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Remittances, education and return migration.

**Evidence for immigrants in Spain** 

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#### **Abstract**

We analyse the relationship between intentions to return, remittances and human capital for immigrants in Spain. We use microdata from the 2007 Encuesta Nacional de Inmigrantes -provided by the Spanish Institute of Statistics- to analyse whether more educated migrants are more or less likely to remit (the extensive margin) and, in the case they do remit, whether they send more or less remittances than less educated migrants (the intensive margin). We find out a negative association between education and remittances at the extensive margin, and a strong positive relationship at the intensive margin. Combining both the extensive and intensive margins reveals that, in general, more educated migrants do remit significantly more. However, the evidence is mixed once we take into account their different origins and their intentions to return. Our results show a different behaviour of immigrants depending on their region of origin that could be related to cultural and institutional differences

#### Keywords

Migration, Remittances, Return migration, Education.

#### **JEL Classification**

I21, F22, F24, F66, F63.

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#### 1. BACKGROUND AND OBJECTIVES

The impact of migrants' education level on remittance flows is one of the most discussed issues within the migration literature (Dustmann and Glitz, 2011; Yang, 2011; Rappoport and Docquier, 2005). In fact, it has been argued that the negative impact of the brain drain due to migration could be offset by the remittances that skilled migrants send back home to their family. Do skilled migrants remit more or less than unskilled migrants? If they remit more than unskilled immigrants, the impact of brain drain would be lower for their home country. Given that most developed countries' immigration policies increasingly favour skilled migrants, whether they remit more or less than unskilled migrants has important implications for migrants' home countries. From a policy perspective, the concern is whether migration policies that shift the education composition of migrants affect remittances. Moreover, policies related to return migration are also attracting growing interest and, in particular, those intended to support the effective management of temporary migration and those that involve assistance for voluntary return. These policies can also affect remittances' flows as the behaviour of temporary and permanent immigrants is quite different. Further, the return to the origin country could have additional benefits through different channels: first, migrants bring back with them the education and working experience they acquired abroad together with the social capital obtained from their migration experience and, second, they may come back with the savings accumulated during their stay abroad.

The objective of this paper is to analyse the relationships between remittances behaviour, return migration and educational levels for immigrants in Spain. Studying immigration in the Spanish labour market is a matter of great interest, because Spain has become in a relatively short time a country with significant and heterogeneous migration flows. In fact, and in contrast with many countries, immigration to Spain originates from a highly varied range of countries, with origins as diverse as Latin America, the Maghreb and Eastern Europe. Furthermore, immigration from Latin America is characterised by the sharing of both the Spanish language and culture, but the level of development of Latin American countries is clearly lower than the one in Spain, and there are marked differences between the various countries on the continent. This feature is not common to other countries that have traditionally received immigration, such as the United States, the United Kingdom and Australia, in which immigrants (with English as their mother tongue) normally come from only a few countries, some of which have a similar level of development. Moreover, the recent economic crisis has changed the dynamics of migration flows and it is important to increase the knowledge about immigrant's behaviour., Extensive research is still needed to devise

proper immigration strategies and policies to guarantee economic well-being and social stability for those immigrant particularly affected by the current worsening of labour market conditions, and also to analyse the potential impact on their countries of origin.

Taking into account previous exposition, microdata from the 2007 Encuesta Nacional de Inmigrantes -provided by the Spanish Institute of Statistics- are used to analyse whether more educated migrants are more or less likely to remit (the extensive margin) and, in the case they do remit, whether they send more or less remittances than less educated migrants (the intensive margin). The main contribution of the paper is to consider the heterogeneity of the immigrant population in Spain, an issue that has been omitted in the previous literature. In particular, we will carry out a specific analysis of three particular groups of immigrants in Spain: Ecuadorian, Romanian and Moroccan, who represent three different realities in terms of their countries of origin, but that also account for an important share of total immigrant population. Our results for all immigrants show a negative association between education and remittances at the extensive margin, but a strong positive relationship at the intensive margin. However, the evidence is mixed once we take into account their different origins and their intentions to return. Our results show a different behaviour of immigrants according to their origin that could be related to cultural and institutional differences.

The rest of the paper is structured as follows: section 2 briefly summarises the literature on the topic; section 3 describes the data used in our analysis; the econometric specification and results are shown in section 4; and, last, the paper ends with some final remarks.

