



# **Diversification of Microfinance Institutions: Determinants for Entering the Remittances Market**

**Ritha Sukadi Mata**

As financial intermediaries, microfinance institutions (MFIs) contribute to integrate remittances into the formal financial system. Using a database including 225 MFIs from Latin America and the Caribbean, this paper investigates the institutional factors that influence the MFI decision-making process of entering the remittances market. Operational, managerial, and financial performances are considered as potential explanatory factors. Results exhibit that financial performance has the highest impact on the MFIs' decision to diversify by offering a remittances service.

Keywords: microfinance, remittances, money transfer activity, diversification

JEL Classifications: G21, L25, O15, O16

CEB Working Paper N° 10/043  
2010

**A revised version of this working paper may be available on the following  
webpage: <http://www.solvay.edu/latest-updates-ceb>**

Diversification of Microfinance Institutions:  
Determinants for Entering the Remittances Market

Ritha Sukadi Mata<sup>1</sup>

**Abstract**

As financial intermediaries, microfinance institutions (MFIs) contribute to integrate remittances into the formal financial system. Using a database including 225 MFIs from Latin America and the Caribbean, this paper investigates the institutional factors that influence the MFI decision-making process of entering the remittances market. Operational, managerial, and financial performances are considered as potential explanatory factors. Results exhibit that financial performance has the highest impact on the MFIs' decision to diversify by offering a remittances service.

*Key words: microfinance, remittances, money transfer activity, diversification*

JEL: G21, L25, O15, O16

---

<sup>1</sup> Université libre de Bruxelles, Solvay Brussels School of Economics and Management, Centre Emile Bernheim, and CERMi. Contact: [rsukadim@ulb.ac.be](mailto:rsukadim@ulb.ac.be). The author would like to thank Marek Hudon, Marc Labie, Ariane Szafarz and Didier Toussaint for their valuable comments, and the Bernheim Foundation for its funding.

## I. Introduction

According to the World Bank (2009), the remittances (money sent home by migrants) towards developing countries amounted to 317 billion USD in 2009, representing a 93% growth over the last five years. Remittances are the second largest source of foreign capital flows, after foreign direct investments and before official development aid. Given their magnitude and weight in receiving countries' economies<sup>2</sup>, remittances represent a strong tool for economic development. In this paper, we focus on the share of remittances dedicated to savings. Those savings increase the availability of funds in the economy, provided the money is recycled by financial institutions. As many remittances receivers are excluded from the banking system because of their socio-economic profile (Shaw, 2006), microfinance institutions offer them a promising alternative.

Penent (2003) shows that in 1998, 51% of remittances were dedicated to direct consumption (household needs, education fees), while the remaining 49% were used to finance investments (business projects, housing). In that respect, savings may reveal instrumental as they increase the availability of funds for valuable projects. However, as many remittances receivers are excluded from the banking system, their potential savings are not optimally dealt with. This is where microfinance institutions can intervene as the unbanked poor represent their typical clientele.

The impact of remittances on development has been assessed in the literature. Ratha (2003) argues that remittances are more broad-based distributed (as they flow directly to households), less volatile, and more counter-cyclical than other sources of external financing for receiving countries. Amuedo-Dorantes and Pozo (2006) stress that remittances flow tends to discourage exportations and hinder output and employment, leading to real exchange rate appreciation.

---

<sup>2</sup> More than 25% of the GDP for Lesotho or Lebanon for instance (World Bank, 2009)

The World Bank (2006) and Giuliano and Ruiz-Arranz (2009) argue that remittances improve the country's creditworthiness and enhance its access to international capital market. Globally, the remittances seem to have a positive impact on the recipient countries' GDP (e.g., Faini, 2007; Glytsos, 2005; Solimano, 2003; Toxopeus and Lensink, 2007)<sup>3</sup>.

The social interest of having microfinance institutions involved on the remittances market is twofold. First, financial institutions benefit from screening processes that help identifying valuable investment projects and allocating capital efficiently to various borrowers<sup>4</sup>. Second, institutionalized savings give remittances receivers the opportunity to secure their residual monies as lendable funds (Gheeraert *et al.*, 2010).

The remittances market provides diversification opportunities to MFIs in terms of revenues (through commissions on money transfers) and volume of activities. Indeed, the money transfer activity can be viewed as a call-product to attract new clients, particularly in countries where loan portfolios growth is constrained by the lack of access to commercial refinancing mechanisms. Furthermore, involvement on the remittances market gives MFIs the opportunity to fulfill their social goals by providing proximity, low-cost and safe money transfers given their presence in remote areas.

