente in Italia'. Available on-line at: <http://www.istat.it/it/archivio/39726>.
- IRES (2009) *Il lavoro domestico e di cura: scenario, condizioni di lavoro e discriminazioni*. Available on-line at: <http://www.ires.it/node/1245>.
- Morokvasic M. (1984) 'Birds of passage are also women...', *International Migration Review* 18(4): 886-907.
- Nielsen H. S., Rosholm M., Smith N. and Husted L. (2004) 'Qualifications, Discriminations, or Assimilation? An Extended Framework for Analysing Immigrant Wage Gaps', *Empirical Economics* 29(4): 855-883.
- Oaxaca R. (1973) 'Male-Female Wage Differentials in Urban Labor Markets', *International Economic Review* 14(3): 693-709.
- Paggiaro A. (2013) 'How do immigrants fare during the downturn? Evidence from matching comparable natives', *Demographic Research* 28: 229-258.
- Phelps E. S. (1972) 'The Statistical Theory of Racism and Sexism', *American Economic Review* 62(4): 659-661.
- Piper N. (2005) 'Gender and migration', GCIM Policy Analysis and Research Programme, Available on-line at: https://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/policy_and_research/gcim/tp/TP10.pdf.
- Ruwanpura K. N. (2008) 'Multiple Identities, Multiple-Discrimination: a Critical Review', *Feminist Economics* 14(3): 77-105.
- Shamsuddin A. F. M. (1998) 'The double-negative effect on the earnings of foreign-born females in Canada', *Applied Economics* 30(9): 1187-1201.
- Strozza S., Gallo G. and Grillo F. (2003) 'Gender and the Labour Market Among Immigrants in Some Italian Areas: the Case of Moroccans, Former Yugoslavians and Poles', in Garcia B., Anker R., Pinnelli A. (eds.) *Women in the Labour Market in Changing Economies: Demographic Issues*, Oxford: Oxford University Press: 133-165.
- Tastoglou E. and Preston V. (2005) 'Gender, Immigration and Labour Market Integration: Where We Are and What We Still Need to Know', *Atlantis: a Women's Studies Journal* 30(1): 46-59.

- Truong T. D. (2000) 'Gender, International Migration and Social Reproduction: implication for theory, policy, research and networking', in Willis K. and Yeoh B. (eds.) *Gender and Migration*, Cambridge: Edward Elgar: 65-90.
- UNDESA (United Nations, Department of Economic and Social Affairs, Population Division) (2011) *Trends in International Migrant Stock: Migrants by Age and Sex (United Nations database, POP/DB/MIG/Stock/Rev.2011)* Available on-line at: <http://esa.un.org/MigAge/>; [Accessed on 13/02/2012].
- Venturini A. and Villosio C. (2000) 'Are Immigrants Assimilating in the Italian Labour Market?', CHILD Working Paper No. 11/2000.
- Venturini A. and Villosio C. (2008) 'Labour-market assimilation of foreign workers in Italy', *Oxford Review of Economic Policy* 24(2): 518-542.
- Zlotnik H. (2000) 'Migration and the Family: the Female Perspective', in Willis K. and Yeoh B. (eds.) *Gender and Migration*, Cambridge: Edward Elgar: 27-45.
- Zlotnik H. (2003) 'The Global Dimensions of Female Migration', *Migration Information Source*, Available on-line at: <http://www.migrationinformation.org/Feature/display.cfm?ID=109>.
- Zorlu A. (2003) 'Do Ethnicity and Sex Matter in Pay? Analyses of 8 Ethnic Groups in the Dutch Labour market', NIMA, Working Paper No. 21.

TABLES

Table 1. Labour market outcomes, by gender and origin

INDICATORS	Italians		Foreigners	
	Men	Women	Men	Women
Activity rate	71.59	49.52	85.88	56.80
Employment rate	67.76	45.57	81.14	49.32
Unemployment rate	5.35	7.98	5.52	13.17

Source: ISTAT, Labour Force Survey 2008, 2nd quarter

Notes: *Activity rate:* working age (15-64) labour force (employed and unemployed) over total working age population. *Employment rate:* working age adults (15-64) employed over total working age population. *Unemployment rate:* working age unemployed workers (willing and able to work for pay, actively searching for work) over total working age labour force.

