Determinants of the remitting behaviour of Romanian emigrants in an economic crisis context

Zizi GOSCHIN^{*}, Monica ROMAN^{**}

Abstract

The remittances of international migrants are particularly important for Romania as one of the top European emigration countries and an important remittance recipient country as well. Responding to the need to better understand the determinants of remittances, our paper examines the significance of selected economic, social and demographic factors that impact on the remittance behaviour of Romanian international migrants, as characterized by the propensity to remit and the amount remitted. The present work builds on a new database of 1514 Romanian migrants from 52 destination countries, resulting from our 2010 online survey. One of the main findings is the fact that the remittances are strongly affected by migrant's income, return intention and presence of the spouse in the destination country.

Key words: international migration, remittances' determinants, Romania

JEL Classification: J61, D31

1. Introduction

Migration and remittances do undoubtedly relieve the sending countries of the underemployment pressure and generate new opportunities, help alleviate poverty and improve life in poor countries (Adams and Page, 2005; Spatafora, 2005; Gupta and al., 2009). From an economic point of view, the strongest impact on the sending countries is conveyed through remittances, as the money sent home by the migrant workers has a key role both for the receiving

^{*} Zizi Goschin is professor, PhD at the Bucharest Academy of Economic Studies, Institute of National Economy; e-mail: zizigoschin@gmail.com, zizi.goschin@csie.ase.ro.

^{**} Monica Roman is professor, PhD, at the Bucharest Academy of Economic Studies, Institute for the Study of Labor, Bonn, e-mail: monicaroman70ro@yahoo.com.

Acknowledgements: This paper was supported by CNCSIS grant no. 1829/2008: *The Effects of Labour Force Migration and Demographical Structural Changes on Dynamic Economies.* An earlier version of the paper was presented at the 51st European Congress of the Regional Science Association International "New Challenges for European Regions and Urban Areas in a Globalised World", 30th August - 3rd September 2011, Barcelona, Spain.

households and for the economy as a whole (Gubert, 2002; Ratha, 2004; Gammage, 2006; Skeldon, 2007).

Over the past two decades migration, remittances, and their economic impact have become matters of high interest among economists and policy makers in Romania. These topics are particularly important since Romania is on the 5th place in the European top of emigration countries and on the 4th place as a remittance recipient country (World Bank, 2011).

Remittances have reached a \$9.4 bn peak in 2008, but halved in the following two years, due to the economic crisis and slow recovery. 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 share of remittances in GDP is lower in Romania compared to smaller countries (approximately over 10%), yet the absolute volume is significant, and their use in household consumption is more than appropriate, especially in this period of economic crisis.

The remittances have a remarkable economic potential at both the micro and macro level: not only are they contributing to the well-being of the receiving households (Ratha, 2004; Gammage, 2006; Skeldon, 2007), but they are also important sources of external financing, second only to FDI. According to some experts, without remittances, the current account deficits in Romania would have been over 50% higher.

Remittances flows are usually directed from developed to less developed countries and therefore they are counter-cyclical with respect to downturns in origin countries. As Ratha (2010) stresses, "unlike past emerging market crises that had started in emerging markets—Mexico in 1994-95, East Asia in 1997-98—the current crisis started in the rich countries and spread to developing countries". This new feature opens room for new researches, since it is not obvious how remittances would behave in response to a deep economic downturn in the host countries. The flows of remittances and their determinants are important to be considered in the context of financial crisis, having severe impacts at the macro and micro-economic level.

The global economic crisis raised concerns regarding the adverse effects that a severe drop in remittance inflows to Romania could have both on the families depending on remittances and on the sustained economic growth in the previous decade. Given their size and economic impact, as well as the importance of Romanian emigrants' remittances for the receiving households and for the economy as a whole, there is a need to shed more light on the determinants of remittances sent home by Romanian emigrants.

There are only a few studies devoted to Romanian migration, remittances and the corresponding economic effects (Constantin et al., 2004; Schiopu, 2006; Nicolae, 2007; Silasi and Simina, 2008; De Sousa, 2010, Soros Foundation Romania, 2011). Therefore this paper aims at a better understanding of the

remittances behaviour by examining the significance of selected economic and demographic factors of influence.

Our contribution to the existing literature is twofold. Firstly, we fill a gap in the literature by providing empirical evidence on the factors that shape the remittance behaviour of Romanian emigrants, one of the largest new migrants' communities¹ in Europe. Secondly, we analyse the determinants of migrants' remittances in the context of the current economic crisis, using new data, generated through the online survey we conducted between July 22nd and December 11th 2010. The database contains a variety of information on Romanian emigrants worldwide, including individual characteristics of the migrant, data on income, employment, remittances, regions of origin and destination, educational attainment both in Romania and in emigration country, length of migration and intention to return to Romania, etc.

