Determinants and Uses of Remittances to Southern and Eastern Mediterranean Countries: Insights from a New Survey

Luis Miotti*
El Mouhoub Mouhoud**
Joel Oudinet*

* University of Paris 13
** University of Paris Dauphine

"Determinants and uses of Remittances to Southern and eastern Mediterranean Countries: *Insights from a new Survey*"[1]

Luis Miotti*, El Mouhoub Mouhoud**, Joel Oudinet*

* CEPN CNRS UMR 7115 University Paris 13
** Laboratory of Economics of Dauphine (LEDa)
correspondent author: E.M. Mouhoud, Professor of economics, univ. Paris dauphine,
em.mouhoud@dauphine.fr

Abstract.

In this paper, we analyze the determinants and the final use of remittances of migrants settled in France sending remittances to the southern Mediterranean and Sub-Saharan African countries. Research using microdata is very scarce in this region; we rely on a specially designed survey (2MO) we conducted in 2007-2008 of 1,000 people who remit to the three Maghreb countries, to Turkey and to the countries of Sub-Saharan Africa. We also use a second survey conducted by the French Ministry of Social Affairs and Health (DREES) which includes a sample of 3,500 people from the regions we are interested in.

DREES microdata set enables us to understand who is more likely to remit (extensive margin). 2MO microdata allows an analysis of remittance behavior amongst those who remit (intensive margin) including sum and reported final use of remittances (housing, investment, current expenditures).

Using these two microdatasets, we examine the likelihood to remit across the different waves of immigrants, the motivations to remit and the intended final use of remittances to highlight behavior differences between the different waves of immigration on the one hand, and on the other hand, the importance of looking beyond classical variables to better understand remittance behavior and its changing nature.

Our first result shows that, after controlling for all the variables linked to income, education, age or nationality, subjective variables such as attachment to the home country, history and the institutional context of emigration play a determinant role in explaining remittance behavior.

Our second result shows that migrants, who are in France for a long time and who have low education levels, also send remittances in order to invest in their home country. The degree of the migrant's attachment to his home country thus appears as a discriminating subjective variable. By contrast, the migrants from Sub-Saharan Africa send money for current

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expenditures rather than for investment. The obligation feeling seems to be the important motivation for remit.

1.INTRODUCTION

Over the last twenty years, the large rise in remittances towards countries of emigration constitutes a central issue in international migration. Officially recorded remittances to developing countries have more than tripled during the period 1995-2008 rising from US$ 102 billions in 1995 to more than US$ 300 billions in 2008 (World Bank, 2009). These flows are more than three times higher than official development assistance (ODA) and have become more important than Foreign Direct Investment (FDI) flows. This trend is even more pronounced in the region this paper focuses on, namely, the Southern and Eastern Mediterranean Countries (SEEMs) where the the amount of remittances is twice more important than FDI or ODA flows. For instance, remittances towards Morocco represent 9 to 10 % of the GDP.

Recent figures however show a relative decrease in remittances because of the restrictions in migration flows. Three factors concur to explain the risk of a declining trend: selective pro skilled immigration policies in the OECD host countries, coupled with restrictive policies, (particularly in Europe); the integration of migrants in the context of family immigration, and the policies of integration. The third factor, mostly overlooked, is the focus of this study; namely the changing composition of the migrant stock in the SEEMs.

A recent survey the authors carried out in 2007-2008 in post offices in France, referred to 2MO thereafter, allowed a comparison of remittance behavior between waves of migrants from SEEMs. A comparison between behavior of migrants from sub-Saharan countries and those from SEEMs was also carried out.

This paper uses two sources of data: a recent survey of carried out by the authors in post offices in France during 2007-2008, which compares migrants across waves of migration, and a survey undertaken by DREES which enables the comparison of migrants who remit with those who do not.

Using these two microdatasets, the authors begin by examining the likelihood to remit across the different waves of immigrants, the motivations to remit and the reported final use of remittances to highlight behavior differences between the different waves of immigration on the one hand, and on the other hand, the importance of looking beyond classical variables to better understand remittance behavior and its changing nature.

DREES microdata set enables us to understand who is more likely to remit (extensive margin); 2MO microdata allows an analysis of remittance behavior amongst those who remit, (intensive margin) including sum and reported final use of remittances (housing, investment, current expenditures). Combining these intensive and extensive margins gives an overall effect of different waves of immigrants on the amount remitted.

We then analyze the main determinants of migrant's remittances comparing different waves of immigration, by measuring directly the subjective and historical variables of the emigration process. Funkhouser (1995) shows that migrants from two countries (as Nicaragua and El Salvador), with same observable characteristics, have different remitting behaviors because of non observable variables, as the attachment to the country of origin. This last variable, which can depend on the political regime, seems to predict remitting behavior. Our aim is to go further in this research by showing that these subjective variables depend not only on the institutional

framework of the country of origin but also on the historical dimension of the emigration process, specific to the different generations of migrants.

The theoretical literature explaining the determinants of remittances stresses the importance of altruism in determining remittance behavior. The migrant's altruistic feelings towards the family or the relatives he has left behind cannot explain alone the remitting decision which may be determined by other motivations, whether they be individual or arise from family arrangements, such as inheritances, repayments of loans to the family, exchange of services, insurance or investment (Rapoport and Docquier, 2006). These remittances may be the result of individual behavior or from informal intra-family contracts. Thus, the existence of an inheritance for instance allows for a reinforcement of the links between the family and the migrant, and leads to maintaining the remittances in the long run. Insofar as the migrant is concerned, he thus ensures, through his remittances that he will actually get her share of his parents' inheritance when the time comes. The migrant may also implement a mere strategy to invest in the patrimony that will be bequeathed to him.

The empirical literature favors a combination of all of the above listed motivations. It has shown that altruistic motives hardly ever exist alone but rather, they tend to combine with self-interest (for an inheritance or an investment in reputation, with a view of resettling in the home country) according to individual logic and/or within the framework of family arrangements (such as co-insurance, exchanges of services or the repayment of costs incurred prior to migration) as well as according to the country, culture and period. These empirical studies are based on specific surveys either of migrants in the host country, or of families in the home country. The countries that have been studied the most are those of Sub-Saharan Africa, South America and Asia. To our knowledge, no empirical studies using individual data have been carried out on the Maghreb countries so far.

In this paper our objective is not to test all those motivations to remit. We only focus on the problem of turnover in stock of immigration in order to understand the differences in the behavior of the different waves of immigrants in France.

As the duration of stay in the host country increases, the level of remittances is theoretically supposed to decrease depending on the hypothesis positing the erosion of the migrant's ties with the home country over time. But this negative relation could be changed by the emigration period and the social, political and economic context of the emigration decision. In other words, the history of emigration should matter.

Ideally, and in order to test this hypothesis, we would need individual-level data from cohort studies of migrant which would make it possible to observe behavior trends over time in the host country. In this cross sectional study, we will only focus on trends in remitting behavior across waves of immigrations while controlling for those variable which are described in the theoretical literature, namely: income of migrant, income of the family as perceived by migrant, nationality of migrant, family size, age and educational level. The authors test simultaneously the effect of a number of subjective variables identified in the survey while controlling for the objective ones. We take a close look at both the difference in migrants' remitting behavior as per the DREES survey (extensive margin) as well as the differences in their use, based on the 2MO survey (intensive margin).

We check if, after controlling for all variables (income, education, age, nationality…), subjective variables like those related to the migrant's attachment to the home country are determining. We also aim to verify if the change in components of emigration (1st wave of the sixties seventies vs second wave of the 90's-2000) from North African and sub-Saharan countries matters for explaining the differences of the remittances behavior. The second point that we

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would like to check deals with the explanation of the diverse use made of the money sent by migrants.

We present the data and the principal descriptive results of our two surveys (section 2). Section 3 introduces the model and the main results. Section 4 is made up of the conclusion on the orientations for further research and the academic and economic policy implications of our findings

2. DESCRIPTION OF THE DATABASES

We use the original survey we conducted ourselves in post offices in France in 2007-2008 (2MO survey[2]) so as to gain deeper insight into the characteristics, the aims and the level of remittances made by this population who transfers money to their home country. We use also the survey by DREES entitled "The profile and track of migrants" which provides information on migrants in France and which enables us to discover the motivations and the characteristics of those who transfer money as compared to those who do not remit.