Table 2. Descriptive statistics (continuous variables)

	Obs.	Mean	St.Dev.	Min	Max	Median
ITALIAN MEN	17,778					
Years of education		11.08	3.61	0	21	13
Work experience		21.11	11.68	0	55	22
Exp2 ^a		582.16	508.25	0	3025	484
Monthly wage		1329.98	440.79	260	2990	1260
Monthly worked hours		168.54	29.75	4.30	430	172
Hourly wage		8.13	4.12	0.78	262.79	7.56
Log (wage)		2.03	0.36	-0.24	5.57	2.02
Partner's hourly wage		2.77	4.51	0	62.02	0
Children 0-5 years old		0.20	0.48	0	4	0
Children 6-10 years old		0.17	0.43	0	3	0
Children 11-14 years old		0.14	0.39	0	3	0
	Obs.	Mean	St.Dev.	Min	Max	Median
ITALIAN WOMEN	14,905					
Years of education		12.30	3.63	0	21	13
Work experience		19.54	11.22	0	52	20
Exp2 ^a		507.78	463.80	0	2704	400
Monthly wage		1096.34	411.39	260	2990	1100
Monthly worked hours		140.21	39.74	4.30	408.50	154.80
Hourly wage		8.34	4.67	1.44	234.88	7.34
Log (wage)		2.03	0.41	0.36	5.46	1.99
Partner's hourly wage		3.75	5.04	0	44.48	0
Children 0-5 years old		0.18	0.46	0	4	0
Children 6-10 years old		0.17	0.43	0	3	0
Children 11-14 years old		0.14	0.38	0	3	0
	Obs.	Mean	St.Dev.	Min	Max	Median
FOREIGN MEN	1,008					
Years of education		9.87	3.96	0	21	8
Work experience		15.56	9.69	0	44	14
Exp2 ^a		335.85	359.94	0	1936	196
Monthly wage		1118.19	341.20	300	2550	1100
Monthly worked hours		172.89	31.45	30.10	361.20	172
Hourly wage		6.56	2.02	1.74	25.19	6.40
Log (wage)		1.84	0.30	0.56	3.23	1.86
Partner's hourly wage		1.77	3.29	0	29.07	0
Children 0-5 years old		0.32	0.61	0	3	0
Children 6-10 years old		0.20	0.46	0	2	0
Children 11-14 years old		0.14	0.38	0	2	0

(continuing)

	Obs.	Mean	St.Dev.	Min	Max	Median
FOREIGN WOMEN	888					
Years of education		10.91	4.32	0	21	13
Work experience		14.96	10.49	0	50	13
Exp2 ^a		333.71	403.33	0	2500	169
Monthly wage		827.71	311.38	260	2560	800
Monthly worked hours		144.93	51.08	17.20	451.50	154.8
Hourly wage		6.08	2.49	0.93	24.19	6
Log (wage)		1.74	0.36	-0.07	3.19	1.76
Partner's hourly wage		3.06	3.95	0	20.47	0
Children 0-5 years old		0.18	0.45	0	2	0
Children 6-10 years old		0.16	0.42	0	2	0
Children 11-14 years old		0.11	0.34	0	2	0

	Obs.	Mean	St.Dev.	Min	Max	Median
TOT WOMEN	15,793					
Years of education		12.22	3.69	0	21	13
Work experience		19.28	11.23	0	52	19
Exp2 ^a		497.99	462.34	0	2704	361
Monthly wage		1081.24	411.10	260	2990	1090
Monthly worked hours		140.47	40.48	4.3	451.5	154.8
Hourly wage		8.21	4.60	0.93	234.88	7.21
Log (wage)		2.01	0.41	-0.07	5.46	1.98
Partner's hourly wage		3.71	4.99	0	44.48	0
Children 0-5 years old		0.18	0.46	0	4	0
Children 6-10 years old		0.17	0.43	0	3	0
Children 11-14 years old		0.14	0.38	0	3	0