To our knowledge, while literature exists on determinants of banks' growth and diversification strategy (see for instance Cyree *et al.*, 2000; Landi and Venturelli, 2001), the literature has not analyzed, so far, the institutional factors that drive the MFIs' decision to diversify by entering the remittances market. This paper aims to fill this gap. Using the MIX Market database reporting the financial statements of 225 MFIs operating in Latin America and the Caribbean (LAC), we test the impact of several observable factors on the money transfer activity (MTA). Our results suggest that financial performances or the capacity for

---

<sup>3</sup> Nevertheless, a few studies (Chami *et al.*, 2005 or Azam and Gubert, 2005) find a negative impact

<sup>4</sup> See for instance Allen and Santomero (1999) and Morawski (2007) for literature on this issue.

MFIs to leverage funds has a significant effect on the probability to have MFIs providing a money transfer service, while profitability and operational performances are not determinant factors in the decision-making process and should be analyzed as results of the decision to enter the money transfer market.

The rest of the paper is organized as follows. Section II examines which financial institutions are able to provide financial services to remittances receivers. Section III discusses the potential determinants of the decision for an MFI to enter the remittances market. Section IV describes the data and methodology used. Section V presents and comments the empirical results. Section VI concludes.

## II. Financial inclusion of remittances receivers

The money transfer market is made of formal actors (money transfer operators, commercial banks, post offices, and credit unions) and informal ones (*hawalas*<sup>5</sup>, friends, and family members).

The formal market is dominated by money transfer operators (MTOs). The main MTOs at global level are Western Union and MoneyGram<sup>6</sup>. MTOs use privately-owned proprietary networks to provide low-value money transfers domestically and internationally to people who lack access to or do not wish to use bank transfers (Isern *et al.*, 2006). Transfers are mainly carried out through the companies' proprietary Electronic Funds Transfer networks, though some small operators rely on telephone or fax. Each major MTO operates in a similar manner, with a central database linking all agents. After the sender pays the transfer amount and fee, the funds are immediately transferred (the money is available to the receiver within a

---

<sup>5</sup> Hawalas are systems in which the operator receives money from the remitter and authorizes his partner in the receiving country to give a counterpart of equivalent value (not necessarily money) to the beneficiary (Mahamoud, 2006).

<sup>6</sup> See Sukadi Mata (2009) for details.

few minutes). The sender then informs the recipient, usually by phone. MTOs provide their services through their branch offices and through extensive networks of partners that are banks, postal offices, MFIs, travel agents, check cashers, foreign exchange bureaus, etc. (Isern *et al.*, 2006).

Other formal actors also provide the opportunity to send money through electronic transfer mechanisms (SWIFT, Giro), or paper-based mechanisms (cheques, postal orders)<sup>7</sup>. In both cases, at least the senders must hold an account in the financial institution providing the money transfer service. This requirement limits the use of these mechanisms by migrants, as migrants and the majority of remittances receivers do not hold accounts in financial institutions. However, banks and credit unions are implementing transfer services that are accessible to migrants and remittances receivers. It is for instance now possible for migrants to remit around the world through a network of 200 credit unions (*International Remittance Network* or *IRnet*) without holding an account in these credit unions (Gupta *et al.*, 2009).

Informal remittances systems are all remittances operators working outside the regulated financial sector, such as transfers between individuals and *hawalas* (Freund and Spatafora, 2008).

In terms of financial inclusion of remittances receivers, MTOs by themselves do not offer financial services other than the money transfer activity. However, when they have partnerships with banks or MFIs, account-to-account or cash-to-account transfers (the recipients receive money on their accounts in the financial institution) can be possible. Informal actors are neither able to offer additional financial services. It is however easily conceivable to have *hawalas* operators also operating as moneylenders or savings keepers. The market actors that can contribute to integrate remittances into the financial system and the

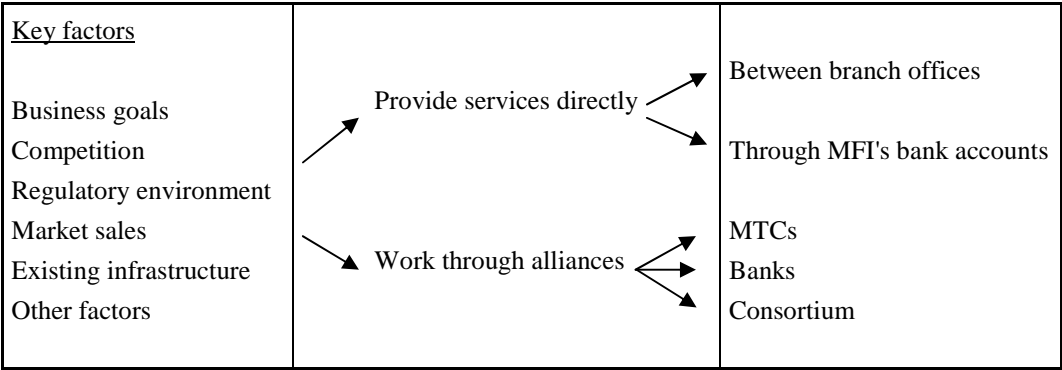
---

<sup>7</sup> See Isern *et al.* (2005)

economy are thus the actors that already operate on the financial market with the provision of financial services other than money transfer. We then come to the issue of financial inclusion and accessibility to financial services for people. This is directly related to the ability of MFIs, unlike other financial institutions, to develop methodologies that enable the financial inclusion of people excluded from traditional banks.

