UDC 331.5:314.15(4-014)(4-015) DOI: 10.2298/PAN1304541R Preliminary report

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This paper was supported by CNCSIS grant no. 1829/2008: The Effects of Labor Force Migration and Demographical Structures Changes on Economic Dynamics. A version of this paper was presented at The Third Future of Europe Conference, Bucharest, November, 2010. We are grateful to the conference participants for their useful feedback.

# Financial Effects of the International Migration in Europe: Modelling the Decision to Remit

**Summary**: This paper analyzes the behaviour of Central and Eastern European migrants regarding money remitting to their country of origin and is based on data provided by the National Immigrant Survey of Spain. In order to analyze the impacts of migrants' demographic and economic characteristics on remitting behaviour, the variables employed in the econometric model referred to individual factors, factors that evaluate the migrant's links with the native country and those that account for the degree of migrant's integration in Spain. The factors showing a stronger attachment to relatives and the country of origin have a positive impact on the decision to remit and on the remitted amounts, while the factors that point to the integration of the migrant into Spanish society have a negative and smaller impact on the remitting decision.

**Key words:** International migration, Remittances, Two-part model, Transition countries. Central and Eastern Europe.

JEL: F22, I31, R23.

Labour migration in Europe is a phenomenon with multiple social and economic effects that are both positive and negative. Money sent by emigrants to their relatives increases the quality of life of the latter and has positive consequences on the family relations. At macroeconomic level, remittances play an important role for developing countries, being the second source of external funding, after foreign direct investment (Dilip Ratha 2003). Therefore, increasing interest can be identified in literature for studying such aspects and revealing the mechanisms behind the migrants' decisions to remit.

In recent years, there has been an ascending trend in the worldwide number of remittances to developing countries, which is over USD 351 billion in 2011, according to the World Bank's estimates. The official figures describing the level of remittances underestimates their real amount, since a considerable share is transferred by informal means. Sebastian Lăzăroiu and Monica Alexandru (2008) show that approximately 40 per cent of the transfers to Romania are made through informal channels, for example bus drivers operating on international lines, family members, friends, and relatives. At the same time, the cost of sending money through formal channels has decreased in recent years, while the financial and banking culture of the persons involved in the remitting process – both the sender and receiver – increases, making the formal transfers more attractive. Thus, a strong network of money-

transfer agents in Eastern European countries was developed, making official transfers more accessible.

With the present economic context being characterized by the persisting effects of the financial crisis, remittances are providing several advantages compared to other sources of external financing. Firstly, they are more stable than private capital flows. While private capital flows often move pro-cyclically, remittances have remained more resilient to the economic downturns in host countries. Secondly, remittances are a major source of income for households in developing countries, since they are directed to households and individuals, while other sources of external financing (such as foreign aid) go to public agencies in the receiving countries and their effectiveness may therefore be hindered by the corruption of the government officials.

Due to both their scale and effectiveness in reaching households, one would expect remittances to have a great impact on economic growth and poverty reduction. Richard Jr. Adams and John Page (2005) found the empirical confirmation of a statistically significant impact of remittances on poverty. Their estimates show that a 10% increase in per capita official remittances has lead to a 3.5% decline in the share of people living in poverty. Such impacts of remittances flows generated in many developing countries remittances policies designed to improve remittances effectiveness or to increase remittance flows. In this respect, Alex Julca (2013) provides a wider view and a typology of remittances policies across countries.

Therefore, remittances have an increasing role within the context of the financial crisis and identifying the true motivation of remittance behaviour is crucial in order to predict the long term effect of migration on the households and, at a macrolevel, its influence on the sending society overall. Furthermore, the motivations behind remittance behaviour have significant implications for public policy, especially in countries that rely heavily on remittance from migrants and lack social security transfers or other welfare programs.

The remittance behaviour has proven to be quite diversified in different parts of the world and our primary objective is to scan the determinants of remittance behaviour of Central and Eastern European emigrants in Spain. For this purpose, we explored a recent data source that is provided by the National Statistical Institute in Spain, namely the National Immigrant Survey (in Spanish *Encuesta Nacional de Inmigrantes*, henceforward ENI).

