Perceived discrimination and remittances: Evidence from immigrants in Northern Italy[*]

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Abstract

Despite immigrants' experienced discrimination can imply higher economic and psychological migration costs, little research has explicitly focused on its role as remitting device. Using the 2012-2013 waves of an original survey documenting transnational economic immigrants in Northern Italy, this paper tries to quantify the relationship between perceived economic discrimination and amount remitted (intensive margin), conditional on remitting at all (extensive margin). Empirical results show that, beside traditional individual characteristics, a more discriminating destination environment leads to lower amount of remittances but only for women. The effect mainly goes through female immigrants' labor market conditions and only slightly through the willingness to leave Lombardy. (*JEL* F22, J16)

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1 Introduction

In most OECD countries discrimination against immigrants and their offspring remains a key issue both on the labor market, through an unequal access to employment and subsequent career advancement and wages, and on the housing market and the education system (OECD, 2013). On average, men tend to be more affected by discriminatory practices than women in both European and non-European OECD countries.[1] This notably concerns immigrants aged 15-24 in Europe, Canada and New Zealand, while in the United States older immigrants (aged 55-64) seem to feel worse off. As far as origins are concerned, immigrants born in lower income countries are the most discriminated, in particular, those coming from Sub-Saharan African and Latin American regions. If we look at their educational level, outcomes are contradictory, with the low educated (ISCED 0-2) feeling discriminated in Europe and United States and the high educated (ISCED 5/6) experiencing discrimination in Canada and New Zealand.[2]

Through its negative impact on social cohesion and immigrants' incentives to invest in education and training, discrimination experienced by immigrants can represent an economic loss to both host and sending countries. Focusing on the latter perspective, this paper looks at the effects of immigrants' perceived discrimination in the host country on remitting behaviour, by empirically quantifying both the extensive (remitting at all) and intensive (the amount remitted) margins. Individual level data comes from the ORIM survey data provided by the *Foundation for Initiatives and Studies on Multi-Ethnicity* (ISMU) which monitors the immigration experience to the Lombardy region, the most preferred immigration destination in Italy.

Being located in the Northern central part of Italy and bordered by Switzerland (north) and four other Italian regions, as Trentino-Alto Adige, Veneto (east), Emilia-Romagna (south), and Piedmont (west), according to the 2011 Census, Lombardy hosted 23.5% of foreign residents (8.2% in the province of Milan) at the national level, followed by Veneto (11%), Emilia Romagna (11%) and Lazio (10.6%).[3]

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[1]Whether female migrants are more discriminated than males is still an open issue. The United Nations Population Fund has recently recognized the presence of a 'double disadvantage' experienced by female migrants as a consequence of being both migrants and women (UNFPA, 2006). According to Rubin et al. (2008), of the two dimensions of disadvantage (gender and migrant), the migrant unemployment differential (for women) is generally larger than the gender unemployment differential (for migrants). Moreover, comparing EU-born migrant women with those born in third countries reveals a third axis of disadvantage: third-country migrant women's unemployment rates are 5.6 percentage point higher than those of EU migrants (14% and 84% respectively)

[2]The following sources have been used: European OECD countries: European Social Survey, 2002-2010. Canadian General Social Survey, cycle 23, 2009; New Zealand General Social Survey 2008; United States 2004-2012 General Social Surveys.

[3]From being one of the major European emigration country until the mid-1970's, Italy has gradually

Looking at a more dis-aggregated territorial level, Lombardy holds the second highest incidence of foreigners in the total resident population, with a share of 11.3%, with the highest incidence belonging to the Emilia Romagna with 12% (Bettin and Cela, 2014).

The role of immigrants' perceived discrimination on remitting behavior is a priori ambiguous. Perceived discrimination can imply higher economic and psychological costs[4] which can in turn affect labor outcomes which are responsible for remitting behavior (Docquier and Rapoport, 2006). However, the magnitude and direction are not straightforward ($\downarrow\uparrow$). On one hand, there can be an income effect ($\downarrow$) due to an unequal access to the labor market or the so called 'brain waste'.[5] In other words, migrants would remit less because of a lower disposable income to be spent both locally and transnationally. On the other hand, there can be a return intention effect ($\uparrow$). Remittances can increase if discrimination acts as return migration device for migrants residing abroad (Dustmann and Mestres, 2010). Indeed, the time spent in the destination country decreases as a consequence of heavy workloads with long working hours, limited training facilities, poor career development as well as recorded abuses. Thirdly, the two effects can be jointly present.