The paper proceeds as follows. The next section briefly reviews the literature on remittances, with a focus on the determinants of migrants' behaviour to remit. In section 3 the main Romanian migration characteristics after 2000 and the role of remittances in the transition period are presented. Section 4 describes the methodology we employ in the analysis, alongside the variables and the dataset. Section 5 comments on the results of the two econometric models concerning the decision to remit and the amount remitted, while section 6 concludes the paper.

2. Literature review

An important part of the theoretical and empirical literature on remittances has focused on the motives that induce immigrants to send money to their families in the countries of origin.

This literature largely acknowledged the altruism towards family members in homeland as the main reason for remitting. The seminal work of Lucas and Stark (1985) opened a new line of research by describing remittance behavior as a combination of altruism with pure and "enlightened" self-interest. Further studies have confirmed that pure altruism cannot entirely explain the remittance behavior of the emigrants and have proved the significance of various selfinterest motives, such as:

- repayments of educational cost or payment for family members which take care of the migrant's children or property (Cox, 1987; Cox et al., 1998);
- loan repayments to the family for financing the migration expenses (Brown, 1997; Ilahi and Jafarey, 1999; Gubert, 2002);
- remittance for securing their rights to inheritance in the home country (Bernheim and al., 1985; Lucas and Stark, 1985);

¹ According to World Bank data there are about 2.9 million Romanian emigrants worldwide, accounting for about 14% of the total population.

• insurance against income losses for the family in the home country (Coate and Ravallion, 1993; Gubert, 2002) and for the emigrants themselves (Amuedo-Dorantes and Pozo, 2006).

In addition to these, empirical findings revealed the influence of a variety of demographic, social and economic characteristics of the migrant, such as age, gender, education, family composition, employment status, etc.

The **age** of the migrant plays an important role in the remitting behaviour (e.g., Cox, 1987; de la Briere et al., 2002; Merkle and Zimmermann, 1992; Bauer and Sinning, 2005) and the amount remitted generally tends to increase with age, but the remittance-age relationship appears to be non-linear (Amuedo-Dorantes and Pozo, 2006).

The **gender** is documented in the literature as a significant factor for remittance behaviour, but its influence is controversial: although women are more altruistic, they have a higher propensity to remit (Osaki, 2003; Craciun, 2006) and remit a higher part of their earnings (Posel, 2001), most empirical studies suggest that women remit less than men (e.g., Cox, 1987; Cox et al., 1998; Merkle and Zimmermann, 1992; Basilio et al, 2009) due to lower economic activity and earnings.

Studies such as Hoddinott (1994) and de la Briere et al. (2002) proved that the marital status of the migrant, presence of children in the household and **family** size and composition are important factors for remittances. Most empirical studies report that remittances are likely to be smaller if close relatives live in the host country, as this lessens the motivation to send money to homeland.

The level of **education** attended is another factor that may influence the remittance behaviour, but empirical evidence seems to be mixed so far. Some studies revealed that higher educated migrants remit less (see, e.g. Sinning, 2007), while others show that the amount remitted by the emigrant is positively correlated with the skill level (Schiopu, 2006; Bollard et al, 2009), as education is strongly linked to income.

The **income** and the **employment status** were documented as relevant factors of influence for remittance behavior (Cox et al., 1998; de la Briere et al., 2002; Merkle and Zimmermann, 1992; Bauer and Sinning, 2005. The positive link between remittances and the income of the migrant was considered in literature as a proof of altruism - driven remittance behavior (e.g. Lucas and Stark, 1985).

The **time** spent in the receiving country may determine a decline in remittances, given that the ties with the country of origin fade in time, as the migrant becomes better integrated in the society of the host country (Fairchild and Simpson, 2004; Holst and Schrooten, 2006; Vargas-Silva, 2006). Remittances intended as repayment of migration or education costs should also fall in time (Lucas and Stark, 1985). The increase in migrant's income in time

may nevertheless compensate for the weakened family ties, leading to an inverted U-curve of remittances over time (Lucas and Stark, 1985; Amery and Anderson, 1995; Craciun, 2006).

Although the links of the immigrants with the homeland should be expected to fade in space as well, modern instant communication and fast travel create new forms of transnational links, proved to be very resilient (Foner, 1997). Therefore **geographic distance** does not necessarily have an adverse impact on remittance flows, although there are studies that suggest the opposite².

Many empirical studies stressed the positive impact of the intention to **return** in the country of origin, by highlighting the fact that temporary migrants are more likely to remit and remit larger amounts than permanent ones (Brown, 1997; Glytsos, 1997; Gubert, 2002; Cai, 2003; Bauer and Sinning, 2005).