The 2MO survey

We conducted this survey in post offices in France in 2007-2008 questioning 1,000 respondents who remit to Algeria, Morocco, Tunisia, Turkey and the countries of Sub-Saharan Africa who transfer through La Poste. The majority of remittances that have been taken into account are made by Western Union, by postal order or by interbank payment transfer[3]. The channels used by the migrants of this sample may bias the survey to the extent that it leaves out people who exclusively use other transfer channels and who therefore do not pass through the post office. Nevertheless, this bias is limited in the questionnaire since migrants are asked to assess the total amount of their remittances, whichever channel is used, inclusive of informal systems. Face-to-face interviews lasting for about twenty minutes[4] have been organized inside the post offices used for the data analysis and located in departments with the highest number of inhabitants from the countries under study, namely the following French departments : Ile de France, Rhône, Bouches du Rhône, Nord and Haute-Garonne[5].

The sample is thus made up of 216 people remitting to Morocco, 196 to Algeria, 196 to Tunisia, 196 to Turkey and 196 to Sub-Saharan Africa (55 from Senegal, 46 from Mali, and 34 from the Ivory Coast). One must bear in mind that this survey aims to gain deeper insight into the financial means implemented for the transfer, the use that will be made of remittances and the reasons that spur migrants originating from the Maghreb and Turkey to make these transfers, and not to study remittances made from France as a whole, as the sample is extensive enough to be representative per nationality, and not important enough to account for all of the remittances from France. The sample is made up of a majority of men (60%), in particular for Turks (73%) and Algerians (64%). But there is no real bias compared to the immigrated population who is equally mainly composed of men (54 to 58% for immigrants from Turkey and the Maghreb[6]) since the questions related to income and remittances concern the household and not the individual.

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[2] 2MO survey for Miotti-Mouhoud-Oudinet.

[3] For Turkish migrants, about thirty of them have been interviewed just after making a remittance through the national bank of Turkey.

[4] These interviews have been coordinated by ourselves in relation with the polling agency BASIC, and have been carried out by Ph.D. students in economics, sociology and law, speaking Arabic, Berber and Turkish.

[5] Complementary surveys have been conducted in other sites, such as migrants' associations and banks for Turkish migrants in order to achieve the quota.

[6] INSEE, annual census surveys, 2004 to 2006.

Different well-known age structures can be noticed according to the nationalities in the population under study, that is to say, the Turkish and African population is slightly younger than the population from North Africa.

The educational level[7] is higher for people who remit to Algeria (30% have an academic standard) and to Morocco (24%). Only 12% of Turks have an academic standard. Among those who have a weaker education level (at best primary level), 45% are Turks, 35% originate from Sub-Saharan Africa and 25% from the Maghreb.

Most of the annual transfers concern amounts situated between 200 and 1,000 €. The distribution is rather orientated to the first median bracket from 200 to 500 € for transfers to Morocco and Algeria. The average amount stands at 1,187 € a year (table 1). The average transfer to Turkey and Tunisia, as well as to the other African countries stands at just under 100 €, while the remittances to Morocco comes to 82 € and that to Algeria to 73 €. If we relate this amount to the income of the migrants' household, 6% of the income of households is transferred through these channels. The share is higher for the other African countries (7,5%) and for Moroccans (6,34%). The median frequency band of remittances is situated between 3 and 6 times a year, which amounts to an almost bi-monthly average frequency. The remittances for consumption and health expenses rank first in the mind of migrants: more than 80% of migrants state they make transfers for consumption expenses, and 70% for health.

TABLE 1. SELECTED DESCRIPTIVE STATISTICS – 2MO' SURVEY

Variable	Total sample			Attachment = No			Attachment = Yes		
	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.
Algeria*	1000	0.196	0.397	350	0.254	0.436	650	0.188	0.391
Morocco*	1000	0.215	0.411	350	0.186	0.389	650	0.205	0.404
Tunisia*	1000	0.197	0.398	350	0.169	0.375	650	0.212	0.409
Turkey*	1000	0.196	0.397	350	0.211	0.409	650	0.188	0.391
Sub-Saharan Africa*	1000	0.196	0.397	350	0.180	0.385	650	0.205	0.404
Age									
Less than 25 years old*	1000	0.098	0.297	350	0.154	0.362	650	0.068	0.251
Between 25 and 34 *	1000	0.320	0.467	350	0.351	0.478	650	0.303	0.460
Bandween 35 and 44 ans*	1000	0.304	0.460	350	0.283	0.451	650	0.315	0.465
Bandween 45 and 54 ans*	1000	0.165	0.371	350	0.114	0.319	650	0.192	0.394
Bandween 55 and 64 ans*	1000	0.087	0.282	350	0.077	0.267	650	0.092	0.290
More than 65 years old*	1000	0.026	0.159	350	0.020	0.140	650	0.029	0.169
Enfants									
Number of children **	995	1.815	1.626	347	1.403	1.571	648	2.035	1.613
Number of childrens born in France**	673	3.521	1.096	192	1.667	0.697	481	1.520	0.791
Income and remittances									
Monthly household income**	988	1 883 €	996 €	347	1 862 €	1 083 €	641	1 895 €	946 €
Amount remittances**	999	1 187 €	1 308 €	349	1 047 €	1 274 €	650	1 263 €	1 320 €
Education level									
No schooling *	1000	0.140	0.347	350	0.111	0.315	650	0.155	0.363
Primary education*	1000	0.172	0.378	350	0.134	0.341	650	0.192	0.394
Secondary education*	1000	0.228	0.420	350	0.206	0.405	650	0.240	0.427
Bac*	1000	0.240	0.427	350	0.294	0.456	650	0.211	0.408
Bac + 2*	1000	0.137	0.344	350	0.183	0.387	650	0.112	0.316
Bac + 4 ou more*	1000	0.083	0.276	350	0.071	0.258	650	0.089	0.285

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[7] The educational level is broken down into six categories: no schooling, primary level, secondary level, A-level, 2-year post A-level higher education, and lastly 4-year post-A level higher education or more.

		Length of stay							
Born in France*	1000	0.281	0.450	350	0.409	0.492	650	0.212	0.409
Less than 2 years*	1000	0.013	0.113	350	0.011	0.106	650	0.014	0.117
Between 2 and 5 years*	1000	0.064	0.245	350	0.046	0.209	650	0.074	0.262
Between 5 and 10 years*	1000	0.152	0.359	350	0.146	0.353	650	0.155	0.363
Between 10 and 20 years*	1000	0.214	0.410	350	0.163	0.370	650	0.242	0.428
More than 20 years*	1000	0.276	0.447	350	0.226	0.419	650	0.303	0.460
Housing, type of expenditure and resettlement projects in the country of origin									
Home ownership in the country of origin *	999	0.431	0.496	349	0.301	0.459	650	0.502	0.500
Resettlement project in the country of origin ***	858	2.393	1.251	283	1.770	0.997	575	2.699	1.250
Purchase housing project in the country of origin *	999	0.402	0.491	349	0.275	0.447	650	0.471	0.500
Investment in the country of origin *	998	0.327	0.469	349	0.218	0.413	649	0.385	0.487
Current expenditure *	998	0.982	0.133	349	0.989	0.107	649	0.978	0.145

* = Dummy variable (0/1) ; ** = Continuous variable ; *** = Licker Scale (1 to 4)

THE DREES SURVEY

The Research, Study, Evaluation and Statistics Division (DREES)[8] conducted a survey, entitled "Profile and track of migrants", since 2006, carried out face-to-face in the thirty main departments with a representative sample of 6,280 migrants ages 18 or above, eligible for the reception and integration contract (CAI) who account for roughly half of all migrants who obtain a residence permit[9]. The sample of the survey is thus made up of "newly arrived" migrants and of regularized people who arrived in France much longer ago. Among the "newcomers", the most numerous category is made up of foreign spouses of French nationals (41%); next to this category rank those composed of immigrants who have come to France within the framework of family reunification (11%), and of refugees (8%). The other important category is made up of foreigners who have been regularized because of personal or family links, or because they have lived in France for more than ten years (36%). Students are not concerned by this device (table 2).