MFIs operate on the remittances market through a direct approach (without business alliances, by moving funds between their own locations or through their bank accounts) or through alliances with MTOs, banks, or consortiums of partners. An MFI's choice of business models is usually limited by country regulations and market realities (see table 1). In many countries, an MFI without a banking license can act only as agent or subagent of a MTO, or establish a correspondent relation with a commercial bank or another type of licensed financial institution. Market structure will also affect an MFI's choice of business model. The market is often oligopolistic (and monopolistic in some regions like Western Africa where 70% of official payments are handled by one large MTO demanding exclusivity to its partners) and segmented.

Table 1: Different MFIs, different approaches (Isern *et al.*, 2006)



Regulation can constitute an entry barrier for MFIs. In order to cope with regulation restrictions and gain a presence in the market, many MFIs choose to offer money transfer

services through partnerships with MTOs or commercial banks. Well-established MTOs offer reliable products with the potential to generate a large volume of transactions and a growing number of MFIs have established alliances to become agent or subagent with MTOs such as Western Union or MoneyGram. Part of the attraction of a partnership is simplicity (Isern *et al.*, 2006): in fact, many companies provide a preset package of well-tested products, a technology platform, limited training, and marketing materials for the MFIs to begin operations. Agents benefit from an established agent network and existing marketing campaigns in other countries, both of which help to generate a larger volume of transfers. From the customers' perspective, the main advantage is the reduction of transaction costs, since the service is now available at the local level (especially in rural areas). However, there are a larger number of partners involved in the transaction, compared to the direct approach, and the more intermediaries there are between the remitter and the recipient of remittances, the higher the commission charged may be.

Although commercial banks and MFIs complement each other regarding money transfers and work as partners in business models, in terms of financial inclusion they are, to some extent, substitutes or competitors. Actually, both are financial institutions able to provide financial products linked to remittances, and the money transfer activity could allow them to identify potential clients. Banks may then be interested by the receivers of large transfers as well as by frequent receivers of small amounts. In this case, they compete with MFIs in trying to turn remittances receivers into clients of their range of financial products. If we focus for instance on deposits products, in commercial banks, unlike in MFIs, one of the access barriers is the minimum capital requested to open an account. However, this barrier could be overcome by remittances flows. If commercial banks take this opportunity to design products adapted to receivers in terms of accessibility (simplified procedures for instance for financially illiterate



people), the competitive advantages of MFIs relative to commercial banks can be significantly reduced. However, MFIs still have a geographic advantage as they are presents in areas underserved by commercial banks, and an expertise advantage in providing financial services to financially excluded people. MFIs are thus important actors in the perspective of including remittances flows in the financial system in order to support local economies.

### III. Determinants of the decision to enter the remittances market

We make the hypothesis that, like any firm that considers entering a new market, MFIs will decide to enter this market if the expected revenues from the new activity are above the costs it generates for the firm (Besanko *et al.*, 2007). They should therefore realize a cost-benefit analysis, with potential benefits coming from efficiency gains linked to the new activity. Potential sources of these gains for MFIs with a MTA are<sup>8</sup> economies of scale and scope (thanks to an increased number of savers and borrowers, and what this implies in terms of deposits volumes and loan portfolio size), economies on transaction costs (MFIs can save on screening costs thanks to the MTA) and internal capital market (additional revenues generated thanks to the MTA can prevent MFIs from borrowing on capital market and can lead to cross-subsidization of their various activities). Regarding the costs, money transfers can have a negative impact on MFIs' health if the challenges and risks associated to the activity are not managed correctly<sup>9</sup>. The first challenges that will be faced by MFIs are certainly associated with regulatory requirements and partnership issues, as the level of commission perceived on each transfer will depend on partnerships' agreements. MFIs will also have to implement an efficient liquidity and information management system that is adapted to money transfers operations, bearing in mind that additional operational costs may appear. An MFI may for instance have to maintain a high level of liquidity (which imply higher opportunity costs and

---

<sup>8</sup> See Besanko *et al.* (2007), Goddart *et al.* (2008), and Singh *et al.* (2003).