Little research has addressed this issue and in a partial way, in considering the first but not the second channel. Carling and Hoelscher (2013) describes the role of perceived discrimination[6] on the capacity to remit for immigrants residing in Norway. While discrimination does not significantly affects remittance-behaviour, the authors find that economic integration, mainly defined as labour market position[7], is crucial. Gorodzeisky and Semyonoy

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evolved, as Greece, Spain, or Portugal to some extend, to a net immigration country. She has become one of the most popular European destinations for migrants, with a stock of 5.7 million of foreign born people in 2012, representing 9.6% of the total population (OECD, 2014). Between 2008 and 2012, the total stock of foreign born people increased an average of 7% a year. Most of the immigrants have settled in the Northern or in the Centre of Italy, which are the most prosperous and therefore the most attractive regions.

[4]For economic effects see Dancygier et al. (2014) which reviews the economic discrimination experienced by immigrants in Europe; and Lowell et all. (1995) on Hispanics' labor conditions in the United States. For psychological effects of ethnic discrimination see Yip et al. (2008) which considers the experience of Asians in the United States. For the effects on the quality of life, see Ng et all. (2015) documenting the experience of Chinese immigrants in Hong Kong.

[5]Ozden (2006) broadly defines brain waste as the difference in the occupational attainment of immigrants who have similar education backgrounds but are from different countries. Focusing on the United States he finds that highly educated immigrants from certain countries are less likely to obtain skilled jobs. Among the lowest likelihood of obtaining skilled jobs are migrants from several Latin American, Eastern European, and Middle Eastern countries.

[6]Perceived discrimination is taken into account as a fundamental dimension of socio-cultural integration together with language proficiency and sense of belonging.

[7]Individuals are asked whether they have had difficulties with regular and unexpected expenses; whether they are employed; whether they receive pension and whether they have a certain degree of security.

(2006) confirm previous conclusions, considering Filipino immigrants' labor market discrimination in a gendered perspective. They show how remitting behavior differs between male and female immigrants as a consequence of individual gendered characteristics and earning disparities[8]. Cortes (2010) also considers a gendered environment which pertains to Filipinas migrants. She finds that migrant mothers send significantly fewer remittances than Filipino fathers because they are underemployed. This is due to most female migrants working in relatively low remunerated occupations such as domestic workers. Finally, from a broader perspective, Marcelli and Lowell (2005), analysing the role of social capital on the amount of remittances sent back home from Mexican immigrant residing in Los Angeles, conclude that remittances are positively related to immigrant homeownership in Los Angeles County and negatively associated with having had public health insurance such as Medicaid.

Our work pays exclusive attention to perceived economic discrimination while taking into account differences between women and men. Following the empirical strategy by Batista and Umblijs (2014), we find that, beside traditional individual economic and non-economic characteristics, a more discriminating destination environment leads to lower amount of remittances but only for women. More importantly, in exploring the possible channels at work as in Bollard et al. (2011), we find that the effect mainly goes through female immigrants' labor market conditions and only slightly through the willingness to leave Lombardy. The results are worthy of note since they suggest that ethnic discrimination in the global economy may have an indirect effect on economic conditions of households left behind in the local economy through a considerable reduction in remittances.

The remainder of this paper is organized as follows. Section 2 describes the datasets used to conduct the empirical analysis. Section 3 provides the two specifications estimated distinguishing between base specification and augmented one with gender discrimination interactions. Finally, Section 4 concludes.

2   The data

To analyse the relationship between remittances and discrimination we use micro data from the *Foundation for Initiatives and Studies on Multi-Ethnicity* (ISMU) which monitors the immigration experience to the Lombardy region, the most preferred immigration

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[8]The net effect of gender on earnings seems to have a cumulative effect on the differential ability of men and women to remit. According to them, about 70 percent of the gender gap in remittances may be viewed as net effect of gender. Yet only 25 percent of this gap is attributed to earnings differentials between men and women. Apparently, net earnings disparities between men and women (after adjustment for living expenses) are considerably larger than the gross earnings gap.

