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The Role of Information and Communication Technologies (ICT) in Improving Microcredit: The Case of Correspondent Banking in Brazil

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Last technical report on the progress of the project

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1. The Research Problem

The aim of the project is to conduct a deep investigation on the way information and communication technologies (ICT) can support correspondent banking (CB) models to improve microfinance in Brazil. We believe that the current, traditional microcredit and other microfinance services (such as micro insurance, for example) delivery models and methodologies could be strongly improved with a more purposive use of ICT, combined with knowledge of particular socio-cultural conditions.

One of the most relevant ICT-related phenomena in the Brazilian banking industry in recent years has been the growth of correspondent banking arrangements as a means through which banks can downscale financial services outside of traditional bank branches, through partnerships with non-bank businesses such as supermarkets, lottery shops, drugstores, as well as with dedicated microfinance institutions (MFIs). Since the implementation of such model, CB service points turned out to be an indisputable opportunity to increase the supply of financial services to low-income consumers and microentrepreneurs, and thereby help increase the historically low Brazilian microfinance penetration rates.

Notwithstanding this clear opportunity, the fact is that microfinance and CB have developed independently in recent years. Banks have mostly employed their CB networks mostly to receive bill payments and some few other banking services, but did not yet explore their full potential as a channel for general microfinance delivery. Likewise, MFIs have performed well in microfinance activities, but did not yet explore the benefits of a more robust technological platform. We do believe that the integration of microfinance and CB in Brazil, and in other Latin America countries as well, is still to be explored in order to achieve its full potential.

The results of two years of research work are extremely positive for at least three main reasons. First, we have deepened our understanding of the benefits of integrating microfinance delivery and ICT-based platforms, particularly the CB network. Second, we have disseminated and communicated our research results to both academic and practitioner audiences, and a number of policy and decision makers are now looking for our research outcomes. Third, we have established important partnerships with other entities (e.g. CGAP and Banco Central do Brasil)

what have allowed us to enlarge the scope and strengthen the results of our investigation as well as have disseminated some of our research findings to a broader audience in Brazil and in other countries.

2. Objectives

According to the grant agreement, the main objective of our research project is to answer the following question: "How can the current ICT-based model of correspondent banking, being so far successfully used in Brazil for collection and payment services, be adapted to scale microfinance services?" Additionally, as the Brazilian CB model (in what refers to its regulation, business models and technological infrastructure) has started to be reproduced or adapted to other countries, the research shall also address the question of how to adapt the potential solutions of CB-based microfinance to other cultural, political and technical contexts, especially in Latin American countries. The goal of the research is to provide an actionable knowledge for practitioners, policy makers, decision makers and researchers, enabling these social actors to make informed choices and implement solutions that work effectively.

To fulfill this general objective, we have identified a number of specific objectives, as follows:

- To make a deep investigation and detailed description of some existing, although incipient, ICT-based models of microcredit delivery, based on the use of CB infrastructure;
- 2) To suggest improvements and to evaluate the feasibility of the models investigated;
- 3) To evaluate the necessary organizational, technical, and normative framework that should be accomplished by banks, MFIs, policy makers and ICT providers to successfully implement the best features of each model to increase the level of deliverance for inclusive finance, in particular microcredit;
- 4) To evaluate the potential impacts of the access to basic financial services in communities where correspondents were introduced and are the major means to facilitate financial inclusion;

5) To communicate the potentialities and barriers related to each identified/suggested model to policy makers, banks, MFIs, ICT providers and other social relevant groups involved with CB and/or microfinance, in Brazil as well as in other contexts and regions, particularly in Latin America.

3. Methodology and main empirical activities

Figure 1 shows an overall picture of how our research agenda is organized for this project, from 2008 to 2010. Activities 1 to 6 were planned to finish in 2009 whereas activities 7 to 15 are already in progress and they are planned to be developed during 2010. It is important to note that some of the activities were funded by complementary resources to those provided by IDRC, since Fundação Getulio Vargas and HEC-Montréal are also sponsoring the research project.

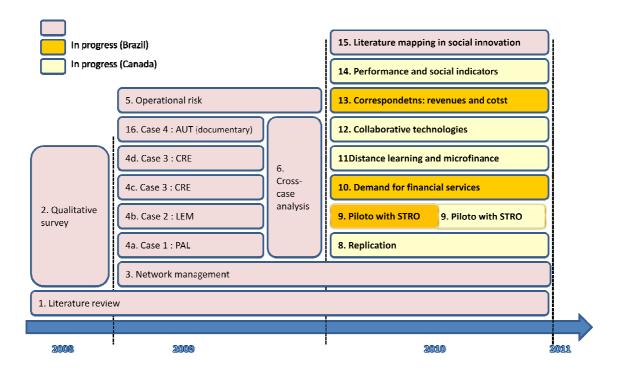


Figure 1 – ICT and inclusive finance: research agenda (2008-2010)