The model involved in the present paper differentiates between the decision to remit and the subsequent decision on how much to remit. Our research is based on a two-part model (John G. Cragg 1971) and is therefore conducted in two stages. During the first stage, we seek to identify the factors that would determine the remittance decision and the magnitude of these factors. Logistic regression is applied in order to identify the statistically significant factors that determine the emigrants to remit. In the second stage, we focus on the remitted amount using the multi-linear regression model.

The rest of the paper is structured as follows: Section 1 offers a brief review of the relevant theories on remittances. Section 2 explains the data set used, the methodology applied and discusses the variables involved in our approach. Section 2 also

contains explanations of the basic hypothesis of our research. The empirical results are presented in Section 3 and concluding notes complete the paper.

## 1. Remittances: A Brief Literature Review

Throughout the past few decades there has been a growing literature on the remittance behaviour of migrants that accompanies a complex remitting process worldwide. We identify two large categories of studies. Firstly, there are some studies that consider the macroeconomic determinants of remittances such as those of Miguel Leon-Ledesma and Matloob Piracha (2004) which are based on macroeconomic data, or Ioana Schiopu and Nikolaus Siegfried (2006). Secondly, there are studies focusing on the individual determinants of remittance motives. These are the ones we will be referring to most in the present paper.

We must emphasise from the beginning of our paper the fact that the current debate in the remittance literature is triggered by the quality of the data used. As Hillel Rapoport and Frederic Docquier (2005) noticed, "at a macro level it is not always possible to test the macro-economic impact of remittances appropriately because of the poor data quality; at a micro level, it is extremely difficult to discriminate between competing theories of remittance".

The former socialist countries from Central and Eastern Europe are characterized, more than other countries, by the poor quality of the data on migration. In Romania for instance statistical data on migration only captures the regular emigrants who change their permanent residence. Labour migration is hard to quantify, although during the last few years it has become the most important component of the Eastern European migration. In this respect, the macro data on remittances in European former socialist countries is very scarce as compared to other developing countries, the time series being inconsistent and affected by a lack of comparability.

During the last couple of decades, there has been a substantial upgrading of the econometric tools available for applied research, especially for the analysis of micro data, thus allowing for a renewal of the empirics of remittances as well. Several surveys conducted in recent years cover developing countries in Europe and allow for a more detailed analysis of remittances in this area. Among these surveys ENI is a useful source of data for researchers and academics.

Some of the key issues in the debate on remittances are to understand which migrant populations remit, for which purposes and what determines the amount of remittances. One can distinguish a number of *motives for remittances*. Firstly, there are remittances due to altruistic motives. In principle, these motives for remitting can simply be viewed as an intra-family transfer across national borders. Remittances that follow this motivation are dependent on the way the immigrant's family is spread across national borders. Secondly, there are remittances that are intended to create assets in the home country and finally, there are remittances that respond to family and social commitments. This motive is in its essence a simple exchange: some transfers to the extended family and the home community are the price to be paid for the option of returning back home at a later stage.

In the 1970s Gary S. Becker first argued that remittances represented a benevolent act which promoted well-being and equality across the extended family.

The theoretical debate on the determinants of remittances was continued by Robert E. B. Lucas and Oded Stark (1985). They argued that remittances can be motivated by *pure altruism*, *pure self-interest* (i.e. the chance of an inheritance or investment in assets at home, especially when the immigrant intends to return to his / her home country) or something in between called *tempered altruism or enlightened self-interest* (i.e. that remittances can be the result of a co-insurance or loan agreement between family members).

If we consider the type of data source involved in researching migration and remittances, we notice that there are used household surveys that include remittance-receiving households (Flore Gubert 2002), or specific surveys of the migrants themselves either in the home country (Catalina Amuedo-Dorantes and Susan Pozo 2006) or in the country of destination (see: Theodore P. Lianos 1997; Elke Holst and Metchthild Schrooten 2006; Zizi Goschin and Monica Roman 2012). The last category, that includes ENI, offers a more detailed perspective on migrants' characteristics. The remitting behaviour was most frequently studied in the case of migrants from Latin-American, African or Asian countries. During the past few years, there has been increasing interest in the remittances received by some Eastern European countries, such as Moldova and Albania (see: Etleva Germenji, Ismail Beka, and Alexander Sarris 2001; Piracha and Amrita Saraogi 2011).