The **religious affiliation** should also influence positively on the remittances, considering that immigrants remit for altruistic motives and religion provides a motivation for helping others (see, for instance, Connor, 2010; Roman and Goschin, 2011).

The largest part of the literature on determinants of remittances envisages the microeconomic level, using survey data. The estimations of the determinants of remittances are either based on household surveys that include remittancereceiving households (Gubert, 2002), or on specific surveys of the migrants themselves, either in the home country (Amuedo-Dorantes & Pozo, 2006) or in the country of destination (Holst & Schrooten, 2006). The type of survey sometimes limits the nature of the analysis that can be conducted, for example, household surveys often do not have much information on the migrant. Most studies focus on Latin-American and African countries, and some Pacific and Asian countries as well, while Eastern and Central Europe countries are less studied, although there is an increasing interest in remittances received by Moldova and Albania (see, for instance, Gjermenji, Swinnen, 2005).

3. Romanian emigration and remittances

Romania has been in the European top of emigration countries for the last decade. Romanian emigration, notably migration for work, has progressively extended under gradual removal of restrictions on the international circulation rights, being also favored by the emergence of multiple possibilities for information on jobs abroad. The number of Romanian immigrants reached almost three million in 2010, representing 13.1% of the population and a large part of the Romanian emigrants are highly skilled.

 $^{^2}$ De Sousa (2010) found that the official remittance flows from OECD countries to Romania tend to increase non-linearly with geographic distance. This can be explained by long-distance migrants' use of formal transfer channels (banks or money transfer companies), while the short-distance migrants' remittances are often sent outside the banking system and therefore less visible in statistics.

The reasons for emigration concern primarily the economic and social environment in Romania (the lack of opportunities, the political instability, the economic depression, the persistent corruption) compared to attractive prospects for improved living conditions, better education, diverse career opportunities, higher incomes, political stability, and a more stable economy in the developed receiving countries. In addition to this, there are also individual reasons such as: relatives and / or friends settled abroad, the inclination for adventure, career ambitions, job dissatisfaction, etc.

In line with the global trends, the rates of emigration from Romania are varying territorially according to the level of development of the region of origin. Thus, statistics showed that the strongest emigration rates do not occur in poor regions (Oltenia, Moldova, Muntenia), but in the wealthy ones (Bucharest, Banat, Transylvania). At the regional level, there is a reduction in migration attractiveness of Italy and Hungary and an increase in the number of departures to Spain, France and Canada. While in the 1990's emigrants often preferred countries where Romanians had their relatives already settled (mainly in Hungary, Germany, Austria) and were attracted by the American dream or by the Western one (France, United Kingdom, Australia), in the 2000s work migration increased and many temporary emigrants headed to Italy and Spain.

Most of the Romanians living abroad (86.2%) have secondary education, while only 12.4% have higher education. A large part of the Romanian higher educated migrants (44%) choose countries outside the European Union, such as Canada or the United States. Approximately one in five migrated despite having a job in Romania, which is an indicative of labor dissatisfaction of skilled people. Canada in particular draws upper skilled workforce: almost 54% of those who emigrate to Canada have academic studies, followed by 50% of those who head towards Switzerland and 46% in the case of the UK. At the opposite pole are Turkey, Italy and Spain, countries which attracted fewer Romanian immigrants with university degrees.

Romania has long benefited from increasing remittance inflows that sustained domestic consumption and economic growth, while reducing the current account deficits. According to the National Bank of Romania data, since 2000, remittances have increased constantly, reaching a peak of 9.4 billion euros in 2008, but the total amount sent home by migrant workers fell to 4.5 billion euros in 2009 and in 2010, due to the economic crisis.

The relevance of remittances for economic research is given by their strong impacts at the micro and macro level. At the macroeconomic level, remittances have a major and clear contribution in financing the current account deficit in Romania. For instance, Daianu et al (2001) demonstrated that the absence of remittances would have caused unsustainable deficits.

At the micro level, remittances are a major source of subsistence for the migrants' families. The data from our online survey (Romanian Emigration

Survey – RES) provide information on the destination of remittances, which are to a great extent oriented towards the satisfaction of the current family needs (65%), followed by loans payment (9%), investments / acquisitions of long-term assets (7%), deposit / savings (5%), build a house (4%). Other studies also emphasize the consumption role of the remittances. According to Lazaroiu and Alexandru (2008), the use of remittances follows a clear hierarchy of consumption patterns: first, food, clothing, and household appliances; second, savings or home repair; and third, children's education.

The official figures describing the level of remittances underestimates their amount, since a considerable share is transferred by informal means. Lazaroiu and Alexandru (2008) shows that approximately 40% of the transfers are made through informal channels such are friends or relatives, bus drivers on international lines.