On the second semester of the project (December 2008 to June 2009) the focus of the research team concentrated on the three in-depth case studies (Banco Lemon, Banco do Nordeste/Crediamigo and Banco do Brasil/Banco Palmas). These three cases were planned to help us explore a number of critical research questions, namely: (a)

what kind of financial services these banks/institutions are ready to offer to low income people, and what kinds of financial needs local micro-entrepreneurs have; (b) which are the technological and procedural adaptations needed to support new or adapted models of CB that integrate microcredit delivery in distinct cultural and political scenarios; and (c) what socio-cultural and political adaptations would be needed to allow ICT-based models of CB to integrate microcredit delivery.

From March to June 2009, field work and data collection were carried out in the metropolitan area of Fortaleza, State of Ceará, which was the area chosen for our study. Settling the three cases down in a single area with similar contextual conditions (socio-economic, political) was a research strategy developed to help us to decrease "regional bias" in the case comparison analysis. At the same time, management of the team in the field in a single region brings logistics benefits, such as costs of learning about the region and knowledge exchange among field researchers.

After the analysis of each case's data collection – interviews, direct observation and archival research – four research reports are the main outcome of this semester of field in-depth case study: one for each case and one cross-case analysis. Both within-case and cross-case analysis concerning these three cases were concluded in July 2009. Main activities related to such work are described next:

CASE 4A Banco do Brasil/Banco Palmas: In-depth interviews were conducted by Tania Christopoulos with people involved with Banco Palmas networking (3 with users, 3 with CB coordinators, 3 with CB operators, 1 with one Banco Palmas CB). Many procedural and strategic information where collected during these interviews, whose content allowed us to realize the evolution of the context regarding the adoption of the CB methodology in the Fortaleza region and in surrounding municipalities. These interviews are part of a process of data collection that started at 2007, conducted by Marlei Pozzebon, Eduardo Diniz and Martin Jayo with Banco do Brasil executives and other people from Banco Palmas. The results of interviews show how the roles of various actors involved have changed over time, such as Banco Palmas that, from a simple CB, has evolved to be the manager of a network of more than 50 "community banks", all based on CB infrastructure. Banco do Brasil has learned from the

partnership with Banco Palmas and is using it to expand its CB network to every "banco comunitário", each of them also a CB point.

CASE 4B Banco Lemon: From December 2008 to May 2009, twelve in-depth interviews with representatives of different relevant social groups related to this case were conducted by Cesar Yokomizo, namely: Banco Lemon's Marketing Coordinator (on February 13th at Banco Lemon's Headquarter in Barueri, State of São Paulo), Banco Lemon's Ceará State Regional Manager and two of Banco Lemon's Ceará Sales Consultants (on April 7th at CheguePague1 office in Fortaleza, State of Ceará), one CB point owner, one CB point operator and two bill payment clients (on April 7th at the CB supermarket in the city of Caucaia, next to Fortaleza, State of Ceará), one CB point owner, two CB point operators and three bill payment clients (on April 8th in the city of Itapipoca, State of Ceará and 138 kilometers far from Fortaleza, toward inland). Interviews with one CB point owner, all CB operators and all clients could not be recorded due to operational constraints. These interviews are a compliment to those described in the previous report and to those conducted by Martin Jayo in 2006 and 2007 with Banco Lemon's General Director and with Multibank's 2Director. Moreover, field observations were conducted by Cesar Yokomizo at a CB supermarket and at two CB drugstores in the city of Caucaia, at a CB supermarket in the community of Granja Portugal (suburbs of Fortaleza), at two CB building supply stores, at one CB stationery store, at one CB lan house, and at one CB grocery in the city of Itapipoca. In May 2009, all recorded interviews were transcribed and the output underwent analysis. Preliminary results show that Banco Lemon is leaving the credit business and refocusing again on bill payment. Reasons for that include Banco Lemon's difficulty in capturing deposits and the higher interest rate due to the worldwide crisis. On the other hand, clients show comparative interest in the credit business, and they rank CB points as the second alternative of getting credit, only after getting it from relatives. Data permitted to identify three distinct phases of Banco Lemon's operation: 1) focus on the bill payment business, 2) focus on the bill payment business, but initiatives of offering credit through CB, and 3) refocus on the bill payment. Details will be discussed in the case report.

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¹ CheguePague is the network integrator responsible for Banco Lemon's operation in the State of Ceará.

² Multibank is the network integrator responsible for Banco Lemon's store format.