destination in Italy. The Survey of interest conducted by the Regional Observatory for Integration and Multiethnicity (ORIM) relies on Centre Sampling (CS method henceforth) method which is a a sampling technique developed and implemented by the ISMU Foundation, particularly in reference to the study of the immigrant population. its main advantage consists in allowing to track legal as well as illegal immigrants which is the main shortcoming in using alternative sources such as administrative and survey data (Baio et al., 2011).[9]

Vogel and Kovacheva (2008) provides evidence on the high reliability of this method and its wide applicability to follow the so called 'hidden populations', such as immigrants without a regular permit. Indeed, the CS method enables to carry out a probabilistic survey even in the situation where the list of statistical units representing the universe of reference is missing or partially incomplete, as in the case of surveys targeting all migrants without regard to their juridical status. It overcomes this obstacle by exploiting social interactions within the immigrant population. Indeed, the CS technique is based on the need of all migrants, legal and illegal, to attend at least one local aggregation centre for social contacts, health care, religion, leisure or simply for everyday needs. The full list of aggregation centres (institutions, places of worship or entertainment, care centres, meeting points, shops, telephone centres, etc.) can be fairly easily mapped by an informed researcher. Once a sufficiently wide and heterogeneous set of centres is identified, it is possible to randomly identify a sample of centres, and then randomly choose a sample of immigrants among the attendees of each selected centre. Notice that the number of interviews in a certain centre will depend on its size, with smaller centres given a smaller probability to be chosen than larger ones. It is important to underline that the final sample of immigrants obtained following this procedure cannot be representative of the whole reference population. Indeed, the inclusion probability of immigrant i selected in centre l depends positively on the number of centre he/she visits, and negatively on the number of regular attendees of centre. However, the probability of inclusion can be obtained ex-post, and used to compute a set of weighting coefficients that correct for the inclusion probability of each immigrant in the sample. This weighted sample has the same representativeness of a simple random sample (SRS) drawn proportionally from the distribution of attendance profile in the universe of reference.

Finally, the stock of immigrants can be estimated reconciling the CS weighted data with

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[9]It is worth to notice that there are other estimation methods that can be implemented to provide information on the whole immigrant population, or to complement the existing data sources on regular migration with specific figures on stocks and flows of undocumented migrants. A detailed discussion of alternative methods can be found in the CLANDESTINO Project, which reviews the state of the art on the topic of illegal immigration in Europe, critically describes the features and the critiques of the existing methods, and assesses the quality of the available estimates obtained with different techniques (Jandl et al., 2008).

the population registry data, augmenting the number of registered immigrants by the proportion of respondents declaring to not be listed in the population registry. Other than providing a valid estimate of the size of the immigrant population, the second advantage of the data collection carried out by ISMU Foundation using the CS method is that it is specifically customized in order to give a detailed picture of the migration phenomenon. Indeed, relative to official data sources, the survey contains more precise and detailed information on the demographic and socio-economic characteristics of the immigrant population from 2002 to 2013. Moreover, it collects valuable and unique information on specific aspects related to the migration phenomenon, such as on integration processes, paths in and out the illegal status, remitting behaviour, and perceived discrimination.

For the purpose of this study, the benchmark model deals with individual remitting behaviour and perceived discrimination plus other traditional individual characteristics discussed at length in Section 3.1.

Specifically, since information on perceived discrimination is available only for years 2012 and 2013, while replies concerning remitting behaviour are available over a longer time interval (from 2004 to 2013), our final time span is limited to years 2012 and 2013. The sample of interest includes 3457 immigrants (with 1345 women and 2112 men) whose individual characteristics are provided in Table 1. Immigrants come from 104 origins from all over the World[10]. As Table 2 shows, the most important origin country is Morocco, followed by Egypt and Ukraine. If then female immigrants are concerned, Ukrainian women are the most widespread both in absolute numbers and in relative terms (as a percentage of the total migrant population). The over-representation of females among migrants is observable also in the case of other Eastern European countries (Moldavia, 84%; Romania, 71%), but also in Peru (67%) and in Ecuador (63%). Whereas, looking at men, Egyptian are the most numerous in absolute terms and males from Pakistan in relative numbers (Table 2).

2.1 Remitting behavior

Remitting behaviour is defined in the Survey at household level as the 'mean monthly household amount expenses for remittances'. It belongs to an array of questions available from 2004 to 2013 related to household monthly income expenditures for food and clothes, housing (loan and rent) and savings. In particular, the question reads as follows: '*How much of your household income is monthly spent for remittances?*'. Since this work looks at individual remitting behaviour, we have restricted the sample of interest to those households where just one working-age migrant (either man or woman) is present as main

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[10]For the complete original list of origin countries see Appendix A.