	Obs.	Mean	St.Dev.	Min	Max	Median
TOT FOREIGN	1,896					
Years of education		10.36	4.16	0	21	10
Work experience		15.28	10.07	0	50	13
Exp2 ^a		334.85	380.78	0	2500	169
Monthly wage		982.14	358.15	260	2560	1000
Monthly worked hours		159.80	44.06	17.2	451.5	172
Hourly wage		6.34	2.26	0.93	25.19	6.05
Log (wage)		1.79	0.33	-0.07	3.23	1.80
Partner's hourly wage		2.37	3.67	0	29.07	0
Children 0-5 years old		0.25	0.54	0	3	0
Children 6-10 years old		0.18	0.44	0	2	0
Children 11-14 years old		0.13	0.36	0	2	0

Source: elaboration from data from Labour Force Survey 2008/2, ISTAT.

Note: ^a Exp2=squared experience

Statistics for foreigners are with the total used sample. When we compare foreign men and women we use 11 individuals less, because they have missing data on legal status, but since the difference in statistics are only few hundredths, we don't report also statistics for the 1,885 foreigners instead of 1,896 (available upon request).

There are no other missing data, because this represents the final sub-sample used for the analysis, from which observation with missing data on variables were excluded.

Table 3. Descriptive statistics (discrete variables)

	ITALIANS		FOREIGNERS			WOMEN TOT	
	MEN	WOMEN	MEN	WOMEN	TOT		
	Percentage	Percentage	Percentage	Percentage	Percentage		
Women	0.00	100.00	0.00	100.00	46.84	100.00	
Foreigners	0.00	0.00	100.00	100.00	100.00	5.62	
Region of residence							
	North	47.86	54.79	71.73	67.00	69.51	55.48
	Centre	16.54	16.91	19.44	24.10	21.62	17.32
	South	35.60	28.29	8.83	8.90	8.86	27.20
Age							
	15-24	8.66	6.25	10.81	6.19	8.65	6.25
	25-34	21.05	22.19	28.77	28.72	28.74	22.55
	35-44	30.12	31.35	38.00	34.12	36.18	31.51
	45-54	29.20	29.94	19.15	22.97	20.94	29.55
	55-64	10.97	10.27	3.27	8.00	5.49	10.14
Marital status							
	Married	61.22	61.19	58.83	48.76	54.11	60.50
	Cohabiting	3.37	3.81	3.67	8.45	5.91	4.07
	Other (divorced, separated, single, widowed)	35.41	34.99	37.50	42.79	39.98	35.43
Sectors of employment							
	Agriculture	2.79	1.48	4.07	1.35	2.80	1.48
	Manufacture	29.42	15.48	35.71	15.54	26.27	15.48
	Construction	10.90	1.29	21.23	0.11	11.34	1.22
	Commerce	11.47	12.36	7.64	6.64	7.17	12.04
	Other activities	45.42	69.39	31.35	76.35	52.43	69.78
Type of occupation							
	Legislators, managers	1.98	0.99	0.00	0.00	0.00	0.94
	Professionals	8.27	12.35	1.69	3.27	2.43	11.84
	Technicians	21.14	32.51	3.47	7.66	5.43	31.11
	Clerks	10.72	19.42	4.56	4.73	4.64	18.59
	Service and sales workers	10.95	17.50	8.83	26.01	16.88	17.98
	Skilled workers	22.07	5.51	41.27	9.80	26.53	5.76
	Operators	14.56	4.23	19.94	7.32	14.03	4.40
	Elementary occupations	7.76	7.41	20.24	41.22	30.06	9.31
	Army	2.56	0.08	0.00	0.00	0.00	0.08
Usage foreign language							
	At work			8.53	5.29	7.01	0.30
	In family			76.88	55.74	66.98	3.13
	With friends			56.65	46.28	51.79	2.600
Origin							
	Most developed countries	..	..	3.67	9.35	6.33	..
	Western Balkans	..	..	20.44	11.60	16.30	..
	Central and Eastern Europe	..	..	20.04	38.96	28.90	..
	Asia	..	..	16.96	6.31	11.97	..
	Philippines	..	..	3.87	6.53	5.12	..
	Northern Africa	..	..	18.25	4.95	12.03	..
	Southern Africa	..	..	10.32	7.66	9.07	..
	Latin America	..	..	6.45	14.64	10.28	..