<sup>9</sup> See Isern *et al.* (2006)

operational risks) in order to avoid the occurrence of a liquidity problem that may decrease clients' satisfaction.

This cost-benefits analysis is included in the broader SWOT analysis (strengths, weaknesses, opportunities, and threats), as proposed by Isern *et al.* (2006)<sup>10</sup>: MFIs must determine if offering a money transfer service is in their best interest, considering the environment (opportunities and threats of the remittances market) and their internal (or institutional) capacities (their strengths and weaknesses). Analyzing both internal capacity and external realities will help MFIs systematically decide whether and how to launch money transfers, as both the environment and MFIs' capacities will help determine the expected revenues and costs of the money transfer activity.

Understanding the business environment of the remittances market implies, for instance, having a sufficient knowledge of the socioeconomic profile of the country and of the laws and regulation relative to international money transfers. Opportunities of the remittances market (potential market size and, thus, potential revenues) will be identified for instance through an analysis of potential clients (both senders and receivers) and an analysis of competition. Variables that could then be used to study the influence of the environment and its opportunities and threats on the decision to enter the remittances market are: regulation (does it allow all MFIs to operate on the money transfer market or should they enter through business alliances with other market actors?), trends on international money transfer (is the market growing or shrinking?), competitors (who are they? Is the market saturated?) , number of receivers among current MFIs' clients (potential clients), and some socio-economic and financial access indicators (rate of population with a bank account, percentage of households with a migrant member, etc.).

---

<sup>10</sup> The following part of the section is largely inspired by Isern *et al.* (2006) propositions.

Regarding internal assessment, MFIs should examine their own strengths and weaknesses in terms of human and financial resources, and technological and organizational capacities, as those can represent constraints or capabilities for the money transfer activity. The analysis should then include examining overall financial performances, operational performances and managerial performances (the MFIs' capacity to manage future cash flows from money transfers, the business risk associated with money transfers, etc.), the availability of human resources and their knowledge of money transfers, and the management information system (their capacity to manage the mass of information related to transfers). The internal capacities that can be easily observed are the financial, operational, and managerial performances. Many performance indicators exist in order to measure those. Based on the Microrate and IADB technical guide (Microrate and IADB, 2003), MFIs' financial performance can be evaluated through 3 ratios, namely the *funding expense ratio* (interest and fee expenses over average gross portfolio) which measures the total interest expense incurred by the institution to fund its loan portfolio, the *cost of funds ratio* (interest and fee expenses on funding liabilities over average funding liabilities) which measures the average cost of the company's borrowed funds, and the *debt over equity ratio* (total liabilities over total equity) which measures the overall leverage of the institution. Operational performances can be measured through efficiency and productivity ratios such as the *operating expenses ratio* (operating expenses over average gross portfolio) and *personnel productivity* (number of active borrowers over total staff). Finally, we suggest covering managerial performances through portfolio quality (measured by the *portfolio at risk*) and profitability (measured by *return on assets* and *return on equity*, for instance).

In the following section we build an estimable specification to identify internal and external factors that have an effect on the probability of having an MFI deciding to operate on the

remittances market. Given the low data availability, this paper will focus only on institutional determinants of entering decision (what are the strengths and weaknesses of MFIs). Actually, to our knowledge, databases that contain environment indicators such as the regulatory framework faced by MFIs across countries and over a period of time and the evolution of the average cost of sending money over a period of time are not available. However, if we refer to Landi and Venturelli (2001), who studied the determinants of European banks diversification strategy, variables related to economic and financial characteristics of single banks explain the diversification to a greater extent than context variables.

#### IV. Data and methodology

We use observations of 225 MFIs from 18 Latin American and Caribbean (LAC) countries<sup>11</sup>. The choice of LAC countries for the analysis has been motivated by the highest available number of observations, compared to other regions of the world<sup>12</sup>. We study only one region because the migration phenomenon varies across regions (which has an impact on the volume of remittances received by countries and, thus, on the opportunity the remittances market represent for financial institutions).

The sample is divided into 2 groups of MFIs which are: the ones that had a MTA in 2006 (26% of the sample) and the ones that did not (74% of the sample). The dummy MTA has been build based on the MIX Market website. The explaining variables (indicators of internal capacities) used to determine the probabilities of entering the remittances market are: indicators of managerial performance (MFIs profitability), financial management and operational performance.

---

<sup>11</sup> 6 MFIs will be dropped for the regression because of missing information.

<sup>12</sup> The second region in terms of available number of observations is East and central Asia, with 168 observations for 2006.