The costs of remitting have decreased during the recent years, with the increasing presence of a strong network of money-transfer agents in Romania. This is likely to induce banks to offer similar services in terms of costs and procedures, but also leads to the development of financial culture among Romanians, both migrants and non-migrants.

4. Method, variables and data

Most studies on migration have examined the determinants of the decision to migrate and to remit in connection to migrants' characteristics and the family profile. They were employing probabilistic models, namely probit or logistic model (e.g. Holst and Schrooten, 2006) as the most common techniques to estimate models with a dichotomous dependent variable.

Following the main methodological trends in recent literature, our empirical analysis discriminates between the decision to remit and the subsequent decision on how much to remit. Separate multivariate models are estimated for the volume of remittances and for the probability of remitting. Firstly, a simple (bivariate) logistic model is used to identify the factors that influence the probability of sending money to Romania. The dependent variable is a dummy equal to 1 if the migrants have remitted an amount of money during the last year and 0 otherwise. Secondly, the remitted amount was analyzed through a multi-linear regression model.

The explanatory variables (Table 1) are the remittance determinants, representing potential factors that influence the decision to remit and the amount remitted.

| Variable | Description | Measurement |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| REMIT | The annual amount remitted. | \$ |
| REM | The decision to remit: a dummy equal to 1 if the migrant remitted an amount of money during the last year and 0 otherwise. | binary |
| AGE | The age of the emigrant. | year |
| GENDER | The gender of the emigrant, 1 if the migrant is female and 0 otherwise. | binary |
| EDUCATION | Educational attainment of the emigrant is a scale variable ranging from 1 to 8 and coded as follows: 1- primary school, 2- vocational school, 3-secondary education (high school), 4- second level of secondary education, 5-first level of tertiary education, 6- higher education, 7-master degree, 8-doctoral studies. | 1-8 |
| SPOUSE | The presence of emigrant's spouse in the emigration country. | binary |
| CHILD | The presence of emigrant's children in the emigration country. | binary |
| PARENTS | The presence of emigrant's parents in the emigration country. | binary |
| TIME | The period of time spent in the emigration country. | year |
| RETURN | Emigrant's intention to return to homeland: 1 if the emigrant has the intention to return and 0 otherwise. | binary |
| INCOME | The average monthly income of the emigrant. | \$ |
| EMPLOYMENT: -EMPLOYEE -EMPLOYER -SELF-EMPLOYED | The employment status of the migrant (employer, employee, self-employed or) is captured through a categorical variable. Three binary variables were employed, the reference group being nonworking migrants. | binary |
| RELIGION | Emigrant's belonging to a religious group (1) or not (0). | binary |

Table 1. The variables

They were structured into three categories, namely the economic factors (income and employment status), degree of integration in destination country (captured through the family-level factors, such as the presence of close relatives (children, spouse, parents and siblings) in the emigration country, the number of years spent in the migration country and the intention to return to homeland) and factors that describe the individual characteristics of migrants: age, gender, education and religion.

Gathering accurate data on remittances is a difficult task both at the micro and macro level, as Romanian official statistics supply only limited macro data³. In order to obtain the necessary data on Romanian emigration we conducted our own online survey that covered a period of almost five months: between July 22nd and December 11th 2010. As it was started during the summer holidays, when the availability of respondents was low, most of them completed the questionnaire in autumn. The potential respondents were approached online, using the Romanian emigrants' sites. The final database included information from 1514 Romanian emigrants based in 52 countries. They were asked questions on a variety of topics covering a large research agenda: income, employment, remittances, regions of origin and destination, graduated studies both in Romania and in emigration country, length of migration and intention to return to Romania.

Due to the limited financial resources and lack of data on spatial dispersion of Romanian immigrants, the research team turned to an online questionnaire, instead of face to face or postal survey methods. Moreover, the online format is the cheapest and quickest way to build an extensive, various and territorially dispersed database. The questionnaire employed in our survey accommodates a suite of 51 questions of various types: simple and multiple questions, questions with multiple listed answers, quantitative and qualitative questions, and also open ended questions that gave the respondents the opportunity to express freely their ideas.

The questionnaire was structured as follows:

- General information: personal attributes (age, gender, religion), duration of migration;
- Geographic information: Romanian county of origin, destination country and region;
- Family: total number of children and number of children under 18, the number of family members living in the immigration country.
- Education: last graduated studies in Romania, studies in the emigration country;
- Professional status: profession, current occupation, economic sector of the first job abroad, current economic sector of activity;
- Employment and earnings: monthly earnings for the first job abroad, current monthly earnings;
- Remittances: remittent or not, top three reasons to remit, annual remitted amount;
- Return intention and reasons.