(continuing)

	ITALIANS		FOREIGNERS			WOMEN TOT
	MEN	WOMEN	MEN	WOMEN	FOREIGNERS TOT	
	Percentage	Percentage	Percentage	Percentage	Percentage	
Legal status			5 ^a	6 ^a	11 ^a	
Italian citizenship	..	..	8.57	17.23	12.63	..
European citizenship	..	..	18.34	26.53	22.18	..
Permit of stay (long)	..	..	38.58	23.58	31.56	..
Permit of stay (short)	..	..	31.41	30.73	31.09	..
Visa	..	..	0.50	0.11	0.32	..
None	..	..	2.59	1.81	2.23	..
Educational qualification in Italy						
Tertiary	..	..	1.49	1.13	1.32	..
Observations	17,778	14,905	1,008	888	1,896	15,793

Source: elaboration from data from Labour Force Survey 2008/2, ISTAT.

Note: ^a missing values (absolute number)

Statistics for foreigners are with the total used sample. When we compare foreign men and women we use 11 individuals less, because they have missing data on legal status, but since the difference in statistics are only few hundredths, we don't report also statistics for the 1,885 foreigners instead of 1,896 (available upon request).

There are no other missing data, because this represents the final sub-sample used for the analysis, from which observation with missing data on variables were excluded.

Table 4. Monthly and hourly wage gap

	Italian men	Italian women	Foreign men	Foreign women
Monthly wage	100	82.43	84.08	62.24
Hourly wage	100	102.57	80.74	74.76

Source: elaboration from data from Labour Force Survey 2008/2, ISTAT.

Table 5. Monthly, hourly and logarithmic wage gaps between groups of interest

Wage gap	Gender wage gap between Italians	Ethnic wage gap between men	Gender wage gap between foreigners	Ethnic wage gap between women	Wage gap between Italian men and foreign women
	$\frac{\bar{W}_m^I - \bar{W}_w^I}{\bar{W}_m^I} \%$	$\frac{\bar{W}_m^I - \bar{W}_m^F}{\bar{W}_m^I} \%$	$\frac{\bar{W}_m^F - \bar{W}_w^F}{\bar{W}_m^F} \%$	$\frac{\bar{W}_w^I - \bar{W}_w^F}{\bar{W}_w^I} \%$	$\frac{\bar{W}_m^I - \bar{W}_w^F}{\bar{W}_m^I} \%$
Monthly	17.57	15.92	25.98	24.50	37.76
Hourly	-2.57	19.26	7.40	27.11	25.24
Logarithmic	$\ln(\bar{W}_m^I) - \ln(\bar{W}_w^I)$	$\ln(\bar{W}_m^I) - \ln(\bar{W}_m^F)$	$\ln(\bar{W}_m^F) - \ln(\bar{W}_w^F)$	$\ln(\bar{W}_w^I) - \ln(\bar{W}_w^F)$	$\ln(\bar{W}_m^I) - \ln(\bar{W}_w^F)$
	0.00	0.19	0.10	0.29	0.29

Source: elaboration from data from Labour Force Survey 2008/2, ISTAT.