Liesbeth Heering, Rob van der Erf, and Leo van Wissen (2004) apply logistic regression in order to analyze the migration intention and its determinants in Morocco. The results of their study support the analytical gender-specific approach of migration intentions among Moroccan non-migrants. Huynh Truong Huy (2009) applies logistic regression in order to analyze the determinants of a migration decision in Vietnam, while Florin Vădean (2007) discovered that citizenship status is an important factor for the determination of international household remittance flows if the country of origin restricts the acquisition of real estate by foreigners.

It was noticed that there is little evidence concerning remittances in former socialist countries in Eastern Europe. Several studies focus on Albania, a country characterized by a large part of the population working abroad. Germenji, Beka, and Sarris (2001) used the Heckman selection model in order to analyse the factors that determine the decision to remit and the amount remitted by Albanian emigrants to their households, while Piracha and Saraogi (2011) applied several models for analyzing the remittance behaviour of Moldovan migrants.

# 2. Data Set, Methods and Variables

### 2.1 Data

The rich and detailed survey data provided by ENI offers a unique opportunity to understand migration and remittance behaviour. The main objective of the ENI is to provide pertinent information on migrants who have been in Spain for at least one year or who intend to stay in Spain for that period, offering reliable and representative data for policy makers and for the scientific community. Therefore, throughout the course of the survey conducted in 2007, nearly 15,500 persons were interviewed regarding a large array of issues pertaining to their migration experience.

A detailed description of this important data source on the migration experience is provided by David Reher and Miguel Requena (2009). They state that compared to other official data sources: "The National Immigrant Survey goes far beyond in two fundamental ways. (1) It enables us to have access to a wide variety of information (...), thus facilitating a more complete and integrated picture of migration. (2) It includes a considerable amount of retrospective data that enables us to evaluate the migration experience of individuals from a longitudinal perspective".

Immigrants in Spain come from a relatively limited number of countries, especially in comparison to the situation in other parts of Europe. Latin Americans, as well as people from Western Europe, Morocco and Eastern Europe, in particular Romania, stand out. From a total of 15,465 people from 143 different countries interviewed, the Moroccans, Romanians, and Ecuadorians represent 30%. In their paper, Reher and Requena (2009) identified two general migratory typologies considering the characteristics of migrants according to origin. Firstly, there are economic migrants from Andean, African and Eastern European countries, who are young and working in relatively low-skilled jobs. Secondly, there are immigrants coming from developed countries with high levels of education and a significant proportion of people who have come to Spain to retire. Therefore, our interest is to focus on emigrants from Central and Eastern European countries, which are an important group with similar behaviour in respect of remittances.

Our purpose is to analyse the remittance behaviour of Central and Eastern European migrants in Spain. We have selected migrants from 20 countries (Albania, Bulgaria, Hungary, Poland, Romania, Ukraine, Latvia, Moldova, Byelorussia, Estonia, Lithuania, the Czech Republic, Slovakia, Bosnia and Herzegovina, Croatia, Slovenia, Russia, Macedonia, Montenegro, Serbia), all of them former socialist countries. These countries mainly provide economic emigrants, with a recent migration history in Spain (Reher and Requena 2009). From this subsample we have selected persons aged over 16 that can legally be involved in the economic process. In the end our sample included 2,085 observations.

# 2.2 Model Specification

In spite of the significance of migration and remittance to the European economy, formal studies analyzing the determinants of migration and the motives to remit among Eastern European migrants have been scarce and mostly confined to descriptive analyses. Initial works on migrants' transfers applied the Ordinary Least Squares Method (OLS), considering the remitting process as an one-stage decision. More recently, this hypothesis was reconsidered by approaching the remitting behaviour as a two-stage process. In the first stage, the factors determining the decision to remit are highlighted, while in the second stage the level of remittances is analysed. The two aspects are considered to be independent, although the decision is made by the same individual

The literature that considers the estimation methods based on data which is characterized by a large number of null values – corresponding for instance, to the group of non-remitters – is consistent. If the null values are considered as resulting from an individual's decision not to remit, there are several available models: Tobit

model, Heckman two-step selection model and Two-part model. The last two approaches are used when a decision to remit is treated separately from the decision on the amount remitted.