#### 2. LITERATURE REVIEW

As highlighted by Bollard et al. (2011), there are several reasons to believe that there are differences in the remitting patterns of highly skilled and less-skilled emigrants, but it is not clear in which direction is the difference. On the one hand, several factors tend to lead highly skilled migrants to be more likely to remit and to send a larger amount of remittances. In particular, highly skilled individuals are likely to earn more as migrants, potentially increasing the amount they can remit. Moreover, their education may have been funded by family members in the home country, with remittances serving as repayment. Last, skilled migrants are less likely to be illegal migrants and more likely to have bank accounts, lowering the financial transaction costs of remitting. On the other hand, several other factors might lead highly skilled migrants to be less likely to remit and to remit less. First, high skilled immigrants may come from richer households, which have less need for remittances to alleviate liquidity constraints. Second, highly skilled migrants may be more likely to migrate with their entire household, so they would not have to

send remittances in order to share their earnings with their household and last, but also related to this point, they might have less intention of returning to their home country, reducing the role of remittances as a way of maintaining prestige and ties to the home community. So, the contribution of migrants to the development of their origin country will not only be limited to remittances but also includes the resources they bring back to the country in case they decide to come back (return migration) (Adams, 2011; OECD, 2008).

Policies related to return migration are also attracting growing interest (Mezger Kveder, 2011) and, in particular, those intended to support the effective management of temporary migration and those that involve assistance for voluntary return. For this reason, from a policy perspective, it is relevant to understand the relationships between remittances behaviour, return migration and educational levels. The literature has suggested four main reasons to explain return migration: failure to integrate into the host country; individuals' preferences for their home country; achievement of a savings objective; and the opening of employment opportunities in the home country thanks to the experience acquired abroad. The second and third argument suggest that perhaps return migration can be considered as part of the initial migration plan and, as a result, the behaviour of the immigrant in the foreign country will be determined by these decisions, i.e.: will remit more.

There are many situations in which remittances "buy" various types of services for the immigrant that intends to came back to the origin country at some later stage, such as taking care of the migrant's assets (land and cattle, for example) or relatives (children, elderly parents) at home. In this context, education also plays a role. As pointed out by Faini (2007), migrants with higher education seem to have less intention to return than migrants with lower education as they have better prospects in the host country. If that is the case, more educated migrants should transfer less for an exchange motive, reflecting their lower propensity to return. But, bargaining power of the two parts also play a role (Aísa et al., 2011). In this context, more educated migrants are expected to remit more to compensate the family for the additional education expenditures incurred in the past. Summarising, it is not clear which is going to be the effect of education on remittances, with the sign of the effect depending on whether return intentions or bargaining issues matter more to remittance behaviour.

The existing empirical literature on the determinants of remittances and return migration is largely based on microeconometric analyses, and the findings obtained up to now are inconclusive. Many of the studies examining motives to remit have focused on altruism and self-interest. While altruism would imply a negative relationship between recipients' income (and education) and remittances sent home, self-interest might imply a positive relationship between these variables of

interest. However, both the altruistic and the exchange motives for remittances yield unclear theoretical predictions as to whether more educated migrants remit more or less than do less educated migrants. Perhaps the most ambitious study in this context is the one by Bollard et al. (2011). Using microdata from surveys of immigrants in 11 major destination countries, they analyse the relationship between education and remitting behaviour. Their results show a negative relationship between education and the probability of remitting, and a strong positive relationship between education and the amount remitted. Combining these intensive and extensive margins yields an overall positive effect of education on the amount remitted for the pooled sample, with heterogeneous results across destinations. Plans to return seem to affect only the decision to remit but not the amount sent. Regarding the relationship between remittances and return migration, it is necessary to consider also the work by Dustman and Mestres (2010). These authors have found large differences in remittance behaviour between households with permanent and temporary migration plans among immigrants in Germany. This association between the temporary character of migration and remittances reflects that those immigrants who are intending return home are also more inclined to remit. Also Sinning (2011) using again data for immigrants in Germany, has found that return intentions positively affect financial transfers of immigrants to their home country, being the most relevant variable to explain individual differences in remittance behaviour. Pinger (2010) has also examined the determinants and consequences of temporary and permanent migration using a large and detailed household dataset on migration in the Republic of Moldova. The results obtained regarding remittances reveal that, in absolute terms, temporary migrants remit around 30 per cent more than their permanent counterparts. Last, Docquier et al. (2012) using a different perspective by analysing aggregate bilateral remittances data, have found that immigration policies determine the sign and magnitude of the relationship between remittances and migrants' education. In particular, they find that the relationship between remittances and migrants' education is inverse-U shaped and that for a given country pair, a more skilled pool of migrants will send more remittances if the destination country has a more restrictive immigration policy.