Table 1: Characteristics of respondents

	Survey	Sample
Female	0.47	0.39
Age	38.9	37.9
Years of stay	10.7	8.6
Education[11]	2.5	2.5
Children[12]	0.93	0.14
Children abroad	0.45	0.85
Legal status	0.89	0.81
Income	688.9	687.5
Regular work	0.58	0.60

remitter. A working age migrant is an individual aged 25 years old, who lives with neither his parents nor his children aged more than 18 years old.[13] Concerning the remitting behaviour of the selected sample of interest, 64% of the immigrants remit. Among the remitters, the monthly amount of remittances is around 265 euros. The percentage of remitters is similar among females and males, with 65% of women remitting monthly compared to 63% of men. However, the amount of remittances sent back home varies by gender with women meanly remitting 304 euros per month while men only 236 euros. The average monthly amount of remittances differs also by country of origin, as it is shown in Figure 1. The best remitters are the Ukranian migrants who send back around 360 euros per month, followed by Indians and Romanians. the ones who remit less are instead migrants from the Ivory Coast with 192 auros per month.

2.2 Perceived discrimination

The specific information provided in the survey on perceived discrimination relates to multiple dimensions. Immigrants are asked on discrimination experienced in six different environments namely at work, at school, on the house search, with services, with the police and in relationship. In this paper we focus on the first one, whose question reads as follows: '*Have you experienced a discriminating situation at work during the last 12 months?*'.[14]

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[13]Although this strategy makes us lose two thirds of the observations originally included in the survey, it allows us to focus on migrants whose remittance behavior is more likely to be affected by discrimination at work since they migrated for economic reasons.

[14]Summary statistics on the other forms of perceived discrimination have been calculated by the authors and are available upon request.

Table 2: Top origin countries

Origin country	total	females	males	%females	%males
Morocco	405	101	304	0,24	0,75
Egypt	268	7	261	0,02	0,97
Ukraine	268	257	11	0,95	0,04
Senegal	256	16	240	0,06	0,93
Romania	194	139	55	0,71	0,28
Pakistan	150	3	147	0,02	0,98
Tunisia	117	14	103	0,11	0,88
Peru	116	78	38	0,67	0,32
Albania	106	38	68	0,35	0,64
India	102	12	90	0,11	0,88
Moldavia	101	85	16	0,84	0,15
Ivory Coast	87	27	60	0,31	0,68
Ecuador	83	53	30	0,63	0,36
China	80	48	32	0,6	0,4

In our sample, while women migrants feel to be less concerned by discrimination at work with respect to men (13% versus 19%), perceived discrimination tends to be more associated with effective discrimination in the case of females (Table 3) as far as individual income and being employed regularly are concerned.

Table 3: Workplace discrimination and situation in the labor market in our sample

		Individual income (in euros)	Regular work (in %)
Females	Workplace discrimination=1	880	54.5
	Workplace discrimination=0	937	75.5
Males	Workplace discrimination=1	990	52.8
	Workplace discrimination=0	1005	47.5
Total	Workplace discrimination=1	951	56.7
	Workplace discrimination=0	974	60.8
	Sample average	970	60.4

Figure 2 shows that, in addition to gender and being a migrant, discrimination can depend on the country of origin of the migrants.[15] Migrants from sub-Saharan Africa, for example, are more likely to experience workplace discrimination than those coming from other

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[15]There is evidence of the so called 'third axis of discrimination' raised by Rubin et al. (2008).