The 2010 online survey provided the necessary micro data to test the influence of individual characteristics on migrants' propensity to remit and

³ Macro data on remittances sent using formal channels (the banking system).

volume of remittances. Descriptive statistics of the selected variables show that the average Romanian migrant in our dataset is young (35.8 years), well educated (the first level of tertiary education) and religious. Men prevail (63%), about half of the migrants have at least one child and they are remitting, while the mean monthly income is of 2385 USD.

5. Results and comments

In this section, we present the results of running the regression models by using the RES data on Romanian emigrants.

The binary logistic model indicated eight significant individual and family characteristics of the migrant that affect the decision to remit (Table 2, model 1). As expected, the main factors that positively influence the remittance decision are income and intention to return to homeland. Another very strong positive factor is the presence of the spouse in the immigration country, which may supply additional income to consume and to remit as well. Age also has a positive but less powerful influence, while the gender variable indicates that women have a higher propensity to remit.

When considering the influence of gender, the model also captures the impact of the global financial crisis on migrants remitting behaviour. Romanian women are generally employed in domestic care, elderly care or in the health care system (Soros Foundation Romania and International Agency for Source Country Information, 2011). These economic domains were much less affected by the recent economic crisis, compared to constructions, which is the field preferred by Romanian male emigrants. This relative wages security might increase the propensity of Romanian female migrants to remit in order to help the families left home, also affected by crisis and poverty.

The employee status positively influences the remittance decision, while the other two employment categories are not statistically significant. The data in our sample do not support the hypothesis that emigrants belonging to a religious group are more likely to remit. Geographic distance is very weakly related to remittances, which is not surprising, as money transfer costs are low and modern instant communication and fast travel are enabling strong and resilient links with the family in the home country.

The probability to remit slightly decreases in relation to the education level and to the number of years spent in the emigration country, being followed by a better integration in the receiving one. As expected, the size of the family in the destination country correlates negatively with the decision to remit, as migrants having their children, parents and siblings with them are less motivated to remit, but these factors were not significant.

| Variable | В | Std. Error | Sig. | Exp (B) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------|
| AGE | .014 | .007 | .032 | 1.014 |
| GENDER | .300 | .118 | .011 | 1.350 |
| EDUCATION | 190 | .034 | .000 | .827 |
| SPOUSE | .710 | .181 | .000 | 2.034 |
| TIME | 016 | .010 | .095 | .984 |
| RETURN | .630 | .121 | .000 | 1.878 |
| INCOME | .621 | .090 | .000 | 1.861 |
| EMPLOYMENT (reference group | p: nonworkir | ng migrants) | | |
| -EMPLOYEE | .324 | .164 | .048 | 1.383 |
| - EMPLOYER | 110 | .344 | .749 | .896 |
| -SELF-EMPLOYED | .218 | .232 | .348 | 1.244 |
| Constant | -4.549 | .642 | .000 | .011 |
| Hosmer and Lemeshow Test | 9.488 | .303 | | |
| No. of observations | 1514 | | | |
| Nagelkerke R Square | 0.13 | | | |
| Effect variable: the amount remitte | ed | | | |
| | ed | Unstandard | | |
| Variable | ed | В | Std. | Error |
| Variable Constant | ed | B 2.090*** | Std. 1 | Error) |
| Variable Constant GENDER | ed | B 2.090*** -0.303*** | Std. 1 0.710 0.120 | Error)) |
| Variable Constant GENDER TIME | ed | B 2.090*** -0.303*** -0.016** | Std. 1 0.710 0.120 0.009 | Error))) |
| Variable Constant GENDER TIME RETURN | ed | B 2.090*** -0.303*** -0.016** 0.369*** | Std. 1 0.710 0.120 0.009 0.110 | Error)))) 5 |
| Variable Constant GENDER TIME RETURN RELIGION | ed | B 2.090*** -0.303*** -0.016** 0.369*** 0.467*** | Std. 1 0.710 0.120 0.009 0.110 0.185 | Error)))) 5 5 |
| Variable Constant GENDER TIME RETURN RELIGION INCOME | ed | B 2.090*** -0.303*** -0.016** 0.369*** 0.467*** 0.613*** | Std. 1 0.710 0.120 0.009 0.110 0.185 0.085 | Error)))) 5 5 5 |
| Variable Constant GENDER TIME RETURN RELIGION INCOME SPOUSE | | B 2.090*** -0.303*** -0.016** 0.369*** 0.467*** 0.613*** 0.618*** | Std. 1 0.710 0.120 0.009 0.110 0.185 | Error)))) 5 5 5 |
| Variable Constant GENDER TIME RETURN RELIGION INCOME SPOUSE EMPLOYMENT (reference group: n | | B 2.090*** -0.303*** 0.016** 0.369*** 0.467*** 0.613*** 0.613*** igrants) | Std. 1 0.710 0.120 0.009 0.110 0.183 0.083 0.140 | Error)))) 5 5 5 |
| Variable Constant GENDER TIME RETURN RELIGION INCOME SPOUSE EMPLOYMENT (reference group: n - EMPLOYEE | | B 2.090*** -0.303*** -0.016** 0.369*** 0.467*** 0.613*** 0.618*** nigrants) .099 | Std. 1 0.710 0.120 0.009 0.110 0.183 0.083 0.140 | Error)))) 5 5 5 |
| Variable Constant GENDER TIME RETURN RELIGION INCOME SPOUSE EMPLOYMENT (reference group: n - EMPLOYEE - EMPLOYER | | B 2.090*** -0.303*** 0.369*** 0.467*** 0.613*** 0.618*** higrants) .099 .755** | Std. 1 0.710 0.120 0.009 0.110 0.185 0.085 0.140 .180 .371 | Error)))) 5 5 5 |
| Variable Constant GENDER TIME RETURN RELIGION INCOME SPOUSE EMPLOYMENT (reference group: n - EMPLOYEE - EMPLOYER - SELF-EMPLOYED | | B 2.090*** -0.303*** 0.016** 0.369*** 0.467*** 0.613*** 0.618*** higrants) .099 .755** .033 | Std. 1 0.710 0.120 0.009 0.110 0.183 0.083 0.140 | Error)))) 5 5 5 |
| Variable Constant GENDER TIME RETURN RELIGION INCOME SPOUSE EMPLOYMENT (reference group: n - EMPLOYEE - EMPLOYER - SELF-EMPLOYED Observations | | B -0.303*** -0.016** 0.369*** 0.467*** 0.613*** 0.618*** nigrants) .099 .755** .033 1514 | Std. 1 0.710 0.120 0.009 0.110 0.185 0.085 0.140 .180 .371 | Error)))) 5 5 5 |
| - EMPLOYER | | B 2.090*** -0.303*** 0.016** 0.369*** 0.467*** 0.613*** 0.618*** higrants) .099 .755** .033 | Std. 1 0.710 0.120 0.009 0.110 0.185 0.085 0.140 .180 .371 | Error)))) 5 5 5 |