<u>CASE 4C</u> Banco do Nordeste/Crediamigo: In-depth interviews with people directly involved with Crediamigo (2 Banco do Nordeste executives, 1 BNB branch manager, and 7 clients) were conducted by Martin Jayo. These interviews allowed us to complete the data collection process that had been initiated in 2008 by Martin Jayo and Frédéric Lavoie (as mentioned in our "First Interim Technical Report" dated December 2008). In May 2009, all interviews were transcribed and underwent analysis. The results show how CB points have been attributed an incrementally growing role at Banco do Nordeste's microcredit model over time, from "no importance at all" to "central importance". The report will show how this central role was incrementally developed as a result of negotiation among the different relevant social groups involved, as well as identify the current challenges that still have to be addressed for a more effective/efficient use of CBs.

CASE 4D In July 2009, a new case study was added to our project. We decided to include Autazes, a city in the Amazon region, based on a first field trip observation sponsored by FGV when three students (René Birochi, Solly Sayeg and Ivan Moura) from our team collected data and made interesting observation on impacts of correspondent banking in the region. Autazes and surrounds were visited by other members of the team (Marlei Pozzebon, Eduardo Diniz and René Birochi) in December 2009. In total, 24 interviews were recorded in audio and video in Autazes region with retailers, micro entrepreneurs, correspondent owners and employees, public authorities, union representatives, and population. Later on, a series of 4 videos on the Autazes case were produced from the recorded material of the second trip to the region.

In summary, as previously stated, from July to December 2009, the research team worked to conclude activities 1 to 6. Four in-depth case studies were concluded (Palmas, Lemon, Crediamigo and Autazes). These in-depth case studies allowed us to achieve part of our goals and to provide the basis for initiating the research work developed in the first semester of 2010, illustrated by activities 7 to 15, which are explained below:

7. Network management mapping

Objective: To provide a typology and compare different network management

models currently practiced behind the operation of agent networks in Brazil. These management models will be drawn considering the logistic and business levels encompassing the distribution of different sets of services. This activity is related to the PhD dissertation of Martin Jayo, and it was concluded in March 2010;

8. Replication

Objective: To investigate the transferability of microfinance and microcredit operations through different regions of Brazil. This activity is related to a study developed by Frederic Lavoie in his thesis about transferability of microfinance practices. The study is also related to an investigation on the replication of Instituto Palmas' community banking model to five different locations in Sao Paulo. It was concluded in March 2010;

9. Pilot project with STRO

<u>Objective:</u> A Pilot to investigate the use of a virtual platform is currently being planned in collaboration with STRO.

10. Financial services demand at the bank agents' level

Objective: Deepen the knowledge about motivations and needs of users of bank agents, understanding the factors that impact the demand for financial services in different segments. The study will trace the profile of the low income population that already uses bank agents, identifying their habits and demands concerning financial services. This activity is divided in three sequential steps: (a) regional mapping of the distribution of financial services and socioeconomic conditions in Brazil (concluded in June 2010); (b) in-depth qualitative study of the demand side for financial services in regions with emblematic conditions of supply and needs for financial services (to be concluded in December 2010); and (c) quantitative survey with excluded people in regions with emblematic conditions of supply and needs for financial services (to be concluded in 2011). This activity is being developed by Tania Pereira Christopoulos and Felipe Zambaldi, with phase (a) finished and to be fully concluded in 2011);

11. Distance Learning and Microfinance

<u>Objective:</u> To investigate the potential of distance learning (for instance, the financial education programs for adult learners) to improving microfinance

activities (for instance, how to better manage a micro-business in terms of financial and management activities), particularly microcredit, by helping to developed the skills and knowledge of the social actors involved in microcredit operations (it could be the credit agents). The study will investigate the ICT infrastructure (for instance, the banking correspondent's network), over which the distance learning programs could be delivered. The project will be mostly focused in the Amazon region. This activity is related to Rene Birochi's dissertation (to be concluded in July 2011);

12. Collaborative technologies to improve MFI's back-office

<u>Objective:</u> To develop a theoretical study (publishable paper) on how MFIs incorporate, use and share back-office technologies to improve business operations, based on adaptations to Latin America of previous studies developed in Middle East and North Africa (MENA). This activity is related to Wikaf Houij Gueddana's dissertation (to be concluded in December 2010);

13. Correspondents: revenues and costs

<u>Objective:</u> To identify cost and revenue structure of operation at the bank agent chain. Costs will include salaries, operational infrastructure, elecommunications, management and administrative costs, taxes etc. Activity related to Alexandro Moreira's MsC thesis (to be concluded in February 2011);

14. Performance indicators

<u>Objective:</u> To develop a theoretical study (publishable paper) on indicators to monitor and evaluate correspondents' social relevance. Developed by Stephanie Emond, with first version finished and presented at our seminar in May 2010 (to be concluded in December 2010);

15. Literature Mapping on inclusive finance

<u>Objective:</u> To update a literature review on inclusive finance, developing a map of the main practitioner and academic publications that could increase the impact of the publication of the research results. Developed by Daniel Bruno Garcia (concluded in June 2010)