Table 6. Wage determinants for foreign people, men and women

	I specification			II specification		
	TOT (a)	MEN (b)	WOMEN (c)	TOT (d)	MEN (e)	WOMEN (f)
Constant	2.041 *** (0.050)	2.107 *** (0.068)	1.832 *** (0.078)	1.910 *** (0.053)	1.969 *** (0.071)	1.776 *** (0.085)
Sex	-0.113 *** (0.017)	..	..	-0.100 *** (0.017)	..	..
Years of education	0.007 *** (0.002)	0.005 ** (0.002)	0.009 *** (0.003)	0.003 (0.002)	0.003 (0.002)	0.002 (0.003)
Education qualification in Italy	0.226 *** (0.062)	0.167 ** (0.072)	0.345 *** (0.106)	0.000 (0.063)	0.007 (0.076)	0.050 (0.109)
Work experience	0.006 ** (0.003)	0.006 (0.004)	0.002 (0.004)	0.006 ** (0.003)	0.005 (0.004)	0.004 (0.004)
Exp2	-0.0001 * (0.0001)	-0.0002 ** (0.0001)	0.0000 (0.0001)	-0.0001 ** (0.0001)	-0.0001 (0.0001)	-0.0001 (0.0001)
Centre	-0.068 *** (0.017)	-0.071 *** (0.022)	-0.063 ** (0.026)	-0.070 *** (0.016)	-0.073 *** (0.021)	-0.069 *** (0.026)
South	-0.214 *** (0.025)	-0.275 *** (0.031)	-0.133 *** (0.040)	-0.224 *** (0.024)	-0.269 *** (0.031)	-0.163 *** (0.039)
Age 25-34	0.107 *** (0.030)	0.096 *** (0.035)	0.125 ** (0.052)	0.111 *** (0.029)	0.103 *** (0.034)	0.133 * (0.051)
Age 35-44	0.082 ** (0.033)	0.091 ** (0.041)	0.084 (0.056)	0.088 *** (0.032)	0.092 ** (0.040)	0.104 (0.055)
Age 45-54	0.070 ** (0.036)	0.088 * (0.046)	0.063 (0.058)	0.077 ** (0.035)	0.085 * (0.045)	0.082 (0.057)
Age 55-64	0.097 ** (0.046)	0.163 *** (0.063)	0.024 (0.071)	0.078 * (0.044)	0.119 * (0.062)	0.036 (0.069)
Cohabiting	-0.092 *** (0.030)	-0.092 ** (0.045)	-0.055 (0.042)	-0.083 *** (0.029)	-0.100 ** (0.044)	-0.046 (0.040)
Marital status other	-0.086 *** (0.018)	-0.121 *** (0.022)	-0.015 (0.032)	-0.085 *** (0.017)	-0.116 *** (0.021)	-0.025 (0.031)
Partner's hourly wage	0.004 * (0.002)	0.000 (0.003)	0.012 *** (0.004)	0.002 (0.002)	-0.001 (0.003)	0.008 ** (0.004)
Agriculture	-0.204 *** (0.043)	-0.226 *** (0.044)	-0.122 (0.098)	-0.179 *** (0.042)	-0.199 *** (0.044)	-0.111 (0.097)
Construction	-0.020 (0.025)	-0.035 (0.024)	-0.041 (0.326)	0.000 (0.026)	-0.021 (0.025)	-0.058 (0.316)
Commerce	-0.015 (0.029)	-0.003 (0.033)	-0.004 (0.051)	-0.008 (0.029)	-0.006 (0.033)	-0.007 (0.054)
Other activities	-0.008 (0.018)	-0.011 (0.021)	0.029 (0.032)	0.006 (0.020)	0.009 (0.023)	0.003 (0.039)
Western Balkans	-0.162 *** (0.038)	-0.219 *** (0.056)	-0.123 ** (0.056)	-0.097 *** (0.037)	-0.153 *** (0.057)	-0.080 (0.054)
Central and Eastern Europe	-0.313 *** (0.032)	-0.321 *** (0.052)	-0.305 *** (0.044)	-0.228 *** (0.032)	-0.229 *** (0.053)	-0.230 *** (0.044)
Asia	-0.227 *** (0.039)	-0.303 *** (0.057)	-0.186 *** (0.062)	-0.156 *** (0.038)	-0.227 *** (0.057)	-0.126 ** (0.061)
Philippines	-0.291 *** (0.044)	-0.417 *** (0.068)	-0.231 *** (0.067)	-0.189 *** (0.044)	-0.315 *** (0.068)	-0.123 ** (0.061)
Northern Africa	-0.241 *** (0.039)	-0.297 *** (0.056)	-0.231 *** (0.067)	-0.172 *** (0.038)	-0.225 *** (0.056)	-0.184 *** (0.065)

(continuing)