First, as indicator of managerial performance, we use the return on equity (RoE) and the return on assets (RoA), both of which measure MFIs' profitability. The RoE is obtained by dividing net income (after taxes and excluding any grants or donations) by average equity over a certain period of time. The RoA is calculated by dividing net income (after taxes and excluding any grants or donations) by average assets over a certain period of time. A positive contribution of managerial performance in the probability of having a MTA may indicate that managers are able to identify remittances market opportunities or are confident in their capacity to manage the MTA. On the other hand, a negative relationship should indicate that MFIs diversify in order to improve their profitability through products expansion.

Second, as indicator of financial management, we use the debt over equity ratio (D/E). It is calculated by dividing total debt by total equity. Total debt includes everything the MFI owes to other parties, including deposits, borrowings, and other debt accounts. Total equity is total assets minus total debt. The D/E ratio measures the overall leverage of the institution and depends on its risk. The less risky the MFI will be perceived by potential lenders, the higher debt it will be able to carry for a given amount of equity (and the higher the ratio will be). We assume that some MFIs are perceived as less risky than others because the quality of their financial management is perceived to be better. A positive relationship with the explained variable would indicate that MFIs that diversify are those with better financial performance (strong institutional capacities), while a negative relationship would support the idea of diversification as a way for MFIs to find an alternative source of funding.

Third, as indicator of the operational performance, we use the operational self-sufficiency (OSS) not adjusted to subsidies, calculated by dividing operating income (from loans and

investments) by the sum of operating costs, loan loss provisions, and financing costs. OSS indicates whether or not enough revenue has been earned to cover MFIs' total costs. The higher it is, the better is the quality of the management. A positive effect of the OSS on the occurrence of a MTA may indicate that MFIs that diversify are those that are well managed.

Finally, we add two additional explaining variables that are specific to each MFI and that could influence managerial decisions in terms of diversification through the remittances market. First, we include a dummy for the offer of deposits facilities (Dep) by MFIs. We assume that the motivation for MFIs to enter the remittances market increases with the opportunity to turn migrants and remittances receivers' savings into deposits (Sukadi Mata, 2009). And second, we include a dummy for the legal status of the MFI (LSD), as it could facilitate or complicate (barrier of entry) the process of entering the money transfer market.

Table 2 presents the descriptive statistics of the variables used for the logistic model. The first line highlights that 26% of MFIs in the database, or 59 institutions out of 225, offer a money transfer service. Regarding the legal status, the majority of MFIs in the sample are non-profit institutions (56.8%), followed by non-bank financial institutions or NBFIs (20.8%), cooperatives (12.4%), banks (7.1%), and "other" institutions (2.6%). In terms of deposits facilities, nearly 33% of the 225 MFIs of the sample collect deposits. The last column of the table provides the frequency at which the dummy considered is equal to 1 (for instance, 59 MFIs of the sample operate on the money transfer market and 16 are banks).

Table 2: Descriptive statistics

Variables	Obs.	Mean	Std. Dev.	Min	Max	Frequency (dummy=1)
MTA	225	.2622	.4408	0	1	59
LSD: bank	225	.0711	.2575	0	1	16
LSD: cooperative	225	.1244	.3308	0	1	28
LSD:non-profit	225	.5688	.4963	0	1	128
LSD: NBFi	225	.2088	.4074	0	1	47
LSD: other	225	.0266	.1614	0	1	6
Dep	225	.3288	.4708	0	1	74
RoA	225	3.24%	7.243	-36%	25%	
RoE	225	1.14%	2.603	-226%	64%	
OSS	225	117.56%	2.179	44%	194%	
D/E	225	578%	421.108	4%	5205%	

There are large differences in managerial performances, as RoA and RoE range respectively from -36% to 25% with a mean of 3.24% for the RoA, and from -226% to 64% with a mean of 1.14% for the RoE. Also, the financial performance ranges widely, from 4% to 5205% of D/E. Finally, an important dispersion exists between operational performances of the MFIs, with the OSS varying from 44% to 194%.

Table 3 presents correlations between variables. The correlation coefficient between MTA and the non-profit status is highly negative, presuming that non-profit MFIs are less likely to enter the remittances market, while it is less high but positive for the other statuses (except for “other” status). This relation supports the idea that legal status is an entry barrier for MFIs, due to regulatory requirements that are difficult for non-profit MFIs to comply with, as highlighted in section II.