4. People Involved in the Project Team

The research project team is currently composed of the individuals listed on Table 1. The members' involvement occurs in different tasks, locations and periods of the project. All of them are professors, researchers and/or students at either one of the grant recipient institutions:

Table 1 – People directly involved in the research team

Name	Institution
Eduardo Henrique Diniz	Professor at FGV/EAESP project leader at FGV-EAESP)
Marlei Pozzebon	Professor at HEC Montréal (project leader at HEC Montréal)
Tania Pereira Christopoulos	Post-doctoral researcher at FGV/EAESP
Felipe Zambaldi	Professor at FGV/EAESP
Martin Jayo	Ph. D. candidate and lecturer at FGV/EAESP
Cesar Akira Yokomizo	Ph. D. candidate at FGV/EAESP
Renê Birochi	Ph. D. candidate at FGV/EAESP
Ewandro Araújo	Ph. D. candidate at HEC-Montréal
Bruno Teodoro Oliva	Ph. D. candidate at FGV/EESP
Frédéric Lavoie	M. Sc. at HEC-Montréal
Alexandro Moreira	M. Sc. candidate at FGV/EAESP
Daniel Bruno Garcia	M. Sc. candidate at FGV/EAESP
Solly Nissim Sayeg	Undergraduate student at FGV/EAESP
Ivan Moura	Undergraduate student at FGV/EAESP

Bruno Oliva and Daniel Bruno Garcia have joined the research team and have took on research responsibilities starting in October 2009.

Table 2 lists researchers in Brazil and around the world who are already collaborating, or starting to collaborate, with our research team.

Table 2 – People collaborating with our research team

Name	Institution
Lauro Gonzalez	Professor at FGV/EAESP – Center for Microfinance Studies
Kurt E. Von Mettenheim	Professor at FGV/EAESP – Center for Microfinance Studies
Wifak Houij Gueddana	Ph. D. candidate at London School of Economics
Nathalie Mitev	Professor at London School of Economics
Volker Wulf	Professor at University of Siegen
Eric Van Heck	Professor at Erasmus University
Emmanuel Raufflet	Associate professor at HEC Montreal
Guilherme-Elias Belassiano	MBA HEC Montreal
Stephanie Emond	MBA HEC Montreal

5. Project Activities

The grant agreement was signed on June 2008, and the first payment from IDRC was transferred to the grant recipients' bank accounts in August 2008. The project is following the planned pathway, and the scheduled activities have been executed without any particular difficulty.

Our efforts so far have been related to the first of the above listed specific objectives, allowing the research team to deeply understand the already existent models of microcredit delivery supported by CB. However, these efforts have also allowed us to disseminate/communicate the team's impressions and preliminary research findings, as a result of our interviewing of and interaction with a large number of practitioners, policy makers, decision makers, ICT providers, researchers and other relevant agents of the CB and microcredit businesses, both in Brazil and abroad, with whom we have been in permanent contact.

The research activities undertaken from the beginning of the project are listed below. It is important to notice, however, that some of the activities were funded by

resources other than those related to the IDRC grant, since part of the research is sponsored by Fundação Getulio Vargas and HEC-Montréal.

The following research activities related to this project have been carried out:

- 1) A two-day Inception Workshop was held at FGV in São Paulo on March 6-7 2008 and gathered 15 participants, including members of the research team as well as invited academics and representatives from the Brazilian banking industry, who met to discuss and prepare the project's research agenda. The main objective of this event was to prepare the research team, refine the conceptual model to be adopted and to get some input from researchers and practitioners of related interests. Besides academics from FGV and HEC Montreal, members of the team, other researchers from FGV, USP, FEI and practitioners from Banco Itaú took part of the workshop.
- 2) A complementary, one-day Inception Workshop was carried out at HEC in Montreal, on May 20 2008, with the same purpose of the workshop held in São Paulo. Eight researchers took part of the event, including members of the project team and other invited researchers, discussing the project's agenda. Again, besides members of the research team, other researchers from HEC Montreal and from other institutions took part of the event.
- 3) From July 7th to July 11th 2008, Martin Jayo travelled to Fortaleza to establish contacts and preliminarily interview representatives from Crediamigo/Banco do Nordeste, which is one of the in-depth case studies to be developed, as well as to visit the case site. Representatives interviewed were: Charles Diniz Leandro, Microfinance Manager; Alexandre Barbosa, manager of BNB's Fortaleza Central Branch; as well as a total of six credit agents.
- 4) From July 7th to August 7th 2008, an investigation was conducted by four MBA students of HEC Montreal under supervision of professors Eduardo Diniz and Marlei Pozzebon. The investigation was made at Microinvest and Real Microcrédito, MFIs of Unibanco and Banco Real, to identify opportunities for using the correspondent network to support microcredit delivery in the two institutions.