	I specification			II specification		
	TOT	MEN	WOMEN	TOT	MEN	WOMEN
	(a)	(b)	(c)	(d)	(e)	(f)
Southern Africa	-0.219 *** (0.040)	-0.313 *** (0.059)	-0.136 ** (0.060)	-0.146 *** (0.039)	-0.233 *** (0.059)	-0.085 (0.059)
Latin America	-0.252 *** (0.038)	-0.340 *** (0.062)	-0.209 *** (0.051)	-0.172 *** (0.038)	-0.259 *** (0.062)	-0.141 *** (0.051)
European citizenship	-0.023 (0.029)	0.013 (0.046)	-0.066 * (0.040)	-0.001 (0.028)	-0.007 (0.045)	-0.023 (0.039)
Permit of stay (long)	-0.103 *** (0.025)	-0.040 (0.034)	-0.160 *** (0.039)	-0.064 *** (0.024)	-0.028 (0.033)	-0.099 *** (0.038)
Permit of stay (short)	-0.146 *** (0.025)	-0.081 ** (0.035)	-0.201 *** (0.036)	-0.105 *** (0.024)	-0.069 ** (0.034)	-0.141 *** (0.037)
Visa	-0.231 * (0.121)	-0.229 * (0.121)	0.196 (0.327)	-0.192 (0.117)	-0.224 * (0.119)	0.198 (0.317)
None	-0.154 *** (0.050)	-0.127 ** (0.059)	-0.141 (0.086)	-0.113 ** (0.048)	-0.124 ** (0.058)	-0.073 (0.084)
Professionals	..	..	..	0.571 *** (0.050)	0.508 *** (0.074)	0.562 *** (0.073)
Technicians	..	..	..	0.188 *** (0.032)	0.157 *** (0.050)	0.196 *** (0.044)
Clerks	..	..	..	0.096 *** (0.034)	0.111 *** (0.043)	0.072 (0.055)
Service and sales workers	..	..	..	0.033 (0.021)	0.053 (0.034)	0.017 (0.028)
Skilled workers	..	..	..	0.050 ** (0.021)	0.081 *** (0.024)	-0.029 (0.042)
Operators	..	..	..	0.078 *** (0.025)	0.097 *** (0.028)	0.017 (0.052)
Observations	1,885	1,003	882	1,885	1,003	882
R ² – adj.	0.247	0.259	0.222	0.298	0.294	0.279

Source: elaboration from data from Labour Force Survey 2008/2, ISTAT.

Note: Dependent variable= logarithm of hourly wage

Standard error in parenthesis

*** statistically significant at 1%

** statistically significant at 5%

* statistically significant at 10%

Reference characteristics are: to live in Northern Italy, to be aged 15-24 years hold, to be married, to come from developed countries, to work in industry, to have the Italian citizenship, to work in elementary occupations (the last one only in the II specification).

Table 7. Oaxaca decomposition of gender wage gap between migrants

	I specification	II specification
Hourly wage gap (logarithm)	0.101	0.101
- due to differences in endowments (explained)	-0.014	0.027
- due to differences in parameters (unexplained)	0.114	0.097
% explained	-13.61%	2.70%
% unexplained	113.61%	97.30%

Source: elaboration from data from Labour Force Survey 2008/2, ISTAT.