#### 3. THE NATIONAL IMMIGRANT SURVEY 2007

The National Immigrant Survey (hereafter, ENI) is a survey prepared by the Spanish National Statistics Institute in order to obtain detailed information on the international nature of immigration in Spain, supplementing information gathered from regular sources of data (such as the Padrón Municipal, the Encuesta de Variaciones Residenciales, the Encuesta de Población Activa or the Censo de Población), which provide partial information on the characteristics of immigration. The ENI covers all of the national territory of Spain and the data collection was conducted between November 2006 and February 2007 based on the Spanish Population Register

(Padrón Municipal, using the week prior to the interview as reference period. The survey was addressed to foreign-born individuals who (intend to) live in Spain for at least one year and the original survey sample comprises approximately 15,500 individuals.

The ENI provides detailed information on the sociodemographic characteristics of immigrants (e.g., age, gender, nationality, country of birth, marital status, education, legal status, and year of arrival in Spain), on their current work situation but also about their behaviour regarding remittances and their ties with origin countries. The range of questions on immigration covered by the survey is very wide comprising, among others, immigrant household structure and accommodation characteristics; family and social networks and various aspects of their migration experience.

The ENI defines immigrants as any individuals born abroad (regardless of whether they have Spanish nationality or not) who at the time of doing the interview had reached at least 16 years of age and had resided in Spain for a year or longer (or, alternatively, in the case of individuals with less than one year's residence in Spain, had the intention to remain there for at least a year). The only exception is individuals born outside Spain who have possessed Spanish nationality from birth, but had not reached two years of age by the time of arrival in Spain. In that case, Spain was considered as their country of origin. This definition of immigrant meant, among other circumstances, that individuals born abroad but with Spanish nationality are considered immigrants, while foreign nationals born in Spain are not. Hence, this approach excludes individuals born in Spain of foreign immigrants, even if their nationality is not Spanish. It also excludes Spanish emigrants who have returned to Spain.

Regarding remittances, two different but related variables are considered in our analysis: first, a dummy which indicates whether a migrant remits or not and, second, the amount of remittances sent. The first variable takes the value of one (remit) whether the migrant gives a positive answer to the question "Do you sent money out of Spain?" while the second variable is defined as the logarithm of the total amount of money sent overseas during the year 2007.

Human capital is proxied in two different ways: first, the information on schooling levels has been recoded as the number of finished schooling years and, second, the different schooling levels have been grouped in 3 categories: primary studies, secondary studies and tertiary studies. This second specification permits us to avoid the critique related to the potential non-linearity of human capital.

In relation to permanent and temporary migration, our data set only provides information on return intentions rather than realized returns. However, Dustmann and Mestres (2011) argue that the history of return intentions represent the optimal data source for modelling the effect of return migration on economic decisions in the host country, such as labour supply, since the economic behaviour is determined by intentions, not by the realizations. On the other hands, intentions are less appropriate to model return determinants and durations, since migrants are likely to adjust their plans over the course of their migration, but this is not our objective. The data set allows us to consider whether the immigrants' plans are to stay in Spain, to return to their country in the next 5 years or to move to a third country in the same period of time. In our analysis, we consider two dummy variables related to the last two categories: return migration and circular or repeated migration.

Other variables employed in the empirical analysis include gender, age, marital status, whether the spouse is living abroad, the number of children in the household and those abroad, the years since the migration, the employment status and the annual income. In addition, a variable has been devised to capture immigrants' legal status, reflecting whether or not they have documents to become legally contracted employees under current Spanish law. We have also considered whether the immigrant asked for a loan in origin country when migrating, if there are plans to bring family to Spain, if they are in touch with family at the origin country and if they are owners of dwelling in Spain. Last, we also consider in the empirical analysis the province of residence in Spain to account for potential differences in the regional labour market of the immigrant.