- 5) From September 11th to November 18th 2008, Cesar Yokomizo carried out a total of four in-depth inteviews with executives from Banco Lemon, one of the selected cases to be studied. The following executives were interviewed: Gilberto Salomão, General Director; Alexandre Santos, Operations Manager; Luiz Ribeiro, Information Technology Manager; and Carlos Tamaki, Products Manager.
- 6) From September 29th to October 24th 2008, professor Marlei Pozzebon stayed in São Paulo at FGV, together with the research team helping on the tuning of the research protocol that is to be used in the field study.
- 7) From August 4th to November 28th 2008, Tania Christopoulos worked in the research of Banco Palmas, inserting it in a broader context, as part of the research of the Banco do Brasil partnership with MFIs through correspondents. Her research also included a new possibility of studying the deployment of the technology of microfinance from a more heterogeneous perspective, considering the needs of relevant groups that form the low income.
- 8) Activities related to the Web site: Guillaume Barreau, PhD in Informatics, accepted the responsibility to create and maintain the research team's Web site, which will be our main toll for communication with the stakeholders and the community. The Web site is on line since January 2009 at www.ictformicrofinance.org.
- 9) From July to December 2008, Frederic Lavoie carried out a total of fifteen indepth interviews with people involved with CrediAmigo (Banco do Nordeste), one of the selected cases to be studied. He interviewed four managers, two coordinators, three credit agents and six clients. The main purpose of Lavoie's M.Sc. dissertation is to investigate conditions for the transferability of microcredit methodologies to other regions.
- 10) From July to December 2008, Ewandro Araujo, PhD student at HEC Montreal who will develop his thesis on the necessary bank organizational changes to include microcredit as a business model, started his collaboration with the research team, providing relevant information prospected from external sources (web sites).

11) From November 26th to 28th, professor Eduardo Diniz took part of the IDRC All Partners Meeting in Montevideo, Uruguay.

Research activities related to this project along the first semester 2009 were:

- 1) A **one-day workshop** was held at FGV in São Paulo on April 23rd 2009 with the participation of members of the research team and some invited professors and students from FGV. At this workshop, we did the first cross-case discussion, after the data collection from the field work in Fortaleza.
- 2) A report entitled "Operational and technology risk related to Microfinance" was produced by Guilherme-Elias Belassiano MBA graduated from HEC Montreal under the supervision of professors Eduardo Diniz and Marlei Pozzebon. The objective of this report is to set up investigation boundaries for future research on risk and microfinance that can impact somehow our project.
- 3) Frédéric Lavoie is writing his M.Sc. dissertation entitled "Understanding the transferability and local appropriation of microcredit methodologies", at HEC Montreal, based on the in-depth case study "Banco do Nordeste/Crediamigo". He is likely to collaborate in other phases of the research program.

On the second semester of 2009, the main activities related to the project were:

- 1) July 2009: Conexao Local Autazes René Birochi led a small research team (with two undergrad students: Solly Nissin Sayeg and Ivan Moura) that has developed a first approach to understand how correspondents have impacted local development in Autazes, a small town located in the Amazon region. From this exploratory field study, a blog was created and is available at http://conexaoautazes.blogspot.com/.
- 2) October 16th 2009: Meeting with STRO the research team had the opportunity to spend a day discussing with members of STRO. The meeting was very productive and insightful. After a more detailed presentation of both parts our research team and STRO team of our respective research activities, we started to discuss elements of possible synergy and convergence.

- 3) November 2009: Frederic Lavoie concluded his M.Sc. dissertation entitled "Conditions for the replication of microcredit methodologies", at HEC Montreal. The dissertation was based on an in-depth case study carried out in Fortaleza ("Banco do Nordeste/Crediamigo"). The dissertation is organized in two articles and one case, facilitating the dissemination of the results.
- 4) December 2009: Video Conexão Autazes René Birochi, Marlei Pozzebon and Eduardo Diniz organized a field trip to Autazes to complete the research started in July in order to record on video statements from local leaders, unionists, merchants, politicians, and citizens in general who could tell explain the impacts of the introduction of the first banking correspondents in the municipality, which did not possess bank facilities until then.
- 5) René Birochi started in September 2009 the development of his Ph.D. research under the supervision of Marlei Pozzebon at HEC Montreal, from August 2009 to July 2011.

In the first semester of 2010 the activities related to the project were:

- January 2010: two academic papers started to be developed based on data collection made on December 2009 involving seven members of the research team;
- 2) February 2010: Frederic Lavoie went to the field to collect data for a investigation study on the replication of Instituto Palmas' community banking model to five different locations in São Paulo.
- 3) March 15th 2010: Martin Jayo concluded his PhD dissertation on the subject of network management models, offering a comprehensive typology to compare different models currently practiced by agent networks in Brazil. Jayo's committee counted with a Banco Central's officer as a member.
- 4) March 2010: Work related to the first phase of the so called "demand side project", involved contacts with Banco Central do Brasil which has put available for our team historical raw data on the correspondents operation in the country. This theoretical research activity involved five team members.