Table 3: correlation table

	MTA	LSD Bank	LSDCoop	LSD Non-profit	LSD NBFi	LSD Other	Dep	RoA	RoE	OSS	D/E
MTA	1										
LSDBank	0.22	1									
LSDCoop	0.23	-0.10	1								
LSDNon-profit	-0.46	-0.31	-0.43	1							
LSDNBFi	0.26	-0.14	-0.19	-0.59	1						
LSDOther	-0.09	-0.04	-0.06	-0.19	-0.08	1					
Dep	0.48	0.28	0.53	-0.68	0.26	-0.11	1				
RoA	-0.05	-0.06	-0.08	0.04	0.05	0.02	-0.10	1			
RoE	0.04	-0.03	-0.03	-0.15	0.21	0.05	0.00	0.76	1		
OSS	0.02	-0.05	-0.09	-0.01	0.12	0.02	-0.02	0.83	0.66	1	
D/E	0.23	0.23	0.08	-0.41	0.18	0.27	0.33	-0.09	0.11	-0.07	1

We observe a highly positive correlation between the MTA and deposits facilities. This relation highlights the tendency that MFIs providing deposits facilities are willing to develop a MTA in order to take the opportunity of turning migrants' savings into deposits. Finally, in terms of internal assessment, the coefficient is positive and relatively high for D/E, presuming a high influence of the financial performance on the decision to enter the remittances market, while the influence of the profitability and the operational performance on the decision seems to be low.

The table highlights multicollinearity between RoA and RoE, as well as between RoA and OSS. RoA and RoE will therefore not be included together in the model. Regressions with RoA give similar results (as those with RoE as managerial performance indicator) that are not reported here.

## V. Results

The explained variable is a dummy: it takes value 1 if the MFI has a MTA, and 0 otherwise. The logit model estimates the probability of entering the remittances market.



We consider the following specification:

$$P(MTA = 1) = \frac{1}{(1 + \exp[-(\beta_0 + \beta_1 LSD + \beta_2 Dep + \beta_3 RoE + \beta_4 OSS + \beta_5 D/E])]}$$

$P(MTA=1)$  being the probability to have the MTA dummy equal to 1.

Regressions are performed using the STATA software. In order to assess the robustness of the results, we test different specifications of the model. Table 4 presents the estimated coefficients and robust t-statistics.

**Table 4:** regression results

	Dependant variable: Money transfer activity (MTA)			
	(1)	(2)	(3)	(4)
LSDBank	.621 (0.95)			
LSDCooperative		-.614 (-0.93)	-.240 (-.34)	-.145 (-.20)
LSDNon-profit	-1.335** (-2.15)	-1.966*** (-2.92)	-1.545** (-2.07)	-1.577** (.040)
LSDNBFI	.349 (0.67)	-.303 (-.49)	-.094 (-0.14)	-.116 (-.18)
Dep	1.269*** (2.84)	1.265*** (2.82)	.975** (2.02)	.872* (1.73)
RoE	-.000 (-0.06)			-.004 (-.54)
OSS		.002 (.33)		.011 (0.96)
D/E			.001* (1.79)	.001** (1.97)
cons	-1.122 (-1.88)	-.819 (-.66)	-1.187 (-1.54)	-2.502 (-1.59)
Observations	219	219	219	219
Pseudo R <sup>2</sup>	.242	.242	.252	.255

Robust t-statistics in parentheses

\*significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%

Coefficients cannot be interpreted as a marginal effect of explaining variables on the MTA, only their signs can be interpreted. Variables with positive coefficients positively influence the probability of entering the remittances market, while variables with negative coefficients negatively affect this probability. In equations (1), (2), and (3), we assume that the probability to have  $MTA = 1$  depends on only one category of performances (respectively management, operational, and financial performance). In equation (4) we include simultaneously the 3 categories, i.e., we allow the probability of having a MFI with a MTA to be influenced simultaneously by all performance indicators.

Equations (1) and (4) suggest that managerial performance indicators or profitability do not have a significant effect on the decision-making process of launching a MTA, as none of the coefficients is significant in the regressions. This is consistent with Cyree *et al.* (2000), who find that the RoA and the RoE are determinants neither of banks' growth decision, nor of the decision to grow through product expansion. Authors argue that non-significance of those performance indicators means that profitability is a result of the choice to grow (through diversification in our case), not a determinant.

Regarding the operational performances indicator, either analyzed as the only category of performance influencing the decision-making process (equation (2)), or combined with management and financial performance indicators (equation (4)), we do not find any significant effect of this variable on the probability of having an MFI deciding to operate on the remittances market. Here also, it could be argued that operational performance should be analyzed as a result of the decision, given the consequences of the MTA on MFIs' overall operational expenses (efficiency gains from the new activity versus additional operating costs). However, we would have expected the operational performance to be determinant in the decision-making process, either positively (MFIs that diversify are those who are able to

control their operational costs) or negatively (MFIs diversify because they have excess capacities and seek to improve their efficiency<sup>13</sup>).

The effect of financial performance on the likelihood to have an MFI with a MTA appears in all the specifications (equations (3) and (4)). The coefficients of D/E are always significant and positive. Since any growth requires relatively large expenditures of resources (Cyree *et al.*, 2000), this result supports the argument that entering the remittances market is costly; thus, MFIs that have facilities in borrowing funds to capital markets will be those with higher probability to enter the new market, because they have higher capacities to finance the initial investments related to the new activity.