As previously mentioned, one of the objectives of our paper is to consider the heterogeneity of the immigrant population in Spain when analysing their remittance behaviour. In order to break down the information by area of origin, first, we have group immigrants by country of birth, and then we classify them as belonging to developed or developing countries. Developed countries include the EU-15 countries, Norway, Switzerland, Iceland, Cyprus, Malta, the small European principalities, the United States, Canada, Israel, Japan, Australia and New Zealand. All other countries have been considered as developing countries. Ecuadorian, Romanian and Moroccan immigrants are highly representative of Latin America, Central & Eastern Europe and Africa respectively, being the three biggest groups of immigrants in Spain according to the country of birth.

We excluded from the original sample observations for individuals with incomplete information concerning the variables of interest; for individuals who are over 65 years of age (those under 16 are not included in the survey); and for those immigrants with Spanish nationality at birth. In this way we end up with a final sample of 11,013 immigrants.

# 4. DESCRIPTIVE STATISTICS, ECONOMETRIC SPECIFICATION AND RESULTS

Table 1 provides some descriptive statistics on remittances, plans to return and education for both all immigrants in Spain in 2007 and for immigrants distinguished by their origin countries, developed and developing countries. Moreover we also present descriptive evidence for Ecuadorian, Romanian and Moroccan immigrants. As we can see the share of immigrants sending remittances is above 40% for the whole sample, but there are important differences according to the region of origin. Only 4.4% of immigrants from developed countries sent money abroad in 2007, while this share is over 53% for those coming from developing countries. The behaviour of immigrants from Ecuador, Romania and Morocco is quite different. While Ecuadorians and Romanians remit more than the average immigrant from developing countries, Moroccans are clearly below this average. The amount remitted is also lower than the average for Moroccans and Romanians while the figure for Ecuadorians is substantially higher. Of course, this amount is related with the economic status of the different groups in Spain (see Annex 1), but also with intentions to return: while 8.3% of immigrants from developing countries has plans to return to their origin country in the next 5 years, only 1.3% of Moroccans has these plans. The share for Ecuadorians and Romanians is substantially higher: 14.8% and 8.2%, respectively. From this table, we can also see that the association between remittances, intentions to return and education is not very clear. Ecuadorians have similar educational levels to Romanians, but their behaviour both in plans to return and remittances behaviour are quite different. As for Morocco, the share of Moroccan immigrants with tertiary studies is similar to the other two groups but they have clear preferences to stay in Spain. In the bottom part of the table, we focus on immigrants with tertiary education. As we can see, there are still significant differences between the different groups of immigrants both in terms of intentions to return and their remittance behaviour.

In order to analyse the factors behind remittances, we specify and estimate two different econometric models. First, we estimate a probit model for the decision to remit and, second, we estimate a regression model for the amount remitted. However, since certain factors affecting the probability of remitting, also affect the amount remitted, in the second case, we use a Heckman's sample selection model. Implementing the Heckman model requires the selection of variables that have an effect on the discrete choice of whether or not to send remittances, but do not impact the amount sent. We estimate these models using only information from immigrants from developing countries. The new sample is formed by 8,385 immigrants.

Table 1. Descriptive statistics on remittances, plans to return and education

	% of immigrants sending remittances	Amount remitted	% of return immigrants	Schooling years	% with tertiary education	
All immigrants	41.6	1,922 €	6.9	11.0	21.8	
Developed countries	4.4	3,613 €	2.6	11.6	31.7	
Developing countries	53.2	1,880 €	8.3	10.9	18.7	
Ecuador	65.9	2,268 €	14.8	9.6	7.1	
Romania	59.7	1,387 €	8.2	10.5	6.8	
Morocco	42.0	1,509 €	1.3	8.1	6.7	

	% of immigrants sending remittances	Amount Remitted	% of return immigrants	
Immigrants with tertiary education	29.2	1,954 €	7.0	
Developed countries	4.1	2,761 €	3.8	
Developing countries	42.6	1,912 €	8.7	
Ecuador	60.6	1,275 €	9.0	
Romania	67.6	1,891 €	8.8	
Morocco	45.0	1,160 €	0.0	

As control variables in the probit model, we include variables related to personal characteristics such as gender, age and education. Other variables that could affect the decision to remit are related to the economic situation in Spain, so we include years since migration and its square (as a proxy of assimilation in the host country), a dummy for legal status, a dummy taking on a value of 1 if the immigrant is employed and a dummy indicating whether he is the owner of a dwelling in Spain. The situation and ties with the origin country are also relevant. In this sense, we include a dummy in the case the immigrant asked for a loan to come to Spain and additional variables related to the family circumstances. We also expect the probability to remit to decrease if the immigrant has to maintain children living in Spain, but to increase if the children or the spouse are residing abroad. A higher probability to remit is also expected in the case that the immigrant is in contact with the family or friends in the country of birth, if there is the intention to bring some family members to Spain or if the immigrant has plans to return to the home country during the next five years.