Table 2. Results

Significance: ***p<.01; ** p<.05; * p<.10 Source: processed by the authors using Romanian Emigrants' Study (RES) data, 2010

Following the objectives of our research, the next question we consider is whether Romanian emigrants' economic, social and demographic characteristics impact on the amount remitted. The results from the second model (Table 2) indicate that the amount remitted is positively influenced by income, intention to return, religiosity and is negatively linked to the time spent in the emigration country and gender. Although more inclined to remit, women remit smaller amounts, presumably because they earn less than men. In line with the literature on migration that documents the return intention as a major factor for savings and remittances, the return variable in our models enhances both the propensity to remit and the amount remitted. Most Romanian emigration is temporarily work migration, therefore the links to family and friends remain strong and the volume of remittances is significant.

The employer status of the migrant increases the amount remitted, but the other two employment categories (employee and self-employed) do not have a significant influence. Family-related factors, such as the presence of different members of the family in the migration country, are not significant (except for the spouse), although the coefficient signs are as we have hypothesized. As in the previous model, the presence of the spouse in the host country significantly increases the amount remitted, which contradicts most of the literature, although there are exceptions⁴ as well.

We have also controlled for the age of the migrant and the level of education, but these factors appear to be very weak predictors of the volume of remittances.

6. Final remarks

The assessment of economic, social and demographic factors that impact on the remittance behaviour of Romanian international migrants is an important policy issue and the new data set we exploit in this paper provides a variety of information on Romanian emigrants worldwide thus allowing us to investigate the remittance behavior in the context of the current economic crisis. The empirical evidence we provide on the Romanian emigrants is largely in line with the literature on the determinants of the remittance behaviour. Income and intention to return to homeland have been identified as primary determinants for both the remittance decision and the amount remitted. The most notable difference to the literature concerns the fact that the presence of the spouse in the host country has a strong positive influence on both the remittance propensity and the amount remitted. We explain this in the context of positive earning differentials between the host and home country, which allows the couple of migrants to accumulate more wealth⁵ compared to the spouse in homeland

⁴ For instance Sinning (2007) reported that married immigrants send about 15% more remittances compared to single immigrants.

⁵ As Romanian emigrant women are largely documented to be economically active, we expect both husband and wife to be employed.

situation. As remittance decisions are made in a family context, the spouse presence in the migration household not only provides higher resources, but also enlarges the number of potential recipients of the money sent homeland. The couple may have both the family of husband and wife to care for, which should increase the remittance propensity and the amount remitted, especially when the elderly depend on the migrants' financial support.

As the remittance behaviour reflects the dynamic and complex influence of a large range of factors, including the current economic crisis influences, further work will be needed to confirm the robustness of these results.