The existence of savings facilities impacts positively and significantly on the probability of entering the remittances market in all the equations. This could be interpreted in relation with the D/E ratio, as deposits are parts of MFIs' debt. It is consistent with Cyree *et al.* (2000) who find that the more deposits over assets increases, the more likely banks are to grow through product expansion rather than through branching. However, the result also supports the argument that MFIs could operate on the remittances market because they have the opportunity to turn migrants' savings into deposits (Sukadi Mata, 2009). Finally, as expected, being a non-profit MFI significantly decreases the probability for the MFI to enter the remittances market, in comparison with the omitted group of MFIs which are banks, except in equation (1) where cooperatives are omitted. This supports the arguments that banks and cooperatives have an easier access than non-profit institutions to the remittances market, in terms of regulatory requirements.

---

<sup>13</sup> See Landi and Venturelli (2001)

In order to have an idea of the magnitude of the effect of significant explaining variables on the likelihood to have MTA equal to 1, we calculate their marginal effects. It appears that when D/E increases at the margin, the probability of having MTA equal to 1 increases by 0.025% (significant at 10%). A discrete change of dummy variable LSDnon-profit from 0 to 1 decreases the probability of having MTA equal to 1 by 27% (significant at 5%), while having the deposit facilities changing from 0 to 1 increases this probability by 15% (significant at 10%).

## VI. Conclusion

This paper addresses the question of the drivers of diversification in microfinance. It tries to identify the determinants of MFIs' decision to enter the remittances market by providing a money transfer service. Our results, closely related to those of the traditional banking sector, suggest that MFIs with a higher probability to enter the money transfer market are those that have better access to liabilities, including deposits (so they have access to funds to invest in the new activity), while their operational capacities and their profitability are not determinants in the decision-making process and should probably be analyzed as a result of the decision. These results suggest that, all other things being equal, the probability of having an MFI operating on the remittances market will positively depend on its capacity to finance investment (and probably operational) costs related to the new activity. They also suggest that MFIs enter the market because this could have an effect on their profitability (considered as a result of the decision, not as a determinant). This implies that, to some extent, as long as financial resources are available, MFIs will tend to launch a MTA, regardless of the operational capacities and the managerial performances available in the institutions. MFIs with poor managerial performances then risk to experience a deterioration of their overall performances, due to failures in managing risks associated with the MTA. It could therefore

be interesting to study the impact of the MTA on MFIs' profitability and operational performance.

In terms of policy implications, results suggest that, in order to have MFIs playing a significant role on the remittances market (because they can contribute either in reducing transfer costs or in increasing the potential of remittances as lendable funds), competent authorities should create a regulatory environment that enables a higher proportion of MFIs to comply with the requirements (while not degrading customer protection). MFIs operating in migration zones should also be encouraged to operate on the remittances market via financial support at the initial stage of their new activity, in case MFIs have limited access to liabilities. However, creating an enabling regulatory environment or providing the funding will not be sufficient to encourage MFIs to enter the money transfer market: it may also be necessary to provide technical support (training of employees and managers for instance) in order to limit the negative impacts of the diversification on their performances.

A major improvement of our analysis could be to enlarge the internal assessment by integrating in the model variables that are related to the human resources and know-how available in the MFI. Those variables should positively contribute to the probability of having an MFI entering the remittances market, all other things being equal. And, of course, completing the internal assessment with variables that consider opportunities and threats of the environment will give a complete overview of the cost-benefit analysis of the decision making process of entering the remittances market by providing a money transfer service.

The topic is widely understudied from different perspectives: from the perspective of diversification motivations (what do MFIs expect from the money transfer activity?), from the

perspective of the decision-making process (do MFIs have the necessary resources to enter the market? What are the resources to be considered?), and finally from the perspective of the consequences of diversification (do the observed effects correspond to expectations?). In order to further study all these potential questions that are important for the microfinance industry, given the strategic implications that remittances flows may have on MFIs' activities (for instance remittances may constitute long term resources that could overcome the issue of funding long term loans), an improvement of available data on MFIs' money transfer activities is needed.

## References

Allen, F. and A. M. Santomero (1999). *What Do Financial Intermediaries Do?* The Wharton Financial Institutions Center Working paper series (99-30-B), The Wharton School, University of Pennsylvania

Amuedo-Dorantes, C. and S. Pozo (2006). Remittances as Insurance: Evidence from Mexican Migrants. *Journal of Population Economics*, vol. 19 (2), pp. 227-254.

Azam, J-P. and F. Gubert (2005). Those in Kayes. The Impact of Remittances on their Recipients in Africa. *Revue Economique*, vol.56 (6), pp. 1331-1358.