The two-part model specifies one model for the censoring mechanism and a second distinct model for the outcome, which is conditional on the outcome being observed. Thus, it allows for a different data generation process for the two parts. The original model estimated by Cragg (1971) presumes that the decision concerning the consumption of a product is disparate to the decision concerning the quantity consumed

The Heckman two-step selection model assumes that the two decisions regarding remitting behaviour are correlated. In this sense, the residuals from the selection equation are used to construct a new variable, the Inverse Mills Ratio, introduced as an explanatory variable in the second equation of the model. Its value can be interpreted as the probability for selection (in our case, the probability for being a remitter), which is why it is often called the "selection hazard".

A two-part model is applied in our study for data analysis. The structure of the two-part model (following Piracha and Saraogi 2011) is based on three constituents – the observed outcome which is the amount remitted, the participation equation describing the migrants' decision to remit and the level equation for the level of remittances. The model is represented as below:

Observed outcome:

$$R = d \cdot R^{**} \tag{1}$$

Participation equation:

$$S = \gamma \cdot X + \theta$$

$$d = \begin{cases} 1 & \text{if } S > 0 \\ 0 & \text{otherwise} \end{cases}$$
(2)

Level equation:

$$R^{**} = \max[0, R^*],$$
  
 $R^* = \beta \cdot Y + \mu$  (3)

The regressors X and Y from the second and third equation capture the determinants of the decision to remit and the level of remittances, while  $\mu$  and  $\nu$  are the disturbance terms, which are randomly distributed. According to the context of our research, the empirical analysis proceeds in the following two stages. First, we run binary logistic regressions using the subsample of emigrants from selected countries, in order to find out which of the selected variables have a significant influence in the decision to remit. In the second stage, we focus on the determinants of the amount remitted, modelled through OLS regression. We expect to find out different influences of the considered variables with respect to the decision to remit and the remitted amount.

### 2.3 Variables Used in the Model

The large variety of variables used in the remittances analysis are grouped into categories such as "migrant characteristics" and "household characteristics" (Edward

Funkhouser 1995) or more specific categories such as "individual characteristics and financial capacity to remit", "motivation to migrate", "family obligations" and "investments in country of destination" (Cecilia Menjivar et al. 1998).

When analysing the labour migration in Spain, Dumitru Sandu et al. (2004) classifies the migration factors into 3 categories: factors related to the *country of origin*, factors related to the *country of destination*, factors related to the *international context*, such as the establishment of the Schengen Area and the free circulation of people within its boundaries. We consider a similar distinction between the factors that describe the individual motivation to remit and therefore the variables taken into account were structured into the next three categories:

- (i) Individual factors: income, age, education, gender and citizenship;
- (ii) Factors that evaluate the *degree of migrants' integration in Spain*: the length of stay in Spain, owning a business or having investments in Spain and the number of persons usually living in the dwelling;
- (iii) Factors that evaluate the presence and intensity of the migrants' *links* with the home country: number of visits, future plans with respect to remaining in Spain or not, parents, spouse and number of children living in the country of origin and owning a house in the country of birth.

To capture the influence of migrants' income, we employ the net monthly income as natural logarithms. The age of the remitter plays an important role in remitting and in the sample, age ranges between 16 and 86, with an average age of about 35. We expect that as age is increasing, the remittances will decrease, since the connections with the home country become more diluted over time. Considering gender, there is a balanced distribution between men and women in the general sample and among Eastern European migrants subsample, women being slightly more numerous than men.

The importance of diaspora, as academic and intellectual communities living abroad is addressed by Jovan Filipović, Srečko Devjak, and Goran Putnik (2012) which illustrate the countries need for attracting the higher educated migrants in order to increase the innovative capacity and competitiveness. In our aproach, the value of the human capital of the migrant is reflected by the last level of education completed. There is a dynamic debate in recent literature concerning the role of education in the remitting process, and it is worth remembering the finding that "more educated migrants remit more" (Albert Bollard et al. 2009). We do not expect a strong influence of education on remittances, since labour migrants from the observed countries are employed mostly in low-skilled jobs (Reher and Requena 2009).