These migrants are young (47% are less than 30 and only 9% are 45 or above) and are mainly women (54%). Immigration as a result of family reunification largely concerns women (71%), contrary to regularizations for residence of over ten years – only 41% of women. Nearly a quarter of migrants have at least one child who lives abroad. Nearly half of all migrants who obtained a residence permit in 2006 originate from North African countries. Thus, 21% of newly arrived migrants were born in Algeria, 15% in Morocco and 7% in Tunisia. More than 20% were born in Sub-Saharan Africa, among which 492 in Senegal, Mali and the Ivory Coast. 6% of migrants come from Turkey. In total, for a comparison of these findings with the 2MO survey, we have singled out 3,505 people who correspond to the nationalities we study, namely: North Africa, Turkey and Sub-Saharan Africa.

The data of this survey have never been used before this work to analyse the behaviour linked to remittances. In the selected sample of 3,505 migrants under study, a much more important proportion of those who remit than those who do not can be observed for migrants from Sub-Saharan Africa (nearly 40 %) than for migrants from North African countries and from Turkey: less than 10 % of Algerians make remittances against 15% of Moroccans, 17% of Turks, 21% of Tunisians and nearly 40% of migrants originating from Sub-Saharan Africa.

[8] French Ministry of Social Affairs and Health.
[9] Annual report of the Department of Population and Migrations.

TABLE 2. SELECTED DESCRIPTIVE STATISTICS – DRESS' SURVEY

Variable	Total sample			Remittances = No			Remittances = Yes		
	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.
Algeria*	3530	0.410	0.492	2872	0.451	0.498	633	0.224	0.417
Morocco*	3530	0.224	0.417	2872	0.229	0.421	633	0.201	0.401
Tunisia*	3530	0.122	0.328	2872	0.117	0.322	633	0.147	0.354
Turkey*	3530	0.094	0.292	2872	0.093	0.290	633	0.093	0.291
Sub-Saharan Africa*	3530	0.150	0.357	2872	0.110	0.313	633	0.335	0.472
Age**	3530	31.298	9.007	2872	31.075	9.232	633	32.397	7.919
Primary education*	2603	0.092	0.289	2121	0.092	0.290	465	0.092	0.290
Secondary education*	2603	0.249	0.432	2121	0.243	0.429	465	0.282	0.450
Bac *	2603	0.479	0.500	2121	0.484	0.500	465	0.452	0.498
Universitary education Bac + 2*	2603	0.132	0.338	2121	0.135	0.342	465	0.116	0.321
Universitary Bac + 4 or more*	2603	0.048	0.215	2121	0.046	0.209	465	0.058	0.234
Income**	2443	1 460 €	1 070 €	2004	1 393 €	1 110 €	426	1 776 €	793 €
Perception standard of living home country ***	3496	3.521	1.096	2839	3.569	1.073	632	3.307	1.164
Perception standard of living host country ***	3516	3.043	0.974	2860	3.014	0.982	631	3.181	0.918
Escape poverty***	3530	0.223	0.416	2872	0.205	0.404	633	0.299	0.458
Escaping to insecurity***	3530	0.141	0.348	2872	0.126	0.332	633	0.202	0.402
Lack of future***	3530	0.139	0.346	2872	0.136	0.343	633	0.150	0.357
Fluency in coutry of origin *	3486	2.147	0.898	2833	2.117	0.888	629	2.275	0.932
Security to the country of origin*	3488	0.734	0.442	2831	0.748	0.434	632	0.672	0.470
Transmission of traditions***	3462	1.535	0.697	2814	1.539	0.702	623	1.510	0.673
Transmission of the language***	3476	1.731	0.827	2830	1.730	0.831	621	1.728	0.822
Migrant family size in the home country **	3530	0.902	0.298	2872	0.893	0.309	633	0.940	0.238
Household size in France**	3530	3.182	1.683	2872	3.253	1.710	633	2.870	1.518
French spouse *	2902	0.515	0.500	2356	0.515	0.500	523	0.509	0.500
Staying definitively in France *	3530	0.824	0.381	2872	0.830	0.376	633	0.796	0.403
Staying then returning to the home country *	3530	0.042	0.200	2872	0.036	0.186	633	0.070	0.255
Staying in France and going to another country *	3530	0.010	0.100	2872	0.009	0.093	633	0.016	0.125
Has not decided *	3530	0.124	0.330	2872	0.126	0.332	633	0.118	0.323
Duration of stay in France**	3530	2.795	4.189	2872	2.608	4.198	633	3.649	4.076

* = Dummy variable (0/1); ** = Continuous variable; *** = Licker Scale (1 to 4)

3. SUB SAHARAN AND OLD NORTH AFRICAN MIGRANTS REMIT MORE

First, by using the data of the DREES survey, we analyze the probability to remit or not taking into account both the objective and the subjective characteristics of migrants. More specifically, we aim to isolate the effect of subjective variables (attachment to the home country for example) on remittance behavior across the different waves of immigration. We add a relativistic element to the criterion of duration of stay, by integrating the social and political context of emigration, using date of arrival, nationality and the migrant's perception of the institutional context in the home country as proxies(§ 3.1.). Secondly, using our own survey (2MO), we study the intended use of remittences using subjective variables (attachment feeling, obligation feeling, return

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projects) and objective ones (income level, education level, age, duration of stay in the host country) (§ 3.2).

3.1. WHO REMITS, WHO DOES NOT AND WHY?

We test a Probit in order to predict the likelihood of transferring money.. The model is described by the reduced equation (1) below. The first column of table 3 indicates the estimated coefficients and the last column shows their marginal impact.

(equation 1)

$$T = \alpha + \sum_{i}^{n} \beta_i Orig_i + \gamma_1 R + \gamma_2 FSO + \gamma_3 FSF + \gamma_4 Age + \sum_{i}^{n} \sigma_i D_i + \gamma_5 SLHp + \delta_6 SLFp + \sum_{i}^{n} \lambda_i SUB_i + \varepsilon$$

Where,
R corresponds to the declared amount of the migrant's household income
Orig: migrant's nationality
Age: migrant's age
FSF = migrant's family size in the host country (number of the members of the family living with the migrant)
FSO = migrant's family size in the home country (number of brothers and sisters in the country of origin)

SLHp: the standard of living in the host country [10] as perceived by the migrant
SLFp: the poverty or wealth level of the family in the home country as perceived by the migrant[11]
D: duration of stay in the host country and variables informing about the date of arrival in France by nationality of the migrants
SUB: the vector of subjective variables including the following variables:
> -traditions-culture-languages transmitted by the migrant to his family (This variable is used as a proxy of the attachment to the home country)
> -the intention to resettle in the home country (a question with four possible choices)
> -F1: synthesis of the responses linked to the feeling of poverty, of insecurity and the perception of the future in the home country created from a factorial analysis, including questions on the conditions in the home country that have motivated the emigration[12].

In the estimated equation, we take migrants' remittances to Sub-Saharan Africa as the reference modality

First of all, the likelihood to remit is lower for migrants from the Maghreb than for those from Sub-Saharan Africa. It is the Algerians who feature the lowest probability to transfer, followed by the Moroccans, Turks and lastly the Tunisians. The marginal impact of remittances is much

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[10] The question asked is linked to the way the respondent perceives his income or wealth level: comfortable, barely enough, difficult, impossible without running into debt… This variable is very weakly correlated with the stated income (correlation inferior to 10 %).

[11] The precise question asked is "concerning money in your home country, you would say" :
1. *You were comfortably off*
2. *It was all right*
3. *It was tight, you had to be careful*
4. *You could hardly manage it*
5. *You couldn't manage it without running into debt*

[12] Because of the strong colinearity between these different variables, we have chosen to synthesize them in axe F1 with the help of a factorial analysis. This axe accounts for 66 % of proper values, which is largely enough to use it as independent variables.

weaker for Algerians than for Moroccans (see the last column of table 3), and two and a half times as weak for remittances by Tunisians. This result can be brought together with the descriptive analysis of the relative share of transfers by nationality.

The income of migrants who remit is represented by two variables: an objective variable (logarithm of the income of the whole household in the home country) and a subjective variable based on the perception of the migrant's income level in the host country. As expected, an increase in the income for the migrants as a whole raises the likelihood to remit. The perception of their income, that is to say the perception of the wealth of the household who remits, equally increases the probability to transfer, regardless of the objective income level.