Figure 1: Average montly amount of remittances by origin country

areas. In our sample, all Mozambican immigrants declared having faced discrimination at work during the last twelve months. Moreover, among the countries which are mostly concerned with discrimination (implying that more than 20% of the respondents experienced workplaced discimination), there are eleven countries belonging to sub-Saharan Africa.
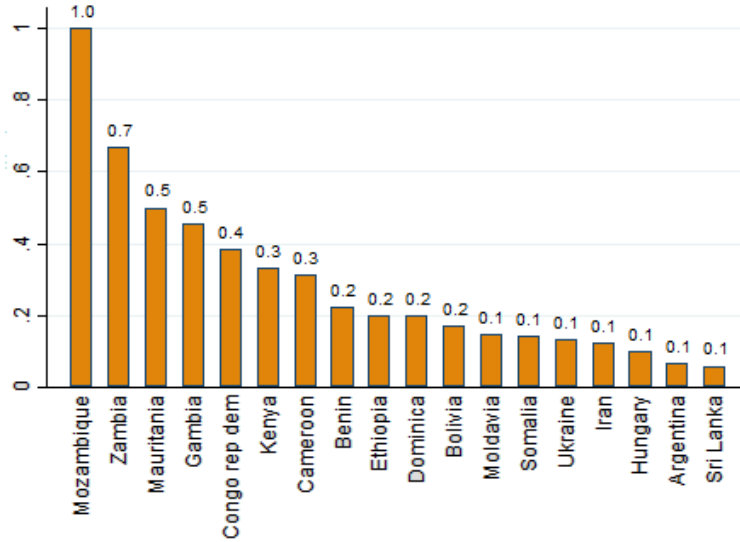
Figure 2: Perceived discrimination among migrants (%) by country of origin

3   Empirics

3.1   Empirical strategy

To examine the effect of perceived discrimination on migrants' remitting behavior, we follow Batista and Unblijs (2014) by first estimating the extensive margin of remittances (the probability of remitting) and secondly, the intensive margin of remittances (the average monthly amount of remittances).

$$Remittances_i = \beta_1 discrimination + \beta_2 X_i + \gamma_i + \delta_p + \epsilon_i \tag{1}$$

The dependent variable Rem_i is either a binary variable that takes the value 1 if the respondent i sends monthly remittances and 0 otherwise, or the amount of monthly remittances sent by the respondent i. X_i represents a vector of individual demographic and socio-economic characteristics expected to influence both the probability of remitting and the amount remitted. They include age, marital status, legal status, number of children abroad, total number of children, education, duration of stay in Italy, level of income and gender. The variable of interest $discrimination_i$ is a dummy variable equal to 1 if the migrant i has experienced discrimination at work during the last 12 months. To control

for specific remittance behavior associated with origin countries and for country of destination' regional characteristics, we also include country of birth (Daldy et al. 2013) γ_i and destination provincial δ_p fixed effects.

We estimate different specifications of this econometric model. We start by estimating a model for the extensive margin of remittances (i.e. the migrant's decision of whether to remit or not). For this purpose, we run a Probit model where the dependent variable is a binary variable equal to 1 if the individual migrant sent any form of remittances in the year of the survey, and we include all controls described above. More specifically, the Probit specification writes as follows:

$$Pr(Y_i = 1|X_i) = \Phi(\beta_1 x_i + X_i \beta) + \gamma_i + \delta_p + \epsilon_i \tag{2}$$

where Y_i is a binary variable taking value 1 when individual i sent any remittances to the origin country; β_1 is the main coefficient of interest linked to economic discrimination. X_i is the vector of control variables described previously, which are likely correlated with remittances behaviour. We are also interested in the amount of remittances sent, the intensive margin, and use a zero censored Tobit model to account for the significant proportion of individuals that have not sent any remittances in the year prior to the survey. There are a number of alternative solutions to the issue of zero censoring in remittance data. (Bettin et al., 2012) suggest double hurdle and Heckit models to account for the possibility of different mechanisms influencing the decision to remit and the amount to be remitted. While this has the advantage of accounting for non-remittance due to budgetary constraints, this type of model can be sensitive to identification exclusions. This is especially a problem for data on remittances, as finding realistic variables that affect the decision to remit money, but not the amount, are difficult to conceive of (Amuedo-Dorantes and Pozo, 2006). Therefore, we opt for the Tobit model, which accounts for the zero censoring without the identification issues of the selection models. More specifically our econometric specification is:

$$Y_i^* = \beta_1 x_{i1} + X_i' \beta + \gamma_i + \delta_p + \epsilon_i \tag{3}$$

$$Y_i = max(0, Y_i^*) \tag{4}$$

$$\epsilon_i \sim N(0, \sigma^2) \tag{5}$$

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where the latent variable Y_i^* is modeled as depending on the same independent variables as those included in the Probit model, and the dependent variable Y_i is the zero censored amount remitted in Euros in the current year.