For the selection model, we assume that some of these variables may affect both the decision to remit and its magnitude, while others only influence the probability of sending remittances. However, there is no consensus in the literature about which factors affect the probability of remitting, and which influence both the probability and the amount remitted. Several robustness checks have been carried out in relation to the specification of the Heckman's selection model and are available on request. The results finally presented in the paper include variables related to personal characteristics (including education), family circumstances, plans to return and the log of annual income together with the selection term.

Results for the two models are shown in table 2. In models (1) and (3), immigrant's education is proxied by schooling years while in models (2) and (4) it is proxied by two dummies related to secondary and tertiary studies (primary studies is taken as reference category). Looking at the results for the probit model, we find no significant differences in terms of gender or marital status. Age seems to have a positive (although) very small effect on the probability to remit. Having the spouse abroad does not increase the probability to remit, but having the children in Spain decreases this probability while having children abroad clearly increases the probability being one of the individual variables with a higher effect. Having asked a loan and keeping in touch with the family at origin are also positive and significant. Years since migration and its square are both significant and show evidence of a non-linear relationship between the economic progress in Spain and the probability to remit: it increases during the first years in Spain but after 8-9 years it decreases substantially. The other variables related to the economic situation in Spain (legal status, being employed) are also positive and significant except being the owner of a dwelling in Spain which turns out to be insignificant.

**Table 2. Econometric results** 

		ty to remit ginal effects	Log of amo	nt remitted coefficient	
	(1)	(2)	(3)		
Male	0.00151	-0.000867	-0.0798*	-0.0809*	
with	[0.0127]	[0.0127]	[0.0468]	[0.0470]	
A go	0.00359***	0.00426***	0.00151	0.00118	
Age			[0.00267]	[0.00269]	
Married	[0.000832] 0.0223	[0.000843] 0.0232	[0.00207]	[0.00209]	
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Smouse mediane channel	[0.0144] 0.0492	[0.0145] 0.048	0.0022	0.0918	
Spouse residing abroad			0.0932 [0.0691]		
Children lining in Carrie	[0.0311] -0.0357***	[0.0312] -0.0376***		[0.0693]	
Children living in Spain			-0.135***	-0.134***	
	[0.00752]	[0.00754]	[0.0237]	[0.0238]	
Children living abroad	0.0737***	0.0710***	0.143***	0.144***	
	[0.00978]	[0.00978]	[0.0233]	[0.0234]	
Years since migration	0.0199***	0.0192***			
	[0.00456]	[0.00454]			
Years since migration squared	-0.00134***	-0.00133***			
	[0.000216]	[0.000214]			
Schooling years	-0.00481**		0.0141**		
	[0.00199]		[0.00686]		
Secondary education		0.0188		0.033	
		[0.0162]		[0.0527]	
Tertiary education		-0.0814***		0.143**	
		[0.0206]		[0.0722]	
Legal status	0.0383**	0.0404**			
	[0.0176]	[0.0176]			
Employed	0.199***	0.197***			
	[0.0134]	[0.0134]			
Having a loan in origin country	0.134***	0.132***			
	[0.0175]	[0.0176]			
Plans to return to origin country	0.157***	0.157***	0.0769	0.0772	
	[0.0212]	[0.0211]	[0.0698]	[0.0699]	
Plans to migrate to a third country	0.00449	0.00796	-0.0902	-0.091	
	[0.0645]	[0.0657]	[0.194]	[0.194]	
Plans to bring family to Spain	0.318***	0.317***			
	[0.0125]	[0.0125]			
Keeping in touch with family at origin	0.359***	0.357***			
	[0.0267]	[0.0269]			
Owner of dwelling in Spain	-0.00559	-0.00424			
	[0.0168]	[0.0168]			
Log of annual income	,	_ 'J	0.446***	0.447***	
			[0.0561]	[0.0564]	
Ecuador	0.0615**	0.0619**	0.168**	0.169**	
<del></del>	[0.0274]	[0.0275]	[0.0791]	[0.0793]	
Romania	0.0901***	0.0812***	-0.208**	-0.203**	
	[0.0257]	[0.0259]	[0.0833]	[0.0835]	
Morocco	-0.119***	-0.109***	0.0464	0.0304	
	[0.0325]	[0.0325]	[0.130]	[0.131]	
Heckman's lambda	[0.0525]	[0.0323]	-0.615***	-0.610***	
Tookinun 5 minouu			[0.0865]	[0.0872]	
Observations	8,385	8,385	2,783	2,783	
Observations R-squared	0,383	0,383	0.158	2,783 0.157	