Furthermore, we have taken into account the income of the recipient family by using the migrant's perception of his family's living standard before his departure.[13]. The use of subjective variables has received some criticism in the literature (Senik, 2005,. But some studies have shown that individuals' evaluation of their financial situation is the good predictor of their actual revenue. (Ravaillon and Lokshin, 2002). In this case, the migrants are supposed to have a higher probability to remit when their own perception of their income in the host country is positive and when their perception of their family wealth in the home country is negative.

Our results (see table 3) show that, as expected, the more negative the migrant's perception of the family's living standard, the higher the likelihood to remit[14].

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[13] This is not the perception at the moment of emigrating but at the moment of being interviewed during the survey in 2006.

[14] We have also tested the effect of the difference in the migrant's perception of his income (in reality that of his household) in the host country compared to his perception of the income level of his family before his departure. The outcome is equally positive here since the wider the discrepancy between the two standards of living, the higher the likelihood to remit.

Table 3. Probit to predict the likelihood to remit for migrants from Sub-Saharan and southern Mediterranean countries

Remittances (Yes/No)	Coef.		dF/dx
Constant	-3.338	***	
	(0.838)		
Algeria	-1.124	***	-0.238
	(0.104)		
Morocco	-0.752	***	-0.133
	(0.109)		
Tunisia	-0.510	***	-0.091
	(0.117)		
Turkey	-0.665	***	-0.105
	(0.152)		
Sub-Saharan Africa		*Reference modality*	
Revenue (Ln)	0.247	***	0.055
	(0.094)		
SLHp Perception standard of living home country	-0.124	***	-0.028
	(0.032)		
SLFp Perception standard of living host country	0.218	***	0.048
	(0.043)		
Tradition-language (attachment/home country)	0.125	***	0.028
	(0.028)		
Age (Ln)	0.207	*	0.046
	(0.149)		
FSO migrant family size in the home country	0.243		0.048
	(0.155)		
FSF migrant family size in the host country	-0.043	*	-0.010
	(0.024)		
Staying definitively in France	0.109		0.023
	(0.107)		
Staying then returning to the home country	0.424	**	0.114
	(0.178)		
Staying in France and going to another country	0.516	*	0.145
	(0.312)		
Has not decided		*Reference modality*	
F1 (poverty, insecurity feeling, lack of future perspectives)	0.108	***	0.024
	(0.040)		
Staying duration and date arrival (Ln)	0.208	***	0.046
	(0.042)		
Moroccan 1990-1994	1.142	***	0.383
	(0.438)		
Algerian before 1990	1.256	***	0.428
	(0.469)		
Number of obs	2387		
Wald chi^2 (18)	272.640		
Prob > chi^2	0.000		
Log pseudolikelihood	-949.250		
Pseudo R^2	0.140		

Notes: 1. Robust Standard errors are in brackets. 2. * significant at 10%; ** significant at 5%; *** significant at 1%.

The results concerning the role of the family size both in the home country (FSO) and in the host country (FSF) confirm the theoretical hypothesis. The coefficient is negative and significant for the variable FSF: the larger the migrant's family is in the host country the less the probability to remit.

Lastly, we tested the relative importance of the period during which migrants arrived in France to their remittance behavior in order to compare the remittances behavior of different waves of immigration and to deal with the turnover of the migrant stock in France. The relative duration of stay depends on the date and the historical context of the emigration. This is particularly evident in the case of Algerian migrants as those who arrived before the 1990s appear to feature a markedly higher likelihood to remit compared to those who arrived after this period. Insofar as Moroccans are concerned, those who arrived during the first half of the 1990s also seem to remit more than those who arrived after this period. Lastly, the arrival period of Tunisians and Turks does not make a significant difference in the likelihood to remit.

As we expected, the likelihood to remit seems to increase according to the migrant's age and the duration of stay in the host country. Concerning the role of the subjective variables, the intent to return significantly increases the probability to transfer money. Conversely, the decision to stay in France forever has no impact on the likelihood to We also looked at the effect of the context in the home country, during which the emigration took place as perceived by the migrants. The proxy for context is created by a composite variable F1 which includes the perception of poverty, of insecurity and the perception of the future in the home country created from a factorial analysis, including questions on the conditions in the home country that have motivated the emigration. The negative perception of the quality of life in general in the home country does actually increase the likelihood to remit. Among the subjective variables, the migrants' attachment to their home country plays an important role. Attachment is approximated by the will to transmit the culture, the traditions and the language of the home country to their children. We hypothesize that a person who is less attached to his home country will be less likely to make an effort in this endeavor. Our analysis shows that the ties with the home countryhas a significantly positive impact the decision to remit. One could suspect an endogeneity between attachment and remittances. This risk is limited by the fact that we use structural variables such as language and cultural transmission to the children, which are the results of long term and structural behavior that could be akin to the concept of "habitus" *à la Bourdieu*.

We cross-check this result using other objective variables. We confirm the role of classical objective variables (income for example) but find that =attachment to the home country and historical variables play an important role in the decision to remit.

In order to analyze the decisions to remit and the amounts and destinations of remittances (investment, consumption, housing...) we now focus only on migrants who make remittances by analyzing the data of the survey we conducted in post offices.

3.2. ANCIENT MIGRANTS REMIT AND INVEST MORE IN HOUSING

We analyze the behavior of migrants who remit and the intended use of these remittances. In this second model we propose to test three distinct uses of remittances using three equations that aim to account for the motivations to transfer, namely: current expenses, investment, purchasing a house. In order to go further into the analysis of this data, different logistic regression methods could be used to assess the probability to transfer money so as to finance the different ways of expenditure. We might then obtain biased coefficients here, since this is an instance where simultaneous decisions can be suspected (purchasing/building a home, current

expenses and investments). In order to take into account this simultaneity which induces endogenous risks, we assess a multivariate Probit model (rather than three independent probit models) (see Greene, 2003; Cappellari and Jenkins, 2003). The multivariate model is therefore better adapted to the estimation of the purposes of remittances than the traditional models since there is a concurrence of events.

<div align="center">Equation (2)</div>

$$\begin{cases} Y_1^* = x_1'\beta_1 + \varepsilon_1 \\ Y_2^* = x_1'\beta_2 + \varepsilon_2 \\ Y_3^* = x_1'\beta_3 + \varepsilon_3 \end{cases}$$

$$\text{with } \begin{cases} Y_1 = 1 \ if \ Y_1^* > 0; \ 0 \ otherwise \\ Y_2 = 1 \ if \ Y_2^* > 0; \ 0 \ otherwise \\ Y_3 = 1 \ if \ Y_3^* > 0; \ 0 \ otherwise \end{cases}$$

X, representing the vectors of independent variables (which may be the same for each equation) and ε_j three distributed error terms according to a normal multivariate law, with an average of 0 for each and a variance-covariance matrix V, so that V has values of 1 on the main diagonal.

This system with three simultaneous equations is assessed according to the maximum simulated likelihood method (since the estimation implies the calculation of a triple integral in the likelihood function). We use the GHK simulator (Geweke-Hajivassiliou-Keane) developed by Cappellari and Jenkins (2003) (*mvprobit* Stata procedure). The use of the GHK simulator implies that the findings depend on the number of random draws used to calculate the simultaneous likelihood function. Cappellari and Jenkins (2003) recommend choosing a number of draws that is at least equivalent to the square root of the size of the sample. Consequently, the choice of 25 draws enables us to relatively rely on the estimated parameters ($25 > \sqrt{562}$). The equation system (2) can be reduced by the equation (3) where we use the objective independent variables of the equation (1), that is to say the nationality of the migrant (orig), the different sociodemographic variables as the migrant's age (Age), family income (R). We also use three new subjective variables as obligation to send money (oblig), attachment to the country of origin (ATT), and desire to return (INST). The significance test confirms the use of multivariate Probit model rather than three independent probits.