3.2 Results

Table 4 provides estimation results on the relationship between remittances and economic discrimination experienced by immigrants in Northern Italy, considering traditional variables of interest.[16] Columns 1 and 2 consider the full sample of interest while from column 3 onward the gender dimension of the respondent is exploited, presuming that discrimination experienced at work can impact men and women' remitting behaviour in a different way.

First, our results show that the sign and the significance levels of each traditional control variable is preserved accordingly to the literature. We observe that remittances follow a U-shaped pattern if age is taken into consideration, with the probability to remit and the amount of remittances raising in early age and falling in old age. As expected, the remitting behavior is strongly influenced by linkages to the home country: having a spouse and/or children abroad positively affect the propensity to remit and the amount of remittances, while the duration of residence in the host country produces the opposite effect. Moreover, coefficients associated with income, having a regular job and total children confirm that the higher migrants' standards of living, the higher their capacity to remit. On the effect of education on remittances, we find a negative relationship which supports the idea that more educated migrants often come from richer families, in so having a lower propensity to remit and to return for supporting them.

Regarding our variable of interest, we find that the effect of perceived economic discrimination significantly and negatively affects the value of monthly remittances sent by female migrants, while it does not influence males' remittances. Since economic discrimination becomes significant just if female immigrants are taken into account, from Table 5 onward we restrict the empirical analysis to women only.

3.2.1 Transmission channels

As discussed in Section 1, economic discrimination can affect remitting behaviour through two main channels: individual income and/or employment status and return intention. Table 3, and Figure 3 show that those female immigrants who feel discriminated in the

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[16]Estimation results accounting only for traditional variables of interest without considering perceived economic discrimination are preserved and available upon request.

Table 4: Probability of remitting and workplace discrimination

	Total sample		Male sample		Female sample	
	Probit	Tobit	Probit	Tobit	Probit	Tobit
Workplace discr.	-0.036	-0.097	0.036	0.024	-0.194	-0.276***
	(0.062)	(0.136)	(0.086)	(0.222)	(0.123)	(0.012)
Age	0.038	-0.000	0.067*	0.108	0.034	0.058***
	(0.026)	(0.062)	(0.035)	(0.101)	(0.048)	(0.000)
Age squared	-0.000	0.000	-0.000**	-0.001	-0.000	-6.13e-05***
	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(8.63e-06)
Spouse abroad	0.296***	1.111***	0.377***	1.431***	0.082	0.512***
	(0.113)	(0.276)	(0.110)	(0.295)	(0.125)	(0.030)
Legal	0.010	-0.033	0.066	0.257	-0.095	-0.459***
	(0.071)	(0.247)	(0.094)	(0.257)	(0.157)	(0.010)
Children abroad	0.581***	1.533***	0.413***	1.081***	0.762***	1.811***
	(0.070)	(0.207)	(0.113)	(0.300)	(0.091)	(0.016)
Children	-0.330***	-0.953***	-0.247**	-0.677**	-0.303***	-0.912***
	(0.063)	(0.196)	(0.107)	(0.275)	(0.077)	(0.019)
Education	-0.069**	-0.193***	-0.085**	-0.188**	-0.060	-0.195***
	(0.027)	(0.063)	(0.039)	(0.081)	(0.037)	(0.002)
Duration of stay	-0.027***	-0.079***	-0.015*	-0.054***	-0.041***	-0.097***
	(0.007)	(0.019)	(0.008)	(0.018)	(0.011)	(0.001)
Income (log)	0.031***	0.726***	0.051***	0.769***	-0.014	0.606***
	(0.010)	(0.030)	(0.014)	(0.037)	(0.021)	(0.001)
Regular work	0.454***	1.214***	0.529***	1.223***	0.344**	0.888***
	(0.077)	(0.209)	(0.085)	(0.226)	(0.142)	(0.008)
Constant	-0.638	2.998***	-1.247	-6.427***	0.285	-23.84***
	(0.516)	(1.153)	(0.818)	(0.165)	(0.749)	(0.013)
Observations	3,226	2,750	1,920	1,602	1,250	1,148

* Significant at the 10% level ** 5% level *** 1% level.
The standard errors in parentheses are clustered by country of origin.

workplace earn less and are more likely to be employed irregularly on one hand, and are more willing to move elsewhere (within or outside Italy) on the other hand.