The length of stay in Spain is expressed in years, which is computed based on the year in which the migrant arrived in Spain. In our sample the average length of stay in Spain was about 5.5 years, which is considerably lower than the duration of migration in Spain, of South American or North African migrants. We hypothesize that the more time a person spends in the host country, the lower the probability of remitting. At the same time, owning a business in Spain is an expression of the economic migrants' interests in Spain. It is less likely for migrants to remit if they have an investment in Spain, but we assume that the amount remitted could be positively affected by a migrant's higher income due to his / her business or investments. One

important determinant of remittances is the size of the migrant's dwelling in the host country, captured by the number of persons usually living in the household in Spain. Following the theoretical models, we assume a negative relationship between the remitted amount and the size of the household in Spain. The larger this size is, the more integrated the individual is considered to be in the host country.

One important basis for remittances is personal contact with the home country and the number of visits to the country of origin is considered to be an important indicator for such personal links. The impact of this factor on the volume of remittances and on the decision to remit is expected to be positive. More than that, an increase in the number of visits might contribute to a decrease in the transfer costs of the money.

Home links are stronger if individuals own real estate assets (land or houses) in the countries of origin. Considering that a dummy equals 1 if the migrant owns a house in their country of birth and 0 otherwise, we expect a positive influence of this variable on the amount of remittance. With respect to the links with the home country, it is important to notice that 39% of the migrants in the sample own a house in their country of birth. We also control for the future plans of the migrants, using a dummy for the decision of moving back to the home country in the next 5 years. We assume that a person who intends to move back will have a higher probability to remit compared to a person who is willing to remain in Spain.

A strong argument for remitting is the size of the family left in the country of origin. We expect an increase in the propensity to remit with the number of children living at home and if the wife / husband is there. We also consider the presence of parents in the home country, counted by a dummy with 1 if the individual has at least one parent at home.

The migrants' citizenship is a potential determinant of remitting behaviour and in this respect in this study we focus on the countries that joined the EU in 2007, Romanian and Bulgaria, which provide the largest number of East European migrants living in Spain. In our sample, Romanians represent 57 per cent, while Bulgarians comprise 15 per cent.

In the last few years, both countries have been among the top recipients of remittances worldwide. Romania is in 5<sup>th</sup> place in the top European emigration countries and in 4th place of remittance recipient countries (World Bank 2011). Remittances reached a USD 9.4 billion peak in 2008, but this halved in the following two years, due to the economic crisis and slow recovery. In Bulgaria, on the other hand, despite the decline induced by the current economic crisis, remittances remain relatively high, given that many migrants, even faced with economic difficulties, continue to send money to support their families. The Bulgarian National Bank reported that at the beginning of 2011, 50% of labor migrants sent money to their families and relatives in Bulgaria. In this context, our hypothesis is that migrants originating from Romania and Bulgaria have a higher propensity to remit compared to migrants from other Eastern and Central European countries. For this purpose in each of the two stages we test an additional model, which considers the migrant's citizenship by using dummies for Romanian and Bulgarian citizenship, the reference group being "other citizenship".

Table 1 The Description of the Variables

Category	Variable definitions	Symbol		
Individual	Age (years)	AGE		
characteristics	Education – dummies for the highest level of education completed: Less than primary education Primary education Secondary education Tertiary education	EDU		
	Gender: 1 - Male 0 - Female	GEN		
	Net monthly income (euro)	INC		
	Dummies for citizenship: Romanian Bulgarian Other citizenships	CIT		
Degree of migrants'	Time spent in Spain (years)	TIME		
integration in Spain	Has business investments in Spain:  1 - Migrant owns a business or investments  0 - Otherwise	AFA		
	Number of the persons usually living in the dwelling in Spain	PERS		
Links with the home country	Owner of the house:  1 - Migrant owns a house in country of origin  0 - Otherwise	HOUSE		
	Number of children living in the country of origin	CHILD		
	Spouse in the home country:  1 - Wife / husband is living in the country of origin  0 - Otherwise	SPOUSE		
	Parents in the country of origin:  1 - At least one parent is living in the country of origin  0 - Otherwise	PAR		
	Future plans: 1 - Migrant plans to return to the country of origin in the next 5 years 0 - Otherwise	PLANS		
	Number of visits to the home country	VISIT		

Source: Author.

## 3. Results

The first objective of the study is to analyze how the three categories of factors described above affect the propensity to remit. When analyzing the probability to remit, the results of the logistic regression models are presented in Table 2. Both models are significant and have good explanatory power: for the first model Nagelkerke R² is 0.138 and Cox & Snell R² is 0.102, while for the second model Nagelkerke R² is 0.173 and Cox & Snell R² is 0.128. The Hosmer-Lemshow-test indicates a good model fit to the data in both cases and three out of four cases could be predicted correctly by the models.