<div align="center">(Equation 3)</div>

$$x_1' = \alpha + \sum_i^n \lambda_i Orig_i + \gamma_1 R + \gamma_2 ATT + \gamma_3 Oblig + \gamma_4 Age + \gamma_5 Inst + \varepsilon$$

Multivariate Probit	Housing		Current expenditure		Investments	
(Robust Std. Err.)	Coef.		Coef.		Coef.	
Constant	-3.431	***	12.365	***	-1.443	
	(1.058)		(3.147)		(1.071)	
African countries: modality of reference						
Algeria	-0.103		-3.589	***	-0.160	
	(0.178)		(0.410)		(0.2380)	
Morocco	0.235		-4.396	***	0.132	
	(0.197)		(0.332)		(0.205)	
Tunisia	-0.075		-3.639	***	-0.244	
	(0.182)		(0.486)		(0.193)	
Turkey	-0.199		-4.138	***	-0.034	
	(0.175)		(0.379)		(0.184)	
Income (Ln)	0.368	***	-0.231		0.035	
	(0.110)		(0.201)		(0.112)	
Age	-0.071		-1.210	**	-0.160	
	(0.221)		(0.569)		(0.238)	
Intention of returning	0.430	***	-0.067		0.433	***
	(0.090)		(0.174)		(0.098)	
Attachment	1.018	***	-0.506	*	0.297	**
	(0.120)		(0.294)		(0.134)	
Obligation to transfer money	-0.401	***	0.930	**	-0.010	
	(0.121)		(0.401)		(0.133)	
/atrho21			-0.553	***		
			(-4.530)			
/atrho31			0.310	***		
			(3.410)			
/atrho32			-0.964	***		
			(-4.820)			
rho21			-0.503	***		
			(-5.510)			
rho31			0.300	***		
			(3.630)			
rho32			-0.746	***		
			(-8.410)			

Multivariate probit (SML, # draws=25)
Condition = non possession of a house in the country of origin
Number of obs = 562
Likelihood ratio test of rho21=rho31 = rho32= 0: chi2(3) = 36.5078 Prob > chi2 = 0.000
Wald chi2(27) = 524.760
Log pseudolikelihood = -587.816
Prob > chi2 0.000

Notes: 1. Standard errors are in brackets.
2. * significant at 10%; ** significant at 5%; *** significant at 1%.

Furthermore, the way in which the different decisions are interrelated with one another can be observed.

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Thus, the Rho sign in table 4 is negative and significant when testing motivation 2 against motivation 1 (Rho 21). Transferring money in order to pay current expenses (2) plays to the detriment of allocating remittances to buying or building a house (1). Similarly, owning a house in the home country increases the likelihood to transfer money for investment motives (3) (which is expressed by a positive and significant Rho 31). Remittances for current expenses also play a negative role in the capability to remit for investment motives (Rho 32 being negative and significant) (table 4).

Remitting for current expenses: an irreducible obligation

Remittances to pay for current expenses most often seem to constitute an irreducible obligation as is shown by the fact that the sign of this subjective "*obligation*" variable is positive and significant with current expenses, but negative with transfers for housing and insignificant for the motivation linked to investment (table 4). Moreover, the "*attachment to the home country*" variable does not play any role in the decision to remit for current expenses, whereas it is positively and significantly linked to the investment or housing motivation (table 4).

Income does not imply a link with remittances for current expenses, as is shown by the positive sign of the « *obligation* » variable, transfers for this motive will occur regardless of the migrant's income. Conversely, income does play a role in the decision to remit in order to invest money (financial investments, business, crafts, housing).

Age weighs in on the decision to remit for motives concerning current expenses (negative and significant coefficient). Indeed, it is the youngest who make these types of remittances. This result can be found in the analysis by nationality. The variables associated with the migrant's origin all feature negative and statistically highly significant signs, only for current expenses. In other words, Algerian, Moroccan, Tunisian and Turkish migrants are far less likely to remit money in order to pay for current expenses than a migrant from Sub-Saharan Africa.

In short, the typical profile of a migrant who remits to finance the current expenses of the family group in the home country is a young migrant from Sub-Saharan Africa, who has little or no attachment to his home country and who feels compelled to remit, regardless of his income level. The young migrants from poor Sub-Saharan African countries seem to incorporate the question of remittances as a motive for their departure

Transferring in order to finance housing: a major concern for migrants with strong ties with their home country

In the decision to remit so as to finance housing in the home country, it is the "*attachment*" to the home country variable that ranks as the most determining one (positive and significant coefficient in table 4), followed by the "*decision to resettle"* in the home country and, lastly, by the migrant's income.

Within the framework of the family organisation of Algerians, Tunisians or Moroccans in France, the parents of the first generation (whether male or female) have already made the effort to build, to improve or to extend the existing family home before. The financial flows between adult children who were born in France or who arrived in their infancy, and their parents, is organised extensively and over a relatively long period around the investment in the house (previous motive). The fathers do not return definitively but come and go (as the pension is received in France, the money is then partly or entirely transferred to the home country). Mothers equally organise the links between the home country and their children. Income and the aim to resettle in the home country is a key variable of remittances for these motives. Children who have got an income contribute often to the whole budget of the family. This is one of the reasons why the "*attachment*" variable is so determining in this equation.

The *"obligation"* variable which accounts for remittances intended for current expenses supplants expenses for housing. This is linked to the budget constraint.

The age of migrants does not seem to be determining factors in the motivation to buy real estate since more than 60 % of the older migrants who remit already possess a family home in the home country or even in their home village (graph 2)[15]. Furthermore, regressing the variable possession of a house in the home country with the duration of the stay results in a positive and highly significant correlation (Annex 3). Unschooled migrants are also those who have lived in France for a long time and equally feature the same type of behavior (graph 2). The education level in relation to the possession of a home follows a kind of U-shaped curve (graph 2): unschooled migrants who have been in France for more than twenty years are the most likely to own their home; people with a secondary education level, with an A-level or with 2-year post A-level higher education are the least likely to own a home, while the highly educated somewhat catch-up with the level of ownership of the unschooled.

Remitting to invest: the determining nature of the project to resettle in and the attachment to the home country

For remittances devoted to investment, it is again the two variables "*decision to settle again*" and "*attachment to the home country*" that are determining. This confirms the idea that the ties with the home country are prominent and rank after the project to return. Yet we had noticed that it is the unschooled migrants that formerly arrived in France who were the most concerned by the attachment variable. Indeed, it is not uncommon to see retired Algerian, Moroccan or Tunisian people invest in the home country, not only in the family house but also in the creation of small companies in business, services or car repair shops, thus providing employment for the family in the home country, or hoping for the return of some of their children. Once again, the age of migrants does not seem to play a significant role in the investment motive[16].

In all, it is not surprising that a marked dividing line appears in the types of behavior linked to remittances between the motives related to current expenses and those of the investment in and the financing of a house. Young migrants from Sub-Saharan Africa seem to be more likely to fit in with this remittance logic linked to current expenses within the constraint of an irreducible obligation. Migrants originating from Southern Mediterranean countries seem to be more concerned by the other two uses: investment in and financing of a home.

For these two motives, the attachment to the home country well appears to be determining, after the resettlement project, in the decision to remit in order to invest or to finance housing. From the point of view of the migrants' characteristics, the most fundamental feature is linked to the weak educational level (the unschooled or people with a primary education level). Moreover, when testing the impact of the duration of the presence in France separately, the most ancient migrants who arrived in the 1960s-1970s with the lowest educational levels (the *Fordist* sectors in France raised this unskilled labor force) again turn out to remit the most with the purpose to invest.

Actually, if remittances are broken down into motivations or objectives, richer results can be found concerning this variable related to the duration of the stay. This variable should be related to the history of emigration, the conditions of the arrival in the host country and the conditions of departure from the home country, which has an impact on the subjective and probably idiosyncratic variable of the extent of the attachment to the home country.