5) April 2010: production of Videos Conexão Autazes

6. Project Outputs

We can see different kinds of outputs provided by our project from December 2008 up to the second semester of 2010. Those outputs are organized in four groups: academic conferences participation, non-academic seminars we took part as invited lecturers, seminars organized by our research team and academic papers published in scientific journals, books, conferences proceedings and, working papers. Bellow we describe those outputs:

6.1 Academic dissemination activities (conference presentations)

As part of the activities of the Project, we took part in a number of academic conferences directed mainly to scholars potentially interested in developing research and academic partnership in the fields of microfinance, ICT for development, and other related subjects. Following a list of those events from December 2008 to September 2010:

- 1) Capetown, South Africa. On July 2008, Eduardo Diniz attended PICMET'08 (Portland International Conference on Management of Engineering & Technology), to present a paper titled "The role of information and communication technologies in improving microcredit: the case of correspondent banking in Brazil" (authors: Eduardo Diniz, Marlei Pozzebon, Martin Jayo, Ewandro Araújo). This event turned out to be a helpful opportunity to discuss our research subject with an international audience.
- 2) Rotterdam, December 11 2008: Eduardo Diniz presented the lecture entitled "ICT-based Branchless Banking: The Case of Correspondent Banking in Brazil" at the ERIM Research Seminar, invited by professor Erick van Heck from Rotterdam School of Management, Erasmus University (expenses covered by Erasmus University).
- 3) Paris, December 14-17 2008: Eduardo Diniz and Marlei Pozzebon presented the paper "Banking technology to scale microfinance: the case of correspondent banking in Brazil" (by Diniz, Eduardo H.; Pozzebon, Marlei; Jayo, Martin) at the

- International Conference of Information Systems (ICIS). In this conference, researchers from London School of Economics and Siegen University expressed interest in our research work and started conversations on how to develop some level of partnership.
- 4) Rotterdam, 12-17 May 2009: Marlei Pozzebon presented the lecture entitled "Every move you make, every claim you stake: a practice-turn in IS research" as invited speaker at Erasmus University, Rotterdam School of Management, ERIM (expenses covered by Erasmus University). Together with Prof. Eric Van Heck, a new dimension of microcredit will be explored through a joint research project seeking to analyze the creation of social value through the use of online models of microcredit, like the peer-to-peer model.
- 5) Siegen University, 17-19 May 2009: Marlei Pozzebon presented the lecture entitled "The Role of ICT in Helping Parallel Paths to Converge: Microcredit and Correspondent Banking in Brazil" as invited speaker at University of Siegen, Institute for Information Systems, Siegen, Germany (expenses covered by Siegen University). An important collaboration was settled with Prof. Wolker Wolf and his team, concerning the integration of participatory design (ie, the involvement of analysts and programmers with local users in order to design and implement together technological solutions for collectively identified problems) in our research project.
- 6) London, May 2009: Marlei Pozzebon presented the lecture entitled "Every move you make, every claim you stake: a practice-turn in IS research" as invited speaker at Londond School of Economics. An important collaboration was reinforced, with Prof. Nathalie Mitev and her PhD student Wifak Houij Gueddana. Wifak is developing an important field work on collaborative technologies for microcredit in five countries (Tunisia, Morocco, Egypt, Jordan and Lebanon) and is investigating the development of MIFOS, an open source software created by the Grameen Foundation to suport the management of microfinance transactions. Wifak will spend four months as a visiting student at HEC Montreal in 2010 in order to collaborate and transfer part of her knowledge to our research team, and apply part of her results to the Brazilian and Latin American contexts.