As hypothesized, income has a strong positive impact on remitting propensity. At the same time, demographic factors (age, gender and education) do not significantly affect the remittance decision, as was expected, although the coefficient signs are as we hypothesized.

Table 2 Results of the Logistic Regression Models

		Model 1			Model 2	
Independent variables	В	Sig.	Exp(B)	В	Sig.	Exp(B)
AGE	-0.010	0.267	0.990	-0.006	0.494	0.994
EDU						
Primary_edu	-0.114	0.764	0.892	0.217	0.572	1,243
Secondary_edu	-0.100	0.749	0.904	0.200	0.529	1,221
Tertiary_edu	-0.382	0.271	0.682	0.369	0.296	1,446
GEN	-0.189	0.184	0.828	-0.173	0.230	0.841
INC	0.271	0.069	1,312	0.280	0.065	1,323
TIME	-0.054	0.056	0.947	-0.035	0.825	0.966
AFA	0.104	0.550	1,109	0.053	0.764	1,055
PERS	0.012	0.802	1,012	0.013	0.793	1,013
HOUSE	0.303	0.043	1,354	0.382	0.013	1,466
CHILD	1,216	0.000	3,374	1,258	0.000	3,519
SPOUSE	0.562	0.252	1,754	0.652	0.188	1,920
PAR	-0.164	0.399	0.849	-0.145	0.462	0.865
PLANS	0.429	0.125	1.535	0.407	0.151	1,502
VISIT	-0.027	0.355	0.974	-0.010	0.740	0.990
CIT						
Romanian	-	-	-	0.692	0.000	1,998
Bulgarian	-	-	-	-0.234	0.300	0.791
Constant	-0.575	0.611	0.563	-1.992	0.151	0.136
No. of observations			2,085			2,085
Nagelkerke R Square			0.138			0.173
Cox & Snell R Square			0.102			0.128
Hosmer-Lemshow test			0.323			0.340

Source: Author's estimations.

Time spent in Spain is a significant factor that determines, in a negative way, the propensity to remit. In time, as the period spent by emigrants in Spain increases, the probability to remit slightly decreases. One explanation might be that the degree of integration in the society of the host country also matters. This is in line with other findings (Holst and Schrooten 2006) that prove that inclination to send remittances may decline with integration in the receiving country.

Having investments in Spain does not significantly affect the decision to remit, but its influence is positive, which is against our expectations.

Family connections with the home country are the most influential factors that increase the remitting propensity. Having children in the country of origin is the factor with the greatest impact on remitting, while the effect of the presence of parents or spouse in the home country is not statistically significant. Therefore, the Eastern European migrants are more prone to remit if they have to support their children left in the country of origin, ensuring their daily living, increasing their quality of life and providing better access to education. Owning a house in the home country also significantly increases the probability to remit, since many migrants are house owners and they aim to improve the living conditions for the families left at home.

With respect to citizenship, Romanians have a significantly higher propensity to remit compared to other Eastern European migrants. The main destination of remittances in Romania is consumption, but a stable flow of remittances, after a certain period of time, could also stimulate investments. As far as we know, the Romanian remittances' recipients invest money in building or upgrading a house or starting a business, purchasing equipment and buying land.

Studying the remitting decision is not sufficient to provide evidence on the motives of the emigrants' remittance behaviour. To this end, it is necessary to look at the factors that influence the size of the transfers. Therefore, in the second stage of our approach, we have only considered the individuals that have remitted, using a subsample of 1,164 observations. We employ the same set of independent variables divided into the three categories of factors, the dependent variable being the remitted amount.

Both the incomes, as regressor and the amount remitted, as regressant, were included in the regression analysis as logarithms. The OLS models are statistically significant (p<0.01) and explains 19.7% of the variation of the remitted amount. The applied tests proved that the model is not characterised by serial correlation, collinearity or heteroskedasticity. All the factors considered have the parameters signs as we hypothesized, although they are not all statistically significant.