Besanko, D., Dranove, D., Shanley, M. et S. Schaefer, 2007. *Economics of Strategy, Fourth Edition*, John Wiley & Sons.

Chami, R., Fullenkamp, C. and S. Jahjah (2005). *Are Immigrants Remittances Flows a Source of Capital for Development?* IMF Staff Papers, vol. 52 (1), pp. 55-81.

Cyree, B., Wansley, J and T. Boehm (2000). Determinants of bank growth choice. *Journal of Banking & Finance*, 24, 709-734.

Faini, R. (2007). Migrations et transferts de fonds. Impact sur les pays d'origine. *Revue d'Economie du Développement*, vol. 21 (2), pp. 153-182.

Freund, C. and N. Spatafora (2008). Remittances: Transaction Costs, Determinants, and Informal Flows. *Journal of Development Economics*, 86 (2), 356-366.

Gheeraert, L., Sukadi Mata, R. and D. Traça (2010). *Remittances and Domestic Investment in Developing Countries: An Analysis of the Role of Financial Sector Development*. Working Papers CEB 10-013.RS, Université Libre de Bruxelles, Solvay Brussels School of Economics and Management, Centre Emile Bernheim (CEB).

Giuliano, P. and M. (2009). Remittances, Financial Development, and Growth. *Journal of Development Economics*, vol. 90 (1), pp. 144-152.

Glytsos, N. P. (2005). The Contribution of Remittances to Growth: A Dynamic Approach and Empirical Analysis. *Journal of Economic Studies*, vol.32 (5/6), pp. 468-496.

Goddart, J., McKillop, D. and J. Wilson (2008). The diversification and financial performance of US credit unions. *Journal of Banking & Finance*, 32, 1836–1849.

Gupta, S., C. Patillo, and S. Wagh (2009). Impact of remittances on poverty and financial development in Sub-Saharan Africa. *World Development*, vol. 37 (1), pp 104–115.

Isern, J., Deshpande, R. and J. van Doorn (2005). *Crafting a Money Transfers strategy: Guidance for Pro-Poor Financial Service Providers*. CGAP Occasional Paper N°10.

Isern, J., W. Donges and J. Smith (2006). *Making Money Transfers Work for Microfinance Institutions. A Technical Guide to Developing and Delivering Money Transfers*. GCAP/World Bank.

Landi, A. and V. Venturelli (2001). *The Diversification Strategy of European Banks: Determinants and Effects on Efficiency and Profitability*. EFMA, Lugano Meetings. Available at SSRN: <http://ssrn.com/abstract=269841>

Mahamoud, I. (2006). *Les hawalas : les systèmes informels de transfert des fonds*. Proposition pour les 7èmes Journées scientifiques du réseau, «Analyse Economique et développement» 7 et 8 septembre 2006 Paris, France.

Microrate and IADB (2003). *Performance Indicators for Microfinance Institutions. Technical guide (3<sup>rd</sup> edition)*. Microrate and IADB, Washington.



Morawski, A. (2007). *The Role of Financial Intermediaries and the Increased Need for Regulation of Financial Markets*. Essex University term paper.

Penent, A. (2003). *La valorisation économique de l'épargne des migrants. Epargner ici, investir là-bas, un état des lieux*. CFSI.

Ratha, D. (2003). *Workers' Remittances: An Important and Stable Source of External Development Finance*. In *Global Development Finance 2003: Striving for Stability in Development Finance*. Washington: World Bank, pp. 157-75.

Shaw, J., Ed. (2006). *Remittances, Microfinance and Development: building the links, Volume 1: a global view*. FDC.

Singh, M., Davidson III, W. and Suchard, J-A (2003). Corporate diversification strategies and capital structure. *The Quarterly Review of Economics and Finance*, 43, 147–167.

Solimano, A. (2003). *Workers' Remittances to the Andean Region: Mechanisms, Costs and Development Impact*. CEPAL.

Sukadi Mata, R. (2009). *Microfinance Institutions (MFIs) on the Remittances Market: Do Money Transfer Activities Generate Deposits?* Working Papers CEB 09-022 RS, Université Libre de Bruxelles, Solvay Brussels School of Economics and Management, Centre Emile Bernheim (CEB).

Toxopeus, H.S. and R. Lensink (2007). *Remittances and Financial Inclusion in Development*. UNU - WIDER Research Paper 2007/49.

World Bank. 2006. *Trends, Determinants, and Macroeconomic Effects of Remittances*. Global Economic Prospects: Economic Implications of Remittances and Migration. IBRD/WB ed. Washington: World Bank, pp. 85-115.

World Bank (2009). *World Bank Remittances Database*. ([www.worldbank.org](http://www.worldbank.org))