Table 8. Wage determinants for women, Italians and foreigners

	I specification			II specification		
	TOT	ITALIANS	FOREIGNERS	TOT	ITALIANS	FOREIGNERS
	(a)	(b)	(c)	(d)	(e)	(f)
Constant	1.076 *** (0.017)	1.006 *** (0.017)	1.591 *** (0.068)	1.317 *** (0.018)	1.257 *** (0.019)	1.645 *** (0.072)
Foreigners	-0.163 *** (0.018)	..	..	-0.091 *** (0.017)	..	..
Years of education	0.045 *** (0.001)	0.049 *** (0.001)	0.008 *** (0.003)	0.020 *** (0.001)	0.024 *** (0.001)	-0.001 (0.003)
Work experience	0.013 *** (0.001)	0.015 *** (0.001)	0.002 (0.004)	0.012 *** (0.001)	0.013 *** (0.001)	0.006 (0.004)
Exp2	-0.0003 *** (0.0000)	-0.0003 *** (0.0000)	0.0001 (0.0001)	-0.0002 *** (0.0000)	-0.0002 *** (0.0000)	-0.0001 (0.0001)
Centre	-0.050 *** (0.007)	-0.054 *** (0.008)	-0.065 ** (0.027)	-0.035 *** (0.007)	-0.036 *** (0.007)	-0.073 *** (0.026)
South	-0.055 *** (0.007)	-0.054 *** (0.007)	-0.118 *** (0.041)	-0.055 *** (0.006)	-0.053 *** (0.006)	-0.167 *** (0.039)
Age 25-34	0.092 *** (0.013)	0.087 *** (0.013)	0.114 ** (0.054)	0.082 *** (0.012)	0.078 *** (0.013)	0.121 ** (0.051)
Age 35-44	0.168 *** (0.015)	0.173 *** (0.016)	0.086 (0.059)	0.138 *** (0.014)	0.143 *** (0.015)	0.100 * (0.055)
Age 45-54	0.254 *** (0.017)	0.263 *** (0.017)	0.057 (0.061)	0.203 *** (0.016)	0.214 *** (0.017)	0.075 (0.057)
Age 55-64	0.369 *** (0.020)	0.379 *** (0.020)	0.039 (0.073)	0.288 *** (0.019)	0.304 *** (0.020)	0.045 (0.069)
Cohabiting	-0.022 (0.014)	-0.006 (0.015)	-0.132 *** (0.043)	-0.012 (0.013)	-0.001 (0.014)	-0.087 ** (0.040)
Marital status other	-0.017 ** (0.008)	-0.008 (0.008)	-0.054 (0.033)	-0.018 ** (0.007)	-0.010 (0.008)	-0.050 (0.031)
Partner's hourly wage	0.005 *** (0.001)	0.005 *** (0.001)	0.014 *** (0.004)	0.004 *** (0.001)	0.004 *** (0.001)	0.008 * (0.004)
Agriculture	-0.169 *** (0.023)	-0.160 *** (0.023)	-0.144 (0.102)	-0.130 *** (0.023)	-0.130 *** (0.023)	-0.120 (0.098)
Construction	0.058 ** (0.025)	0.060 ** (0.025)	-0.001 (0.337)	0.049 ** (0.024)	0.056 ** (0.024)	-0.046 (0.317)
Commerce	-0.008 (0.010)	-0.006 (0.010)	0.019 (0.052)	0.013 (0.011)	0.014 (0.011)	0.004 (0.054)
Other activities	0.105 *** (0.008)	0.106 *** (0.008)	0.017 (0.032)	0.081 *** (0.009)	0.084 *** (0.009)	-0.006 (0.039)
Children 0-5 years	0.015 ** (0.007)	0.013 * (0.007)	0.015 (0.027)	0.014 ** (0.006)	0.013 ** (0.006)	0.019 (0.026)
Children 6-10 years	0.043 *** (0.007)	0.042 *** (0.007)	0.028 (0.029)	0.042 *** (0.006)	0.042 *** (0.007)	0.018 (0.027)
Children 11-14 years	0.038 *** (0.007)	0.037 *** (0.008)	0.040 (0.035)	0.034 *** (0.007)	0.033 *** (0.007)	0.059 *** (0.033)
Foreign language at work	0.237 *** (0.050)	..	0.193 *** (0.051)	0.168 *** (0.048)	..	0.136 *** (0.048)
Foreign language in the family	-0.009 (0.026)	..	-0.057 ** (0.026)	-0.003 (0.024)	..	-0.029 (0.025)
Foreign language with friends	-0.103 *** (0.026)	..	-0.106 *** (0.027)	-0.076 *** (0.025)	..	-0.071 *** (0.025)

(continuing)

