Migrations and Determinants of Remittances to Southern Mediterranean Countries: when History Matters ! Insights of two new Surveys

Luis Miotti (University of Paris 13), El Mouhoub Mouhoud (University of Paris Dauphine), Joel Oudinet (University of Paris 13)

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#### Motivations

- Funkhouser (1995) : migrants from two countries (as Nicaragua and Salvador) with same observable characteristics have different remitting behaviors because of non observable variables.
- Going further in this research by showing that these non observable 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.
- Measuring directly the role of non observable variables related to subjective and historical variables of the emigration process.
- Using an original survey we have conducted in 2007-2008 of 1,000 people who transfer money to the three Maghreb countries, to Turkey and to the countries of Sub-Saharan Africa. We also use a second survey conducted by DREES (French Ministry Health) in order to find out the difference in the behaviour of those who send and those who do not send money. The sample covers 3,500 people for the regions we are interested in.

#### Two main aims of the paper

 The impact of subjective variables and the historical context of emigration on the remitting behavior
How those subjective variables explain diverse uses made of the money send by migrants ?

### Plan of the presentation

- 1. Brief theoretical and empirical survey
- 2. Data of the two surveys used
- 3. The econometric strategy
- 4. Main results
- 5. Conclusion and implications

# 1. The economics of determinants of remittances : a brief survey (1)

Well-known theoretical literature explaining the determinants of remittances on a micro level see Docquier & Rapoport literature survey -(2006). Pure Altruism, Exchange (goods and services , Loans reimbursement...), Insurance, Strategic motives (inheritance, return decisions...), Mix motivations...

#### Empirical literature (1)

- 1. Pure Altruism rejected / other motives are dominants Altonji, Hayashi et Kotlikoff (1997) (Lucas et Stark 1985 => exchange, inheritance) Chavez (2004) => exchanges +
- 2. Altruism yes, but combined to the other motivations (Agrawal-Horowitz, 2002),
- 3. Insurance : Caribbean countries, Sub-Saharan countries (Itzigsohn, 1995, Agarwal, Horowitz, 2002, Gubert, 2002 and Osili, 2007),
- 4. The extension of the stay in the home country and the decrease in the frequency of visits to the home country is often associated with weak family ties, a slump in the degree of altruism and therefore a decrease in the remittances (Banerjee, (1984) Funkhouser, 1995)

#### Empirical literature (2) : staying duration

- But this negative relation has not been confirmed by most works. In some of them the longer the migrant's stay in the host country, the more important his remittances (Agarwal, Horowitz, 2002, Osaki, 2003, Durand *et alii*, 1996, Lucas, Stark, 1985, Amuedo-Dorantes, Pozo, 2006, de la Brière *et alii*, 2002, Gubert, 2002, Hagen-Zanker, Siegel, 2007, Craciun, 2006).
- Our hypothesis : The duration of immigration should also be related to the context of departure, that is to say the date and the place of the departure from the home country. Not an absolute variable but a relative one.

#### 2. Data base from two new surveys(1)

We use two types of surveys here in order to gain deeper insight into the remittance behaviour from France to Southern Mediterranean countries, namely Algeria, Morocco, Tunisia and Turkey.

- i) 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

- ii) survey we have carried out ourselves in post offices in France (2MO survey) so as to gain deeper insight into the characteristics, the motivations, the aims and the level of remittances made by this population who transfers money to their home country.

We are interested in migrants from Sub-Saharan Africa as a reference group to the extent that in France, this group is renowned for having an intensive remittance activity to their home country.

07/09/2009

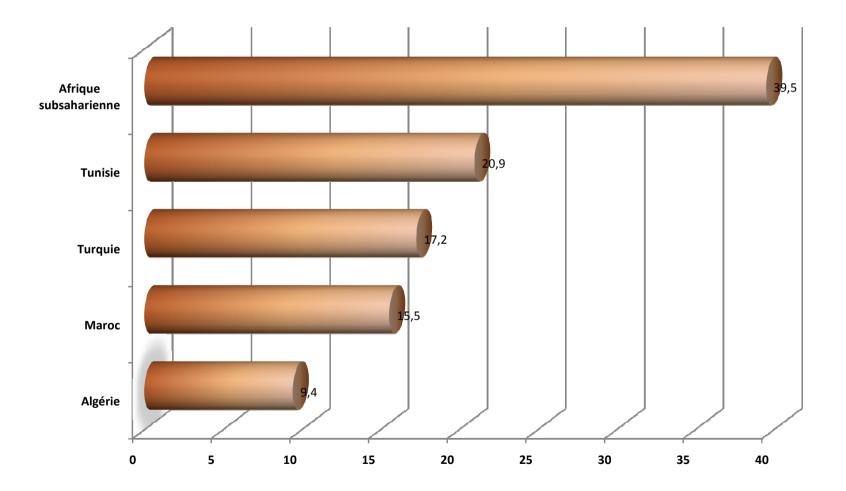
#### 2. Data from 2 original surveys (2)

• DREES Survey : (The Direction de la Recherche de l'Evaluation et des Statistiques (DREES) has made since 2006 a survey 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.