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[15] Furthermore, the model has been estimated by leaving out migrants who already possess a house in the home country from our sample. This may account for the absence of significance in the age variable in the equation.
[16] See the foot note 16 above.
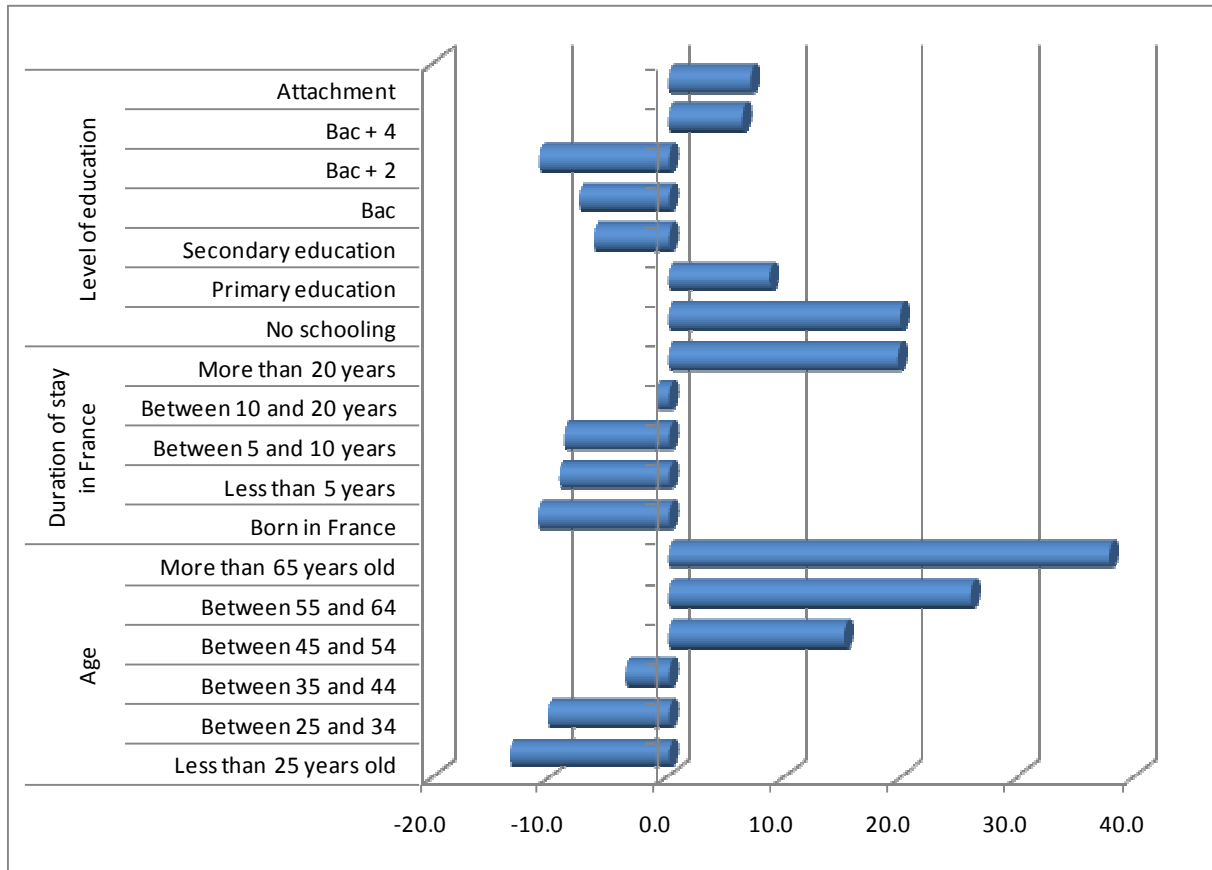
We can specify the characteristics of the migrants belonging to different emigration waves by using a multiple component analysis (MCA) (see annex 3). We get four categories of migrants. The first category is composed of people born in France, young (less than 35 years old) with middle education levels (Bac and Bac + 2). The answerers are not attached to their country of origin and decided not to settle in the country of origin of their parents. The second category represents the old migrants, who emigrated during the 1960s and 1970s, settled in France for a long time, with no or very low education levels. They feel attached to their country of origin and have got the highest probability to remit for investment and housing reasons[17]. The third category refers to the migrants from Sub-Saharan African countries who feel obliged to remit because they probably have been sent to France by their families in order to remit money and are constrained by family contracts or arrangements. The important characteristic in this case is the low level of income of the origin country. The last category corresponds to the new wave of migrants from Morocco and Algeria who arrived in France after the 1990s and in 2000s. Those young people seem to be not attached to the country of origin and don't want to return definitively. Their level of education is relatively high. They have emigrated for repulsion factors *vis-à-vis* their home country. They are different from the migrants of the category 2 whose

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[17] In some sociological literature they are called "chibanis"'. See for example, Sabrina Kassa, Gérard Noiriel, Zabou Carrière, 2006, *Nos ancêtres les Chibanis ! : Portraits d'Algériens arrivés en France pendant les Trente Glorieuses*, Editions Autrement , Paris).

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emigration to France was internalized by the big French firms pertaining to the construction, automotive, textile and mining industries.

4. CONCLUSION

This paper shows that the likelihood to transfer money is lower for migrants from the Maghreb than for those from Sub-Saharan Africa, which confirms the existence of a link between the need to remit and the incentive to emigrate for the latter. It confirms what the empirical literature says about migrant behavior from poor countries.

We have also two original findings about the role of subjective variables on the one hand and the use of remittances on the other. First, by controlling the variables linked to income, education, age or nationality, we have highlighted the role of subjective variables as well as of those related to the attachment to the home country.

We have shown the role of subjective variables that couldn't be directly observed in the current literature. Indeed, if objective variables as migrants income, are determining for all the categories of migrants studied in the DREES survey, we have equally emphasized the important and significant role of subjective variables (notably the migrant's attachment to his home country) and of history, that is to say, the conditions of the arrival and emigration of migrants. Thus, the case of Algerians is particularly interesting: those who arrived before the 1990s feature a higher likelihood to remit than those who arrived more recently. The oldest, come first and unschooled migrants have stronger ties with their home country, which accounts, after controlling several variables, for their tendency to remit more than more recently arrived migrants whose emigration can be explained rather by repulsive and insecurity factors. In other words, the arrival during the 1960s and 1970s period, raised by the big industrial and construction sectors, does not have the same impact on the motivation to remit as the context of the 1990s-2000s when migrations were organized rather on personal and strategic bases concerning more highly skilled people.

Second result, the motivation to remit so as to invest in the home country, for reasons other than those linked to buying a home, also concerns the unschooled and those who have been present in France the longest. The extent of the migrant's attachment thus appears as a discriminating subjective variable according to these historical conditions. By contrast, the migrants from Sub-Saharan African countries send money for current expenditures rather than for investment. The obligation feeling seems to be the important subjective variable for remitting money.

Finally, one of the implications of our findings in terms of economic policy is linked to the question of the risk of erosion of these remittances in the future since the new immigration waves, in a context featuring a restriction of migration flows and a strategy of lowering emigration costs, are translated by a self-selection effect of the most highly skilled. In those circumstances, the countries who receive migrants' remittances ought to think of the after-remittance instead of contenting themselves with implementing an investment management of the migrants' money.

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ANNEX 1. IN 2MO SURVEY: OLDER MIGRANTS WHO SETTLED LONG AGO REMIT MORE

In this annex we analyze the differences in behavior of the individuals of the 2MO Survey in terms of amounts of money transferred. It is assessed by MCOs because the variable of the transferred amount is quantitative although discrete (table A1).

$$T_i = \alpha + \beta_1 R_i + \beta_2 N_i + \beta_3 A_i + \beta_4 Edu_i + \beta_5 Size_i + \beta_6 ChocF_i + \sum \beta_i VS_i + \varepsilon_i$$

The Edu variable has been added, for it is not collinear with the income variable, contrary to what we might initially have thought. By testing the relation of colinearity between the migrants' educational and income level, a disconnection can be observed. This can probably be explained by the relegation effects on the labor market and by the fact that employers allocate average wage levels to migrants because of the informational asymmetry on the labor market. It is worth mentioning that this result is obtained in the case of our sample concerning the nationalities present in our survey. The income and educational levels are likely to be collinear in the case of European migrants[18].

A ChocF variable is explained on the basis of a question on the obligation to remit in case a shock affects the family in the home country (accident, disease) [19]

The Size variable is a proxy of the migrant's family size in the host country (number of the children).

The VS subjective variables are described on the basis of two questions: one on the intention to resettle in the home country, and the other on the intensity of the attachment to the home country.

It is noteworthy that the response concerning the extent of the bonds with the home country is actually positively correlated with the amount of the remittances (graph A1).