- 7) Dubai, May 26-28 2009: Tania Christopoulos presented the paper: "The Role of ICT in the Microfinance Model of Brazilian Banks" (by Diniz, Eduardo H.; Jayo, Martin; Christopoulos, Tania; Yokomizo, Cesar A.) at the IFIP 9.4 Conference. This conference allowed us not only to show the correspondent banking models existing in Brazil, but also to establish contacts with ICT4D academic community and practitioners. Few examples are: a lecturer of University of East London, researchers from Lancaster University and The Australian National University and others interested in ICT4D.
- 8) Barcelona, Spain, July 2nd to 4th 2009. Martin JAYO presented the paper "Social innovation in the Brazilian banking area: using correspondents to increase microcredit delivery" at the 25th EGOS (European Group for Organizational Studies) Colloquium.
- 9) San Francisco, EUA, August 6th to 9th 2009. Eduardo DINIZ presented the paper "Uso de Correspondentes Bancários como Canal de Distribuição de Serviços Financeiros: o Papel dos 'Gestores de Rede" and "Emergencia da quinta onda de automação bancaria".at the 15th Americas Conference in Information Systems, AMCIS 2009.
- 10) Gotemburg, Sweden, September 17th to 18th, 2009..Tania CHRISTOPOULOS presented the paper "Monitoring and Evaluating Microfinance Delivery Through ICT Based Correspondent Banking" at the 3rd European Conference on Information Management and Evaluation, in
- 11) São Paulo, Brazil, September 19th to 23rd, 2009. Cesar YOKOMIZO presented the paper "Tecnologias de Informação e Comunicação na Oferta de Serviços Financeiros para a População de Baixa Renda: os Correspondentes Bancários do Banco Lemon" at the XXXIII Encontro da ANPAD, EnANPAD,
- 12) Cartagena de Indias, Colombia, November 25th to 27th, 2009. Cesar YOKOMIZO presented the paper "Mensurando uma inovação no acesso a serviços financeiros para a população de baixa renda: evidências do uso de correspondentes bancários do Banco Lemon" at the XIII Seminario Lation-Iberoamericano de Gestión Tecnológica, ALTEC.
- 13) Valencia, Spain, December 13th to 15th, 2009.Cesar YOKOMIZO presented the paper "Financial services to lower income population through the correspondent

- banking technology: lessons from the Brazilian experience at Banco Lemon" at the 35th European International Business Academy Annual Conference, EIBA.
- 14) Montréal, Canada. May 7th 2010. Marlei POZZEBON presented the lecture "Innovation sociale et inclusion financière". CRISES-HEC.
- 15) Montréal Canada. May 7th 2010. René BIROCHI presented the lecture "Critical Distance Education for Microfinance: The Case of Autazes/Amazon" at Seminaire "Innovation sociale et inclusion financière" organized by Centre de Recherche sur les Innovations Sociales (CRISES).
- 16) Montréal-Canada. May 19th, 2010. Marlei POZZEBON presented the lecture "Adapting the Structurationist View of Technology for Studies at the Community/Societal Levels: two empirical illustrations" at Groupe de Recherche en affaires internationales- GRAI. HEC Montréal,
- 17) Lisbon, Portugal, from June 30th to July 2nd 2010. Eduardo DINIZ presented the paper "Financial Inclusion through Correspondents: the Case of Amazonian Autazes" at EGOS (European Group for Organizational Studies) 2010 Colloquium.
- 18) Montreal, Canada, from August 6th to 10th 2010. Felipe ZAMBALDI presented the paper "Network integration models and groups of services delivered by Brazilian branchless banking" at the Academy of Management Annual Meeting, to be held in
- 19) Montreal, Canada, from August 6th to 10th 2010. René BIROCHI presented the paper "Theorizing in distance education: the quest for conceptual foundations" at Academy of Management, PDW (Professional Development Workshops).
- 20) Lima, Peru, on August 2010. Tania CHRISTOPOULOS presented the paper "Banking Correspondents as Social Inovation Network The Case of Banco Palmas" at AMCIS (16th Americas Conference of Informaction Systems).
- 21) Rio de Janeiro, Brasil, from September 25th to 28th 2010.Eduardo DINIZ presented the paper "Uso da tecnologia dos correspondentes bancários no Brasil: o papel dos gestores de rede" at Enanpad 2010 (Encontro Nacional da Associação de Pós-Graduação em Administração no Brasil),
- 22) Rio de Janeiro, Brasil, from September 25th to 28th 2010. Cesar YOKOMIZO presented the paper "Potenciais e Desafios da Adoção da Tecnologia de Correspondentes Bancários para a Expansão do Microcrédito: um Estudo

- Exploratório na População de Baixa Renda no Brasil" at Enanpad 2010 (Encontro Nacional da Associação de Pós-Graduação em Administração no Brasil).
- 23) Rio de Janeiro, Brasil, from September 25th to 28th 2010. Tania CHRISTOPOULOS presented the paper "Banking Correspondents as Social Network The Palmas Institute Case" at Enanpad 2010 (Encontro Nacional da Associação de Pós-Graduação em Administração no Brasil).
- 24) "ICT: Unlocking the potential of correspondent banking in Brazil: an analysis of how technology in correspondent banking can enhance microcredit operations". Seminar organized by the Center of Mincrofinance Studies at FGV, this event was held on August 7th 2008, and brought together more than 20 invited participants, including researchers and industry representatives from mainstream commercial banks and both Brazilian and foreign microfinance institutions. At the seminar were present practitioners from Banco do Brasil, HSBC, Bradesco, Itaú, besides managers of Unibanco and Banco Real. One journalist from Revista Exame and one CGAP analyst were also present.