•6,280 migrants aged 18 or above, eligible to the reception and integration contract (CAI).

•we have singled out 3,505 people who correspond to the nationalities we study, namely : North Africa, Turkey and Sub-Saharan Africa

# Part of migrants sending money to their home country (Enquête DREES, en %)



#### 2. Data from 2 original surveys (3) 2MO Survey

#### • **2MO survey** (*Miotti-Mouhoud-Oudinet*):

•survey at the end of 2007-begining 2008, within the framework of a research convention with the Research Institute of Ia Caisse des dépôts as well as with the Research Mission of La Poste, questioning 1,000 respondents who remit to Algeria, Morocco, Tunisia, Turkey and the countries of Sub-Saharan Africa.

•The original feature of this survey first lies with the fact that the statistical data, provided by La Poste, concerning the daily amounts of remittances and their destinations over a two-year period (2005 and 2006), have been processed per post office and cover the whole of the French territory. This has enabled us to spot the peak periods of remittances, month after month and week after week, over two years.

#### 3. Econometric strategy (1)

# 3.1. We test a Probit in order to predict the probability to transfer money for migrants.

#### $T = \alpha + \sum_{i=1}^{n} \beta_{i} Orig_{i} + \gamma_{1}R + \gamma_{2}FSO + \gamma_{3}FSF + \gamma_{4}Age + \sum_{i=1}^{n} \sigma_{i}D_{i} + \gamma_{5}SLHp + \delta_{6}SLFp + \sum_{i=1}^{n} \lambda_{i}SUB_{i} + \varepsilon$

R : the declared amounts of the income of <sup>*i*</sup>the household of the migrant,

Orig : the migrant's nationality

Age : the migrant's age

FSF = migrant's family size in the host country

FSO = migrant's family size in the home country

Di : duration of stay in the host country and variables informing about the dat of arrival in France by nationality of the migrants

SLHp : the standard of living in the host country as perceived by the migrant SLFp : the poverty or wealth level of the family in the home country as perceived by the migrant

SUB : the vector of subjective variables resuming the following variables :

- traditions-culture-languages transmitted by the migrant to his family which approximate 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 sense of poverty, of insecurity and the perception of the future in the home country (CPA)

<sup>07/09/2009</sup> (take migrants' remittances to Sub-Saharan Africa as a reference) <sup>11</sup>

### 3. Econometric strategy (2)

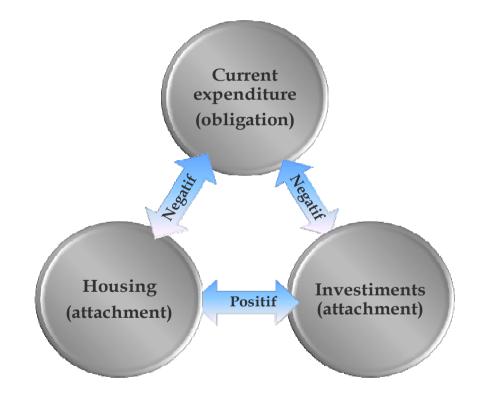
3.2. We test three distinct goals use of remittances.

- Possible biased coefficients when simultaneous decisions are 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 correlation coefficients between the error terms of each of the equations are significant in all cases.

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

#### **GRAPH 2: RELATION BETWEEN THE DIFFERENT DECISIONS**



#### 3.2. Multivariate probit

(Equation 3)

$$x_{1} = \alpha + \sum_{i}^{n} \lambda_{i} Orig_{i} + \gamma_{1}R + \gamma_{2}ATT + \gamma_{3}Oblig + \gamma_{4}Age + \gamma_{5}Inst + \varepsilon$$

In this equation we use the objective independent variables of the previous equation :

the nationality of the migrant (orig),

the different sociodemographic variables as migrant's age (Age),

family income (R)

We use also three new subjective variables :

as obligation to send money (Oblig),

attachment to the country of origin (ATT),

and desire to return (INST).

### 4. Results

• 4.1. Motivations (DREES survey)

 4.2. Use of remittances (MULTIVARIATE probit) (2MO survey)

# 4.1. Motivation Results (1)

- The probability to remit is lower for migrants from the Maghreb and Turkey than for those from Sub-Saharan Africa.
- An increase in the income for the migrants as a whole raises the likelihood to remit.
- The perception of their income increases the probability to transfer,.
- the more negative the migrant's perception of the family's living standard, the higher the likelihood to remit
- this result does seem to confirm the altruistic motivation of remittances highlighted by the theoretical models, without ruling out the other motivations however.
- the likelihood to remit seems to increase according to the migrant's age

# Results (2)

the project to return significantly increases the probability to transfer money.

The negative perception of the quality of life in general (repulsive factors) in the home country does actually increase the likelihood to remit, in the same way as the perception of the family income in the home country as weak.

the ties with the home country play a positive and significant role in the explanation of the decision to remit

We test the relative importance of the period during which migrants arrived in France in their transfer behaviour.

the case of Algerians: those who arrived before the 1990s feature a higher likelihood to remit than those who arrived more recently. The oldest, first come 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.