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[18] This equation obviously cannot be generalised since the sample contains a selection bias that needs correcting.
[19] The question asked in the survey is: "have you had to send money because of an unforeseen family event such as a health problem or a decease?".

GRAPH A1: INCOME AND REMITTANCE LEVELS, ACCORDING TO THE EXTENT OF THE ATTACHMENT
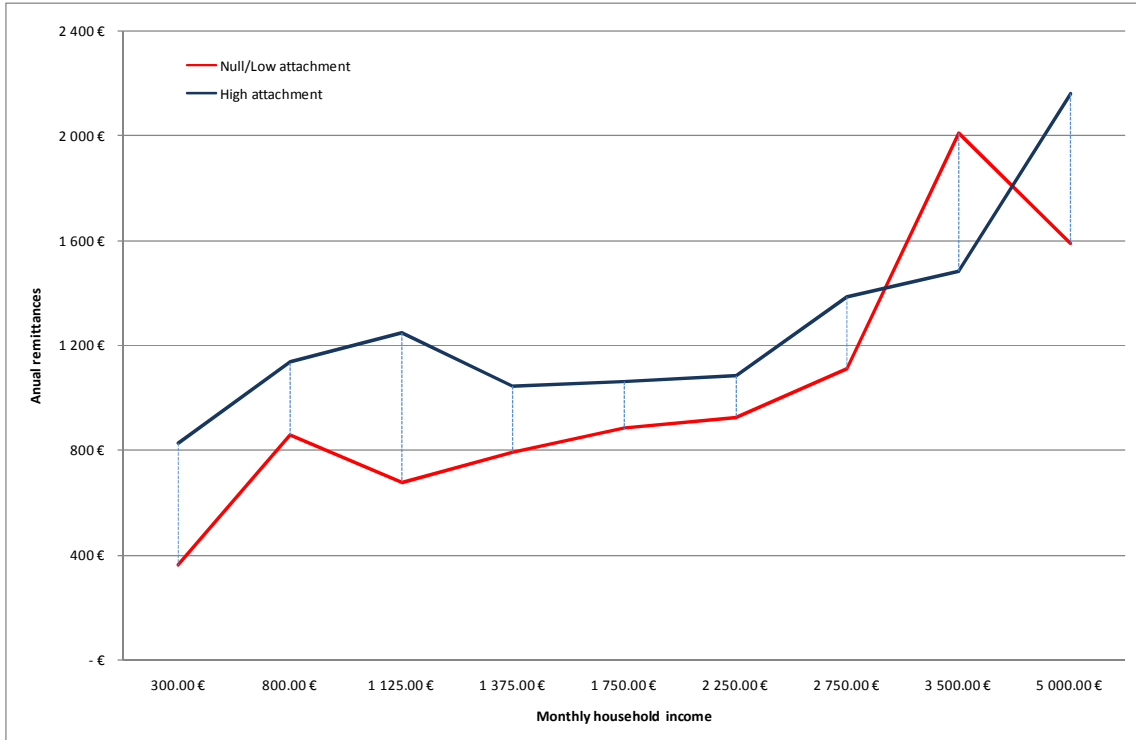
Source: calculations by the authors, 2MO survey

Amount remittances (ln)	Equation 1 Coef.		Equation 2 Coef.		Equation 3 Coef.		Equation 4 Coef.		Equation 5 Coef.	
Constant	2.427	***	2.597	***	3.228	***	2.720	***	2.776	***
	(0.456)		(0.464)		(0.451)		(0.454)		(0.440)	
African countries: modality of reference										
Turkey	-0.054		-0.063		-0.029		-0.045		-0.041	
	(0.106)		(0.108)		(0.106)		(0.110)		(0.109)	
Tunisia	0.060		0.017		0.094		0.106		0.076	
	(0.100)		(0.103)		(0.102)		(0.101)		(0.101)	
Morocco	-0.141		-0.203	*	-0.078		-0.109		-0.188	*
	(0.101)		(0.104)		(0.105)		(0.103)		(0.106)	
Algeria	-0.270	**	-0.320	**	-0.213	**	-0.252	**	-0.268	**
	(0.101)		(0.102)		(0.103)		(0.101)		(0.101)	
Income (ln)	0.434	***	0.459	***	0.438	***	0.415	***	0.406	***
	(0.062)		(0.063)		(0.060)		(0.062)		(0.06)	
Age	0.133	***	0.145	***						
	(0.031)		(0.032)							
French Children Number	-0.072	*	-0.088	**						
	(0.037)		(0.038)							
Born in France					-0.527	***				
					(0.072)					
No schooling							0.232	**	0.148	*
							(0.105)		(0.105)	
Primary Education							0.171	*	0.118	
							(0.093)		(0.094)	
Secondary Education							0.054		0.050	
							(0.087)		(0.086)	
Bac + 2	Modality of reference									
Bac + 4							0.274	**	0.227	*
							(0.116)		(0.117)	
Obligation	0.289	***	0.314	***	0.267	***	0.314	***	0.308	***
	(0.069)		(0.069)		(0.069)		(0.070)		(0.069)	
Project to Return	0.265	***					0.274	***	0.241	***
	(0.044)						(0.046)		(0.045)	
Attachment			0.235	***	0.171	**				
			(0.069)		(0.069)					
Possession of housing									0.304	***
									(0.069)	
Number of obs	986		986		988		988		988	
R-squared	0.166		0.144		0.165		0.155		0.173	

First, Algerians and Moroccans clearly appear to remit significantly less than the other migrants of the sample. This observation confirms the results previously found in the likelihood of remittances based on the DREES survey (graph 1 and table 3) or the abovementioned findings on the average amounts that are transferred (see section 2.2.2.).

The obligation to send money due to an unforeseen event (such as a health problem or death) significantly increases the likelihood to remit a higher amount than the median one, regardless of the income level of the respondent. This variable well reflects the insurance motive that will be dealt with in more detail in the model on motivations. This is a strong constraint affecting all migrants. The instance of such random events markedly accounts for a likelihood to remit that is superior to the median. Obviously, the existence of a project to settle again in the home country considerably and significantly increases the probability to remit more. This result is in perfect compliance with the findings of the recent literature.

Concerning the intrinsic characteristics of migrants, the following results are found:

The educational level (no schooling, primary education, secondary education, 2-year post A-level higher education, 4-year post A-level higher education or more) plays a role in accordance with the theoretical expectations (Faini, 2007): the less skilled the migrants, the higher their likelihood to remit more money. The highly skilled are an exception (with at least four years of post A-level higher education) since they also feature a high probability to remit, which remains weaker however than that of the unskilled (unschooled and primary education level). Migrants with an average level (secondary education, A-level and 2-year post A-level higher education) tend to remit the least. Their educational level is not correlated with their income level, which reflects the imperfections of the labor market and the relegation effects that particularly affect them, as has been analyzed by sociological studies[20].

Finally, we have introduced a subjective characterization linked to the extent of the attachment to the home country. This variable significantly and strongly accounts for the higher level of remittances.

Thus, the typical profile of migrants who remit the most corresponds to those who are mainly from Sub-Saharan Africa, Tunisia or Turkey, unschooled, weakly educated or to a lesser extent highly educated (with at least 4-year post A-level higher education), compelled by a family event, rather elderly, with a more or less certain project to resettle in the home country to which they state being very attached to. The profile of the migrants who remit the least are people from Algeria or Morocco, with a relatively average educational level (secondary education or merely 2 years of post A-level higher education), who are unlikely to resettle in the home country, relatively younger and who declare having few ties with their home country.

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[20] Some sociological surveys show that the most discriminated or relegated candidates on the labour market are migrants with an average educational level (A-level or 2-year post A-level higher education). See for instance S. Beaud and M. Pialoux, 2002, *Violences sociales, violences urbaines*, La Découverte Paris.