	I specification			II specification		
	TOT	ITALIANS	FOREIGNERS	TOT	ITALIANS	FOREIGNERS
	(a)	(b)	(c)	(d)	(e)	(f)
Legislators, managers				0.335 *** (0.027)	0.309 *** (0.027)	..
Professionals	..	..	..	0.447 *** (0.012)	0.416 *** (0.012)	0.645 *** (0.067)
Technicians	..	..	..	0.203 *** (0.009)	0.190 *** (0.009)	0.220 *** (0.045)
Clerks	..	..	..	0.066 *** (0.009)	0.056 *** (0.009)	0.096 * (0.054)
Skilled workers	..	..	..	-0.018 (0.013)	-0.015 (0.014)	-0.042 (0.044)
Operators	..	..	..	0.022 (0.015)	0.020 (0.016)	-0.010 (0.055)
Elementary occupations				-0.057 *** (0.011)	-0.050 *** (0.012)	-0.033 (0.028)
Army				0.145 (0.091)	0.135 (0.091)	..
Observations	15,793	14,905	888	15,793	14,905	888
R2 – adj.	0.350	0.357	0.150	0.419	0.417	0.254

Source: elaboration from data from Labour Force Survey 2008/2, ISTAT.

Note: Dependent variable= logarithm of hourly wage

Standard error in parenthesis

*** statistically significant at 1%

** statistically significant at 5%

* statistically significant at 10%

Reference characteristics are: to live in Northern Italy, to be aged 15-24 years hold, to be married, to come from developed countries, to work in industry, to work as service and sales workers (the last one only in the II specification).

Table 9. Oaxaca decomposition of ethnic wage gap between women

	I specification	II specification
Hourly wage gap (logarithm)	0.292	0.292
- due to differences in endowments (explained)	0.097	0.170
- due to differences in parameters (unexplained)	0.193	0.122
% explained	33.33%	58.24%
% unexplained	66.67%	41.76%

Source: elaboration from data from Labour Force Survey 2008/2, ISTAT.

Table 10. Oaxaca decomposition of ethnic wage gap between men

	I specification	II specification
Hourly wage gap (logarithm)	0.190	0.190
- due to differences in endowments (explained)	0.070	0.105
- due to differences in parameters (unexplained)	0.120	0.085
% explained	36.84%	55.24%
% unexplained	63.16%	44.73%

Source: elaboration from data from Labour Force Survey 2008/2, ISTAT.

Table 11. Decomposition of the wage differential between Italian men and foreign women, to estimate the double effect (Shamsuddin decomposition, 1998)

I specification							
Wage differential Italian men/ foreign women							
0.290							
<i>Ethnic differential between men</i>	Italian men/ foreign men	1. Log differential	0.190	Italian women/ foreign women	Log differential	0.292	<i>Ethnic differential between women</i>
		(a) Explained	0.070 (24.16%)		Explained	0.097 (33.48%)	
		(b) Unexplained	0.120 (41.42%)		Unexplained	0.193 (66.62%)	
<i>Gender differential between foreigners</i>	Foreign men/ foreign women	2. Log differential	0.100	Italian men / Italian women	Log differential	-0.003	<i>Gender differential between Italians</i>
		(c) Explained	-0.002 (-0.85%)		Explained	-0.070 (-24.16%)	
		(d) Unexplained	0.102 (35.23%)		Unexplained	0.067 (23.13%)	
Double negative effect: (b) + (d)			0.222 (76.65%)			0.260 (89.75%)	

II specificazione							
Wage differential Italian men/ foreign women							
0.290							
<i>Ethnic differential between men</i>	Italian men/ foreign men	1. Log differential	0.190	Italian women/ foreign women	Log differential	0.292	<i>Ethnic differential between women</i>
		(a) Explained	0.105 (36.24%)		Explained	0.170 (58.68%)	
		(b) Unexplained	0.085 (29.34%)		Unexplained	0.122 (42.11%)	
<i>Gender differential between foreigners</i>	Foreign men/ foreign women	2. Log differential	0.100	Italian men / Italian women	Log differential	-0.003	<i>Gender differential between Italians</i>
		(c) Explained	0.021 (7.25%)		Explained	-0.061 (-21.06%)	
		(d) Unexplained	0.079 (27.27%)		Unexplained	0.058 (20.02%)	
Double negative effect: (b) + (d)			0.164 (56.61%)			0.180 (62.13%)	

Source: elaboration from data from Labour Force Survey 2008/2, ISTAT.

Note: number in parenthesis are the percentage part of each component to the average difference between logarithm of hourly wage between Italian men and foreign women.