Remittances (Yes/No)	Coef.		dF/dx
Constant	-3.338	* * *	
	(0.838)		
Algeria	-1.124	***	-0.238
5	(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 (pauvreté, insécurité, manque d'avenir)	0.108 (0.040)	* * *	0.024
Staying duration and date arrival (Ln)	0.208	* * *	0.046
	(0.042)		5.640
Morocco 1990-1994	1.142	* * *	0.383
	(0.438)		5.565
Algeria before 1990	1.256	* * *	0.428
	(0.469)		5.420
Number of obs	2387		
Wald chi² (18)	272.640		
Prob > chi²	0.000		
Log pseudolikelihood	-949.250		
Pseudo R <sup>2</sup>	0.140		

Table 3. Probit to predict the likelihood to remit for migrants from the South of the Mediterranean in France \_\_\_\_\_

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

### 4.2. Uses of remittances : Results (1)

- Remitting for current expenses: an irreducible obligation
- Transferring in order to finance housing: a major concern for migrants with strong ties with their home country both for unschooled old migrants and highly skilled new migrants
- Remitting to invest: the determining nature of the project to resettle in and the attachment to the home country

Multivariate Probit	Housing		Current expend	diture	Investment	ts
(Robust Std. Err.)	Coef.		Coef.		Coef.	
Constant	-3.431	* * *	12.365	* * *	-1.443	
	(1.058)		(3.147)		(1.071)	
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)			

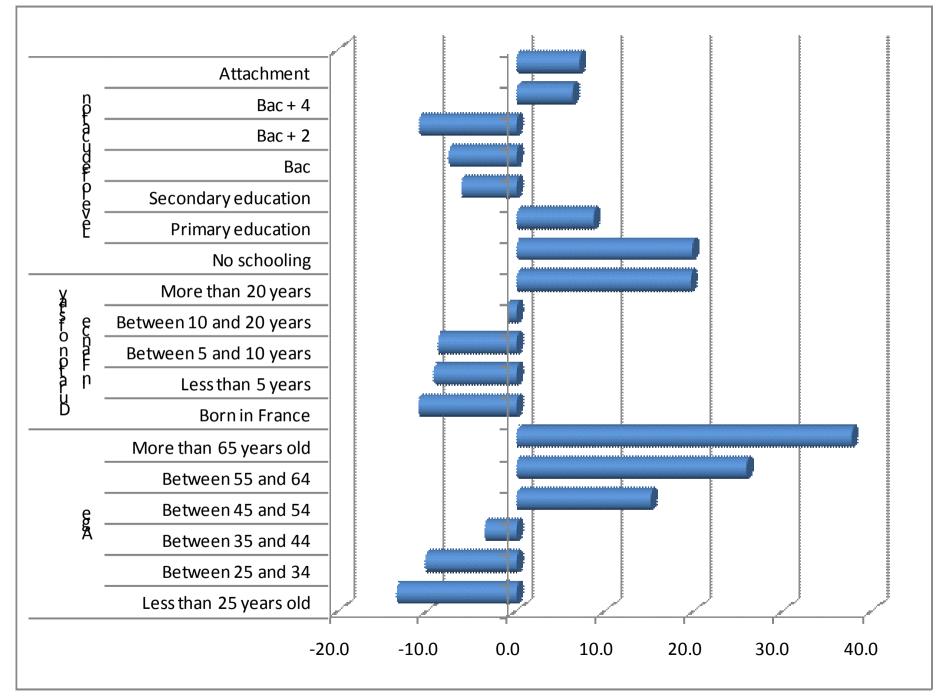
Multivariate probit (SML, # draws=25)

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%.

GRAPH. 3: POSSESSION OF A HOUSE IN THE COUNTRY OF ORIGIN



# Conclusion (1)

1. Motivations to remit : history matters !

- if altruistic and insurance motives are determining for all the categories of migrants, we have emphasized the important and significant role of subjective variables (notably the migrant's attachment to his home country) and of history. The arrival during the sixties, 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 became organized rather on personal and strategic bases concerning more highly skilled people*.
- Old unskilled migrants and very highly skilled migrants remit more. The profile of migrants who remit the least are Algerians or Moroccans who settled only recently in the host country, with a relatively average educational level (secondary education or 2-year post A-level higher education), and who are unlikely to resettle in the home country.

## Conclusion (2)

2. Uses of remittances (housing, investment, current expenditures)

-. Remittances to pay for current expenses most often seem to constitute an irreducible obligation, typically for Sub saharan migrants, 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

- 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 ant the less educated

## Conclusion (3): Implications

- I. Academic : The question then arises if one of the reasons that may account for the remittance behaviour of the unschooled and first come does not stem from the children's contribution to the family budget which makes it possible to make higher remittances as compared to the individual incomes of fathers.
- II. Go further into this notion of attachment to the home country as well as the relationship between the "old migrant who arrived in the 1960s-1970s" with his children who migrated in their infancy or who were born in France,
- III. Economic policy is linked to the question of the depletion 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