Our main finding in this respect is that the links with the country of origin are the most influential factors that determine the remitted amount. The significant factors belonging to this category refer to the relatives living in the country of origin and owning a house in the country of birth; they all positively affect the remitted amount. In many cases migrants remit for the rehabilitation of the houses owned in the country of origin or for building a new house. At the same time, migrants remit significantly more if they have children or a spouse living in the country of origin. The motive for remitting in this case is altruistic and the remitted money is usually used for the daily living of the relatives left at home and for supporting the children's education

Against our expectations, the other variables describing the connections with the country of origin, respectively the *number of personal visits to the home country* and the future plans considering returning home had no significant impact on the probability to remit or on the amount of remittances. The number of visits is positively correlated to the remitted amount, because in many cases the migrant's visit to the family left at home is accompanied by directly giving the various amounts of money, with practically no transfer costs. Interestingly, the plans for returning home within the next five years are negatively correlated to remittances.

At the same time the persons that have economic interests in Spain, owning a property, having financial investments or affairs are remitting significantly smaller amounts of money compared to those that don't have an economic interest in Spain. These kinds of migrants with entrepreneurial characteristics are more economically integrated in Spanish society and they prefer to develop their business rather than to remit. The number of persons living in Spanish dwellings is negatively, but not significantly, correlated to the amount remitted.

The income of the emigrants is very important in explaining the size of remittances. This confirms what both basic theories on remittances (altruism and exchange) predict: the more the emigrants earn, the higher the amount of money that they send back home.

Having, secondary or tertiary education as the highest attained level of education significantly increases the value of remittances. The migrant's human capital described by being higher educated is the most influential factor in the linear regression model that leads to a significant increase in the amount remitted.

Table 3 Results of Linear Regression

Variables	Model 1			Model 2		
	Unstandardized coefficients		٥.	Unstandardized coefficients		٥.
	В	Std. error	Sig.	В	Std. error	Sig.
(Constant)	3.011	0.805	0.000	2.954	0.813	0.000
AGE	-0.007	0.006	0.190	-0.007	0.006	0.212
Primary_edu	0.454	0.241	0.173	0.317	0.242	0.192
Secondary_edu	0.372	0.200	0.064	0.354	0.201	0.079
Tertiary_edu	0.563	0.231	0.015	0.551	0.233	0.018
GEN	-0.073	0.092	0.428	-0.073	0.093	0.430
INC	0.504	0.105	0.000	0.507	0.105	0.000
AFA	-0.274	0.118	0.020	-0.005	0.022	0.805
TIME	-0.009	0.021	0.660	-0.279	0.118	0.018
PERS	-0.028	0.030	0.356	-0.029	0.030	0.335
HOUSE	0.343	0.099	0.001	0.353	0.100	0.000
CHILD	0.269	0.080	0.001	0.274	0.081	0.001
SPOUSE	0.308	0.183	0.093	0.306	0.184	0.096
PAR	0.181	0.128	0.158	0.188	0.128	0.144
PLANS	-0.182	0.153	0.234	-0.187	0.153	0.222
VISIT	0.026	0.023	0.254	0.028	0.023	0.228
CIT						
Romanian	-	-	-	0.067	0.124	0.587
Bulgarian	-	-	-	-0.056	0.162	0.729

Source: Author's estimations.

# 4. Conclusions

In the case of labour migration which is specific for the Central and Eastern European migrants in Spain, remittances are often considered to be a major factor behind migration. Here we investigate the remittance behaviour of this group of migrants. Important findings of our study are: Income is a significant factor that positively characterizes both the decision to remit and the amount of money remitted. Both the personal attachment to the country of origin and the degree of integration in Spanish society affect the remitting decision. Generally, demographic factors such as age, gender or education do not influence the probability to remit. There are several determinants that affect the amount remitted, but this does not influence the decision to remit. These are *education*, which increases the size of remittances and *having investments in Spain*, which negatively affects the amount remitted.

Being the owner of a home in the country of origin is a strong motive for remitting, since it was proven that one very important destination of the remittances is to improve the owned house or to build a new house. This factor is increasing both in terms of the sum remitted and the probability to remit.

Romanians are more prone to remit compared to other Eastern European migrants living in Spain but being Romanian does not significantly increase the level of transfers.

To conclude, one can say that factors showing a stronger attachment to relatives and the country of origin have a positive impact on the decision to remit and on the remitted amounts, whereas factors that point to the integration of the migrant in Spanish society have a negative and smaller impact on the remitting decision.

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