To disentangle the role of the above transmission channels, we consider specifically variables related to individual income and return intentions, and we add them one by one to observe how the coefficient associated to economic discrimination changes with respect to the baseline model (as in columns 1 and 2 of Table 6). From column 3 to 6 of Table 5, variables measuring immigrants' labor market conditions, as individual income and regular employment, are first included. Both of them are positive and significant in increasing the role of economic discrimination in discouraging the probability to remit and the amount remitted. From column 5 onward, leaving intentions are also taken into account. In particular, a first broader question on leaving Lombardy is added (columns 7 and 8), then a more specific question on the likelihood to come back to the home country
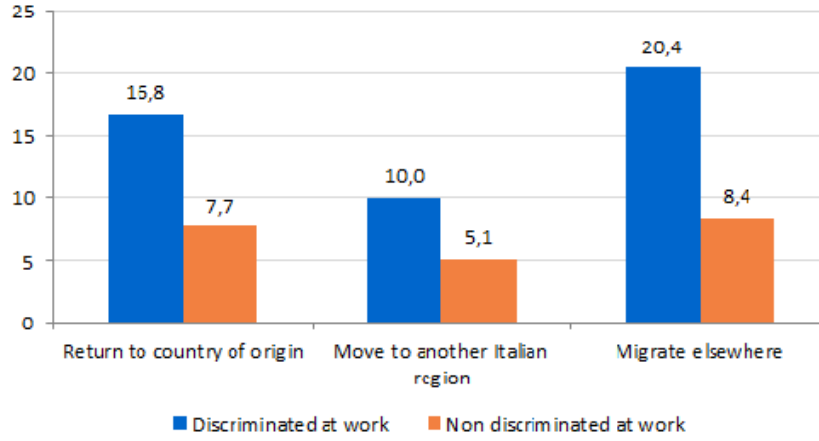
Figure 3: Female migrants' willingness to move in the next 12 months (% of respondents)

(columns 9 and 10) and finally the intention to move to a third country (columns 11 and 12). The most important channels at work are the likelihood to come back home and the intention to move in another country different from Italy and the origin country. Coming back home affects positively the amount of remittances sent back home (Wolf, 2013) and strengthens the role of economic discrimination in decreasing both the probability and the amount remitted. Moving elsewhere, instead, decreases the amount of remittances sent back home given the additional costs the migrant is likely to incur where redefining her migration plan.

Overall, results presented in Table 5 suggest that the negative effect of workplace discrimination on remittances mainly passes through female immigrants' labor market conditions and the willingness to migrate elsewhere.

Non linearities

Table 6 also controls for non-linearities, showing that the discrimination-remittances relationship varies with the level of income, education and the duration of stay in Italy. Our results in columns 1 and 2 show that the remittances-reducing effect of workplace discrimination decreases with migrants' level of income and education. On the contrary, column 3 indicates that while discrimination at workplace has a positive effect on remittances when migrants have just arrived, the effect becomes negative after a certain length of stay. This result may be explained by the decrease in the desire to leave with the migrants' duration of stay. As a brief, the remittances-reducing effect of workplace

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discrimination applies particularly to female migrants who are less educated, have a low income and are long-settled.

Table 5: Probability of remitting and workplace discrimination (females only)

	Female sample											
	Probit	Tobit	Probit	Tobit	Probit	Tobit	Probit	Tobit	Probit	Tobit	Probit	Tobit
Workplace discrimination	-0.198	-0.388***	-0.200	-0.303***	-0.194	-0.276***	-0.214*	-0.305***	-0.216*	-0.325***	-0.214*	-0.305***
	(0.130)	(0.0141)	(0.132)	(0.011)	(0.123)	(0.0121)	(0.138)	(0.0172)	(0.128)	(0.135)	(0.138)	(0.016)
Income (log)			0.013	0.680***	-0.0149	0.606***	-0.013	0.601***	-0.012	0.603***	-0.013	0.603***
			(0.020)	(0.001)	(0.021)	(0.001)	(0.022)	(0.001)	(0.021)	(0.001)	(0.022)	(0.001)
Regular work					0.344**	0.888***	0.297**	0.696***	0.300**	0.707***	0.299**	0.698***
					(0.142)	(0.009)	(0.147)	(0.010)	(0.145)	(0.010)	(0.147)	(0.010)
Leave Lombardy							0.036	0.014				
							(0.142)	(0.0202)				
Return to home country									0.114	0.217***	0.111	0.199***
									(0.183)	(0.040)	(0.187)	(0.043)
Move elsewhere											-0.021	-0.180***
											(0.173)	(0.021)
Constant	-0.336	-26.37***	0.111	-23.92***	0.285	-23.84***	0.476	-24.21***	0.464	-24.314***	0.470	2.945***
Observations	1,275	1,173	1,250	1,148	1,250	1,148	1,156	1,065	1,156	1,065	1,156	1,065

* Significant at the 10% level ** 5% level *** 1% level.