Possession of a house in the country of origin (1/0)		Equation 1 Coef.		Equation 2 Coef.		Equation 3 Coef.	
Constant		-1.643	**	-1.308	**	-1.932	***
		(0.612)		(0.606)		(0.605)	
Country of origin	Turkey	0.022		0.048		-0.024	
		(0.138)		(0.136)		(0.138)	
	Tunisia	0.144		0.150		0.242	*
		(0.135)		(0.135)		(0.135)	
	Morocco	0.607	***	0.583	***	0.678	***
		(0.137)		(0.137)		(0.134)	
	Algeria	0.117		0.103		0.171	
		(0.138)		(0.139)		(0.136)	
	African countries			Modality of reference			
Attachment		0.371	***	0.372	***	0.376	***
		(0.094)		(0.093)		(0.093)	
LN Income		0.040		-0.002		0.085	
		(0.081)		(0.08)		(0.079)	
Project to Return		0.235	***	0.248	***	0.232	***
		(0.06)		(0.06)		(0.059)	
Age	Less than 34 years old	0.034					
		(0.161)					
	Betwenn 35 and-44	0.193					
		(0.163)					
	Between 45 and 54	0.645	***				
		(0.177)					
	Between 55 and 64	0.891	***				
		(0.205)					
	More than 65 years old	1.346	***				
		(0.333)					
Duration of the stay in France	Less than 5 years			-0.002			
				(0.183)			
	Between 5 and 10 years			0.029			
				(0.138)			
	Between 10 and 20 years			0.195			
				(0.125)			
	More than 20 years			0.689	***		
				(0.115)			
Level of education	No schooling					0.724	***
						(0.133)	
	Primary Education					0.420	***
						(0.12)	
	Secondary Education					0.003	
						(0.113)	
	Bac + 4					0.361	**
						(0.166)	
Number of obs		988		988		988	
Wald chi² (12)		126.28		121.17		109.88	
Prob > chi²		0.000		0.000		0.000	
Log pseudolikelihood		-601.56		-609.16		-613.16	

Pseudo R^2	0.1094	0.0981	0.0922

To finalize our results, we specified the characteristics of our migrants attached to their country of origin, by means of a Multiple Correspondences Analysis (MCA) based on the objective descriptive variables (country of origin of the migrants, age, duration of stay in France and level of education). Every variable was divided into slices or modalities. Every modality was treated as a dichotomous variable. We obtain a typology from the coordinates of the individuals on the first five factorial axes treated as new synthetic variables. Finally, an analysis of correlation allows us to clarify the composition of the typological groups and their association with the variable indicating the attachment to the country of origin.

Table A3-1 shows the slowness of the first five axes of the ACM and the table 7 summarizes the characteristics of the obtained classes. Four classes turn out to be balanced in terms of number of individuals.

TABLE A3-1: EIGEN VALUE AND INERTIA

	F1	F2	F3	F4	F5
Eigenvalue	0.126	0.093	0.075	0.067	0.063
Inertia (%)	12.573	9.301	7.533	6.673	6.251
Cumulative%	12.573	21.873	29.406	36.079	42.330
Inertia adjusted	0.007	0.002	0.001	0.000	0.000
Inertia adjusted (%)	32.445	11.385	4.494	2.278	1.464
Cumulative%	32.445	43.831	48.324	50.603	52.067

TABLE A3-2: RESULTS BY CLASSES

Classe	Classe 1	Classe 2	Classe 3	Classe 4
Number of observations	238	241	312	209
Intra-class variance	0.177	0.229	0.217	0.208
Minimum distance to the barycenter	0.240	0.127	0.201	0.075
Mean distance from centroid	0.410	0.459	0.447	0.435
Maximum distance to the barycenter	0.684	0.880	0.880	0.821

Table A3-3 shows the correlations between the typological classes and the modalities with which they are built. The tests of Khi^2 and Monte Carlo led on how the association between the variables "memberships in a class" and "attachment to home country" converges towards the acceptance of a significant and positive association for Classes 2 and 3, negative for Class 1 and not significant for Class 4.
Besides, we can see the correlations between the classes and the variable of attachment to the country of origin and the one who describes the desire of reinstalment in the home country.

Class 1 which we could call the "second generation ", consists mainly of persons born in France mostly from Moroccan origin, young (of less than 35 years old) and having a medium level of education (High School Diploma). This class presents a negative and significant correlation with the variable which translates the attachment in the country of origin. Also, obviously, this "second generation" is not inclined to settle down in the country of origin of the family.

Class 2, that of "Chibanis[21]", are older migrants from the "fordist period" (in the 1960-1970's) that consists of mostly Algerians and Moroccan, present in France for more than 20 years and very weakly, even in no way schooled. This class presents a positive and significant correlation with the variable of attachment and with the variable "intention of reinstalment" in their country of origin.

Class 3, which we can qualify as "appointed migrants" (sent abroad by families with the objective to receive transfers) consists of migrants native to sub-Saharan Africa, between 34 and 54 years old. Their duration of stay in France is between five and 20 years and they have a primary and secondary educational level. These migrants who transfer for obligatory reasons (current expenses) remain nevertheless attached to the country of origin and declare to want to return.

TABLEAU A3-3: MATRICE DE CORRELATION (PEARSON)

	Class-1		Class-2		Class-3		Class-4	
	" The second generation"		"The Chibanis"		"The appointed migrant "		"The Harragas"	
Country of origin								
African countries	-0.128	***	-0.119	***	0.184	***	0.050	ns
Turkey	-0.063	**	-0.090	***	0.157	***	-0.018	ns
Tunisia	-0.029	ns	-0.015	ns	0.008	ns	0.036	ns
Morocco	0.216	***	0.115	***	-0.190	***	-0.131	***
Algeria	-0.004	ns	0.105	***	-0.153	***	0.068	**
Age								
Less than 25 years old	0.527	***	-0.186	***	-0.200	***	-0.128	***
Between 25 and 34	0.160	***	-0.372	***	-0.365	***	0.639	***
Between 35 and 44	-0.196	***	-0.169	***	0.587	***	-0.286	***
Between 45 and 54	-0.210	***	0.298	***	0.090	**	-0.195	***
Between 55 and 64	-0.173	***	0.531	***	-0.200	***	-0.150	***
More than 65 years old	-0.091	**	0.290	***	-0.110	***	-0.084	**
Duration of the stay in France								
Born in France	0.795	***	-0.331	***	-0.349	***	-0.086	**
Less than 5 years	-0.144	***	-0.163	***	-0.105	***	0.442	***
Between 5 and 10 years	-0.224	***	-0.239	***	0.118	***	0.351	***
Between 10 and 20 years	-0.234	***	-0.271	***	0.680	***	-0.244	***
More than 20 years	-0.319	***	0.871	***	-0.305	***	-0.235	***
Level of education								
No schooling	-0.219	***	0.325	***	-0.004	**	-0.108	***
Primary Education	-0.248	***	0.208	***	0.162	***	-0.143	***
Secondary Education	-0.203	***	-0.050	**	0.169	***	0.072	**
Bac	0.335	***	-0.202	***	-0.065	**	-0.064	**
Bac + 2	0.419	***	-0.184	***	-0.187	***	-0.033	**
Bac + 4 or more	-0.117	***	-0.076	**	-0.140	***	0.362	***
Project to Return	-0.210	***	0.069	**	0.115	***	0.016	ns

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[21] Chibanis, "white hair " in dialectal Arabic, they are the old immigrants from the Maghreb. Arrived in France during the period of growth which are sometimes called the "Thirty Glorious", while the country needed arm. They all experienced a situation leading them of the exile to the implanting in the French society, without giving up their identities, their values in their past. (Sabrina Kassa, Gérard Noiriel, Zabou Carrière, (2006), Nos ancêtres les Chibanis ! Portraits d'Algériens arrivés en France pendant les Trente Glorieuses, Editions Autrement, Paris).

| Attachment | -0.195 | *** | 0.075 | ** | 0.100 | ** | 0.011 | ns |

Class 4 corresponds to the "new waves of migrants", qualified sometimes by themselves as "Harragas"[22], and consists rather of young Algerians, whose duration of stay in France is below ten years, with higher levels of education. The individuals belonging to this class do not seem to be attached to their country of origin and do not declare to wish to return back home. Their emigration can be explained more by an effect of aversion towards their country of origin unlike "Chibanis", the immigration of which had been organized by the French companies belonging to the sectors of the *fordist* period.

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[22] Word native of Arabic from Maghreb which is translated by "whom burn» or "Burners of borders (papers, in reference to the documents of identity).