All models include regional fixed effects. Robust standard errors in brackets. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

If we focus on the main variables of interest in our analysis, we find a positive effect of plans to return but no differential effect of plans to move to a third country. Education has a negative effect both when proxied by schooling years or educational level dummies, in line with previous findings in the literature. Last, if we look at the dummy variables associated to Ecuador, Romania and Morocco, we cannot reject a substantial different effect between these three countries and the rest of immigrants from developing countries. Once the effect of the covariates is discounted for, the probability to remit of immigrants from Ecuador and Romania is 6 and 9 percentage points higher than in the rest of developing countries while this probability is 12 points lower in Morocco.

Similar results are found when we look at the results for the determinants of the annual amount remitted. As expected, the log of annual income has a positive and significant effect on the amount remitted. Education has, now, a positive and significant effect as found by Bollard et al. (2011). Plans to return, however, turns out to be insignificant to explain the amount remitted. Heckman's lambda is also significant showing evidence that both decisions are somehow linked. Last, the dummy variables associated to the three countries under studies show again clear differences among them. While remittances from Moroccan are not different of those from the rest of the world, Ecuadorian send much more (17%) and Romanian send less (-20%). The factors behind these differences among countries have not been identified by the literature and could be related to institutional and cultural differences that will be analysed in further research.

#### 5. FINAL REMARKS

According to World Bank remittances statistics, remittances received from around the world accounted for the 7.3% of GDP in Ecuador, 5.0% in Romania and 8.9% in Morocco. Remittances from Spain accounted more than 40% of total remittances received in Ecuador, 30% in Romania and 25% in Morocco. Table 3 shows that since 2007 up to now the economic crisis hitting the Spanish economy has affected international migration flows coming to Spain. However, while the Ecuadorian population in Spain has decreased substantially, Romanian and Moroccan population is still increasing although at a lower pace. This different evolution is not explained by a better relative situation in any of these countries as shown in figure 1. Several studies analysing the remittances behaviour of immigrants in different host countries have not explored potential differences among immigrants according to their region of origin. Most researchers have focused on the role of education, plans to return or other personal characteristics but no attention has been paid to other institutional and cultural characteristics that could explain this different behaviour. Our results emphasize the importance of education and the particular form of migration for immigrant behaviour, but also points out that further research should explore new directions. From a policy perspective, our analysis also suggests that remittances need to be discussed in conjunction with other policies not only related to

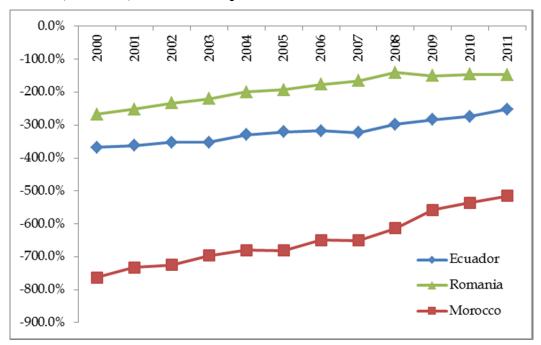
education or the particular form of migration but also to other channels potentially affecting migrants' decisions.