The standard errors in parentheses are clustered by country of origin.

Table 6: Probability of remitting and discrimination: interaction terms

	Female sample		
	Tobit	Tobit	Tobit
Workplace discr.	-2.155***	-1.345***	0.171**
	(0.068)	(0.070)	(0.085)
Discr.*Income	0.291***		
	(0.010)		
Discr.*Education		0.365***	
		(0.013)	
Discr.*Duration of stay			-0.054***
			(0.006)
Income	0.577***	0.607***	0.593***
	(0.002)	(0.002)	(0.001)
Education	-0.198***	-0.272***	-0.207***
	(0.002)	(0.002)	(0.002)
Duration of stay	-0.097***	-0.094***	-0.089***
	(0.001)	(0.001)	(0.000)
Constant	-24.09***	-23.85***	-24.14***
	(0.012)	(0.012)	(0.012)
Observations	1,065	1,065	1,065

* Significant at the 10% level ** 5% level *** 1% level.
The standard errors in parentheses are clustered by country of origin.

4   Conclusion

Despite in most OECD countries discrimination against immigrants and their offspring remains a key issue both on the labor market (OECD, 2013), little research has been devoted to the effect of immigrants'economic discrimination on remittances, where the possible channels at work can be a decrease in individual income as well as an increasing return intention.

Using survey data from the *Foundation for Initiatives and Studies on Multi-Ethnicity* (ISMU) which monitors the immigration experience to the Lombardia region, the most preferred immigration destination in Italy, this paper originally aimed at quantifying the relationship between perceived economic discrimination and amount remitted (intensive margin), conditional on remitting at all (extensive margin).

Empirical results show that, beside traditional individual characteristics, a more discriminating destination environment leads to lower amount of remittances but only for women. The effect mainly goes through female immigrants' labor market conditions and only slightly through the willingness to leave Lombardy. Moreover, controlling for non linearities, the empirical results have also shown that the remittances-reducing effect of workplace discrimination applies particularly to female migrants who are less educated, have a low income and are long-settled.

The results are worthy of note since even if the debate on the effect of discrimination on economic development is still open, they suggest that economic inequality experienced by immigrants in the destination country can have an indirect effect on economic conditions of the households left behind through a reduction of remittances sent back home.

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A   List of origin countries

The original list of origin countries includes: Afghanistan, Albania, Algeria, Angola, Argentina, Armenia, Azerbaijan, Bahrain, Bangladesh, Belize, Benin, Bhutan, Bielorussia, Bolivia, Bosnia and Herzegovina, Brasil, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Ciad, Chile, China, Colombia, Comoros, Congo, Costa Rica, Croatia, Cuba, Czech Republic, Democratic Republic of the Congo, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Eritrea, Estonia, Ethiopia, Gambia, Georgia, Ghana, Guinea, Guinea Bissau, Haiti, Honduras, Hungary, India, Indonesia, Iran, Iraq, Ivory Coast, Jamaica, Jordan, Kazakhstan, Kenia, Kyrgyzstan, Kosovo, Lebanon, Lettonia, Liberia, Libya, Lithuania, Macedonia, Madagascar, Malaysia, Maldives, Mali, Mauritania, Mauritius, Mexico, Moldavia, Mongolia, Montenegro, Morocco, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Nigeria, North Korea, Pakistan, Palestinian Territory, Panama, Paraguay, Peru, Philippines, Poland, Romania, Russia, Rwanda, Saint Vincent and the Grenadines, Senegal, Serbia, Seychelles, Sierra Leone, Slovacchia, Slovenia, Somalia, South Korea, South Africa, Sri Lanka, Sudan, Syria, Taiwan, Tanzania, Thailand, Togo, Tunisia, Turkey, Ucraine, Uganda, United Arab Emirates, Uruguay, Uzbekistan, Venezuela, Vietnam, Zambia.