References

Adams, R., Page, J. (2005), Do international migration and remittances reduce poverty in developing countries?, *World Development*, Elsevier, vol.33, no.10, pp. 1645-1669.

Amuedo-Dorantes, C., Pozo, S. (2006), Remittances as Insurance: Evidence from Mexican Immigrants, *Journal of Population Economics*, Vol.19, No. 2, pp. 227–254.

Basilio, L., Bauer, T. K., Sinning, M. (2009), Analyzing Labor Market Activity of Immigrant Families in Germany, *Labour Economics*, Vol. 16, No. 5, pp. 510-520.

Bauer, T. K., Sinning, M. (2005), The Savings Behavior of Temporary and Permanent Migrants in Germany, *IZA Discussion Paper*, No.1632, pp. 1-37.

Bernheim, B. D., Shleifer, A., Summers, L. H. (1985), The Strategic Bequest Motive, *Journal of Political Economy*, Vol. 93(6): 1045-1076.

Brenner, R., Kiefer, N.M. (1981), The Economics of the Diaspora. Discrimination and Occupational Structure, *Economic Development and Cultural Change*, Vol. 29, No. 3, pp. 517-534.

Brown, R.P.C. (1997), Estimating Remittance Functions for Pacific Island Migrants, *World Development*, Vol. 25, No. 4, pp. 613–626.

Bollard, A., McKenzie, D., Morten, M., Rapoport, H. (2009), Remittances and the brain drain revisited: the microdata show that more educated migrants remit more, *Policy Research Working Paper Series* 5113, The World Bank.

Cai, Q. (2003), Migrant Remittances and Family Ties: A Case Study in China, *International Journal of Population Geography*, Vol. 9, No. 6, pp. 471–483.

Carling, J. (2008), The determinants of migrant remittances, *Oxford Review of Economic Policy*, Vol. 24, No.3, pp. 581–598.

Craciun, C. (2006), Migration and Remittances in the Republic of Moldova: Empirical Evidence at MicroLevel, Master Thesis, Kiev: Kyiv-Mohyla Academy.

Connor, P. (2011), Religion as resource: Religion and immigrant economic incorporation, *Social Science Research*, Vol. 40, No. 5, pp. 1350-1361.

Constantin, D.L. et al. (2004), *The Migration Phenomenon from the Perspective of Romania's Accession to the EU*, European Institute of Romania, Bucharest.

Coate, S., Ravallion, M. (1993), Reciprocity without commitment – Characterization and performance of informal insurance arrangements, *Journal of Development Economics*, No. 40, pp. 1-24.

Cox, D. (1987), Motives for Private Transfers, *Journal of Political Economy*, Vol. 95, No.3, pp. 508-546.

Daianu, D., L. Voinea, Tolici, M. (2001) *Balance of Payments Financing in Romania. The Role of Remittances.* The Romanian Center for Economic Policies Working Paper No. 28, The Romanian Center for Economic Policies, Bucharest.

De la Briere, B. A., de Janvry, S. L., Sadoulet, E. (2002), The roles of destination, gender, and household composition in explaining remittances: An analysis for the Dominican Sierra. *Journal of Development Economics*, Vol. 68, No. 2, pp. 309-328.

De Sousa, J., Duval, L. (2010), Geographic distance and remittances in Romania: Out of sight, out of mind?, *Economie internationale*, Vol. 121, No.1.

Fairchild, S. T., Simpson, N.B. (2004), Mexican Migration to the United States Pacific Northwest, *Population Research and Policy Review*, Vol.23, No.3, pp. 219–234.

Foner, N. (1997), What's new about transnationalism? New York immigrants today and at the turn of the century, *Diaspora*, Vol. 6, No. 3, pp. 355-375.

Gammage, S. (2006), Exporting People and Recruiting Remittances: A Development Strategy for El Salvador?, *Latin American Perspectives*, Vol. 33, No.6, pp. 75-100.

Gjermenji, E., Swinnen, J.F.M. (2005), Human capital, market imperfections, poverty, and migration: Evidence from Albania, *PRG-Leuven Working Paper*, 5.

Gubert, F. (2002), Do Migrants Insure Those Who Stay Behind? Evidence from the Kayes Area (Western Mali), *Oxford Development Studies*, Vol. 30, No. 3, pp. 267–287.

Gupta, S., Pattillo, C. A., Wagh, S. (2009), Impact of Remittances on Poverty and Financial Development in Sub-Saharan Africa, *World Development* 37(1), pp. 104–115.

Glytsos, N. (1997), Remitting behavior of 'temporary' and 'permanent' migrants: The case of Greeks in Germany and Australia, *Labour*, No. 11, pp. 409–435.

Hoddinott, J. (1994), A Model of Migration and Remittances Applied to Western Kenya, *Oxford Economic Papers*, Vol. 46, No. 3, pp. 459-476.