Table 3. Evolution of immigrant population in Spain

	All immigrants		Ecuador		Romania		Morocco	
2007	5,249,993		434,673		510,983		621,295	
2008	5,268,762	0.4%	415,535	-4.4%	702,954	37.6%	579,311	-6.8%
2009	5,648,671	7.2%	409,328	-1.5%	758,823	7.9%	627,858	8.4%
2010	5,747,734	1.8%	387,367	-5.4%	781,343	3.0%	645,156	2.8%
2011	5,751,487	0.1%	347,360	-10.3%	806,716	3.2%	648,458	0.5%
2012	5,736,258	-0.3%	293,602	-15.5%	829,936	2.9%	651,207	0.4%

Source: Own elaboration using data from the Population Register of the Spanish National Institute of Statistics.

Figure 1. Differences in GDP per capita (PPP - 2005 constant \$) between Ecuador, Romania, Morocco and Spain



Source: Own elaboration using data from the World Bank indicators.

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ANNEX 1. DESCRIPTIVE STATISTICS

	All immigrants		Developed	Developed countries		Developing countries		Ecuador		Romania		Morocco	
	Mean	Sd	mean	sd	Mean	sd	mean	sd	mean	sd	mean	sd	
Remit	0.416	0.493	0.0441	0.205	0.532	0.499	0.659	0.475	0.597	0.491	0.42	0.494	
Amount remitted	1,922	2,577	3,613	7,464	1,880	2,317	2,268	2,847	1,387	1,964	1,509	1,656	
Annual income	12,946	8,574	16,558	11,523	11,983	7,303	11,368	4,118	10,660	4,966	11,864	4,623	
Return migration	0.0695	0.254	0.0255	0.158	0.0832	0.276	0.148	0.356	0.0818	0.274	0.0133	0.115	
Circular migration	0.0114	0.106	0.0145	0.119	0.0104	0.101	0.0107	0.103	0.00798	0.0891	0	0	
Schooling years	11.03	3.306	11.61	3.241	10.85	3.305	9.588	3.139	10.45	2.779	8.06	3.843	
Primary education	0.167	0.373	0.134	0.341	0.177	0.382	0.363	0.481	0.162	0.369	0.36	0.481	
Secondary education	0.588	0.492	0.534	0.499	0.604	0.489	0.554	0.498	0.747	0.435	0.417	0.494	
Tertiary education	0.218	0.413	0.317	0.466	0.187	0.39	0.0708	0.257	0.0679	0.252	0.0667	0.25	
Male	0.461	0.499	0.473	0.499	0.458	0.498	0.485	0.5	0.497	0.5	0.64	0.481	
Age	35.49	10.59	40.13	11.2	34.03	9.951	31.28	9.254	31.61	9.532	31.49	10.87	
Married	0.515	0.5	0.525	0.499	0.511	0.5	0.489	0.5	0.599	0.491	0.56	0.497	
Spouse living abroad	0.0518	0.222	0.0133	0.115	0.0638	0.244	0.0494	0.217	0.0419	0.201	0.0833	0.277	
Children living in Spain	0.764	0.997	0.753	0.941	0.768	1.013	1.251	1.305	0.916	1.057	1.167	1.569	
Children not living in Spain	0.449	0.952	0.349	0.809	0.48	0.991	0.474	0.948	0.307	0.714	0.243	0.872	
Years since migration	8.95	10.43	16.47	12.9	6.591	8.219	4.908	2.668	2.98	1.976	7.487	7.133	
Legal status	0.86	0.347	0.997	0.0584	0.817	0.386	0.918	0.274	0.525	0.5	0.903	0.296	
Employed	0.691	0.462	0.642	0.48	0.706	0.455	0.725	0.447	0.747	0.435	0.567	0.496	
Having a loan in origin country	0.111	0.314	0.00266	0.0516	0.145	0.352	0.303	0.46	0.156	0.363	0.0767	0.267	
Plans to bring the family	0.261	0.439	0.0441	0.205	0.329	0.47	0.421	0.494	0.188	0.391	0.43	0.496	
Keeping in touch with family	0.904	0.295	0.792	0.406	0.939	0.24	0.974	0.159	0.974	0.159	0.957	0.204	
Owner of dwelling in Spain	0.305	0.46	0.553	0.497	0.227	0.419	0.27	0.445	0.11	0.313	0.18	0.385	
Developed country	0.239	0.426											
Developing country	0.761	0.426											
Ecuador	0.0423	0.201											
Romania	0.0455	0.208											
Morocco	0.0272	0.163											
Observations	11,013		2,6	28	8,3	85	40	<u></u>	5(	)1	300		