Holst, E., Schrooten, M. (2006), Migration and Money. What Determines Remittances? Evidence from Germany, *German Institute for Economic Research*, Discussion Paper 566.

Ilahi, N., Jafarey, S. (1999), Guestworker migration, remittances and the extended family: evidence from Pakistan, *Journal of Development Economics*, No. 58, pp. 485-512.

Klinkhammer, G. (2004), Religion – Migration – Integration – eine Einführung, in *Religion – Migration – Integration in Wissenschaft, Politik und Gesellschaft*, 12-18, Berlin, Bonn: Satz und Druck.

Lăzăroiu, S., Alexandru, M. (2008), Who is Coming after Who is Leaving? Labour Migration in the Context of Romania's Accession to the EU. Country Report. International Organization for Migration, Geneva.

Lucas, R.E.B., Stark, O. (1985), Motivations to Remit: Evidence from Botswana, *The Journal of Political Economy*, Vol. 93, No. 5, pp. 901-918.

Merkle, L., Zimmermann, K. (1992), *Saving and Remittances: Guest Workers in West Germany*, in Klaus Zimmermann (ed.), Migration and Economic Development, Berlin: Springer-Verlag, pp. 55-75.

Merkle, L., Zimmermann, K. F. (1992), Savings, Remittances, and Return Migration, *Economics Letters*, No. 38, pp. 129-134.

Nicolae, M., Radu, B. M.(2007), Socio-Economic Effects of the Labor Force Migration in an Enlarged Europe, *Romanian Journal of Economic Forecasting*, No. 2, pp.54-73.

Osaki, K. (2003), Migrant Remittances in Thailand: Economic Necessity or Social Norm?, *Journal of Population Research*, Vol. 20, No. 2, pp. 203–222.

Posel, D. (2001), How Do Households Work? Migration, the Household and Remittance Behaviour in South Africa, *Social Dynamics*, Vol. 27, No.1, pp. 165–189.

Ratha, D. (2004), *Understanding the importance of remittances*, Washington: Migration Policy Institute, World Bank.

Ratha, D., Mohapatra, S. (2010), *Forecasting* migrant remittances during the global financial crisis, Migration Letters, Vol. 7, No. 2, pp. 203-213.

Roman, M., Goschin, Z. (2011), Does religion matter? Exploring economic performance differences among Romanian emigrants, *Journal for the Study of Religions and Ideologies*, Vol. 10, No. 30, pp. 183-212

Roman, M., Voicu, C. (2010), Some socio-economic effects of labour migration on sending country. Evidence from Romania, *Theoretical and Applied Economics*, No. 7, pp. 61-76.

Rex, J., D. Joly, Wilpert, C. (1987), *Immigrant Associations in Europe*, Aldershot: Gower.

Sassen, S. (1988), *The Mobility of Labor and Capital: A study in international investment and labor flow*, Cambridge: Cambridge University Press.

Schiopu, I., Siegfried, N. (2006), Determinants of Workers' Remittances. Evidence From The European Neighbouring Region, *Working Paper Series*, 688.

Skeldon, R. (2007), On Migration and the Policy Process, Sussex Centre for Migration Research, *Working Paper*, 20.

Soros Foundation Romania, International Agency for Source Country Information (2011), *Maximising the Development Impact of Migration*, *Research Overview*, Selected Findings, Case Study.

Silasi, G., Simina, O. (2008), *Migration, Mobility and Human Rights at the Eastern Border of the European Union– Space of Freedom and Security*, Ed. Universitatii de Vest, Timisoara.

Sinning, M. (2007), Determinants of Savings and Remittances. Empirical Evidence from Immigrants to Germany, *IZA Discussion Papers*, 2966.

Smith, C. K., Blen, S. (2009), The Influence of Religion on Remittances Sent to Relatives and Friends Back Home, *Journal of Business & Economics Research*, Vol.7, No.1, pp. 91-102.

Spatafora, N. (2005), Worker Remittances and Economic Development, *World Economic Outlook*, April, pp. 69-84.

Taylor, J.E. (1999), The New Economics of Labor Migration and the Role of Remittances, *International Migration*, Vol. 37, No.1, pp. 63-86.

Vargas-Silva, C. (2006), The Determinants of International Remittances: Evidence from the Legalized Population, *Academy of Economics and Finance Papers and Proceedings*, 30, pp. 333–335.

World Bank (2011), *Migration and Remittances Factbook 2011*, available at http://siteresources.worldbank.org/INTLAC/Resources/Factbook2011-Ebook. pdf.

Zhou, M. (2004), Revisiting ethnic entrepreneurship: convergencies, controversies, and conceptual advancements, *International Migration Review* 38, pp. 1040–1074.