6.2 Non-academic dissemination activities (lectures and presentations directed to practitioners and policy makers)

We also took part in events where we could make closer contact with practitioners and policymakers and discuss some of the ideas we have been developing along the project development. Those events are described below:

- 1) September 18th 2008. Eduardo Diniz did a presentation at the Fórum Paulista de Microfinanças (São Paulo State Microfinance Forum), promoted by the Center for Studies of Sustainability at FGV (GVces). The title of the presentation was "Banking technology and microfinance". The audience was composed by academics from FGV, managers and decision makers from the Brazilian microfinance sector, government and commercial Banks. Among the more than 20 attendees, there were institutions such as Banco Itaú, Unibanco, Bradesco, Banco Cacique, Banco Real, Sebrae, São Paulo Confia, Prefeitura de São Paulo, Souza Cruz, and international institutions like IFC and Planet Finance.
- September 29th to October 1st 2008. Professor Eduardo Diniz took part of the 7th
 Seminar on Microfinance promoted by the Banco Central do Brasil, in Belo

Horizonte, where more than one thousand attendees were present. In the three days of the seminar, professor Diniz made contacts with officers from the Banco Central and the Ministry of Labour, managers from credit unions, microfinance institutions and banks as Bradesco and Banco Itaú, and also international institutions as Planet Finance and IFC, all of them interested in the use of correspondent banking as a microfinance channel.

- 3) 23rd and 24th of October 2008. Professor Eduardo Diniz was invited to present a lecture on the "Brazilian experience with correspondent banking" at the 7th Encuentro Nacional de Microfinanzas, organized by the Ministry of Economy of Mexico for around 800 attendees. Held in the city of Cuernavaca on the, open great opportunity for discussions about the potential of the correspondent banking model and exchange ideas with officers of microfinance institutions and government from Mexico and many other Latin American and Caribbean countries, as well as institution like USAID and World Bank, and some academic researchers.
- 4) April 17-19 2009. Martin Jayo attended to the 3rd IEEE/ACM International Conference on Information and Communication Technologies and Development (ICTD2009) in Doha, Qatar, as a result of an invitation from IDRC. Although no paper was presented in the occasion, the Conference was a good opportunity to establish contacts and exchange knowledge with the ICT4D academic community and professionals.
- 5) May 12th 2009, Eduardo Diniz presented a lecture entitled "Cenários de Bancarização no Brasil", at Seminário Bancarização organized by Febraban, the Brazilian Banks Federation, as a preparatory seminar for the CIAB, Congresso Internacional de Automação Bancária3. Besides the attendance of about 300 practitioners from Brazilian banks, this presentation generated a number of interviews and press notes⁴, and one podcast⁵.
- 6) May 15th 2009. Eduardo Diniz presented in Pune, India, the lecture entitled "Correspondents: The Brazilian Model" at the Policy Retreat on Business

³The largest Congress and exposition on Information Technology for Financial Institutions in Latin America: http://www.ciab.org.br/ciab2009/index.html

⁴ 'Bancarização' pode tornar país exportador de tecnologia, avalia especialista, published on 12th May 2009, available at http://www.tiinside.com.br/News.aspx?ID=129518&C=265

⁵ Bancarização avança, mas serviços ainda são limitados, Published on June 3rd 2009 and available at http://www.tiinside.com.br/News.aspx?ID=133458&C=263

Correspondent Model taken place at the College of Agricultural Banking, promoted by the Reserve Bank of India, CGAP and Access Development Services. This retreat was organized to deepen the understanding of the correspondent business model adopted in India and the Brazilian case is one of great interest. About 70 practitioners attended the presentation, among policy makers from Reserve Bank of India, bank managers, technology providers and CB network managers.

- 7) July 15th 2009. Eduardo Diniz presented a lecture entitled "Correspondent Banking in Brazil: Making Banks Accessible to the Poor". Club de Microfinance de Montréal at HEC Montreal, CANADA.
- 8) August 21st to 22nd 2009. Eduardo Diniz presented a lecture entitled "Retos y logros en el modelo de corresponsales en Brazil" at I Congreso Latinoamericano de Acceso a Servicios Financieros. Hotel Hilton, Cartagena de Indias, in Colombia.
- 9) October 20th 2009. René Birochi presented the case: "Distance Learning in the Amazonas" at the Séminaire Franco-Québécois VILLES, TIC et COHESION SOCIALE sponsored by CRISES, in Montreal, CANADA.
- 10) October 28th to 29th 2009. Tania Christopoulos presented a lecture entitled "Estratégias para inclusão bancária" organized by Ministério do Desenvolvimento Social e do Combate a fome at Hotel San Marco, Brasília, DF, BRASIL.
- 11) October 29th 2009. Eduardo Diniz presented a lecture entitled "Modelos e casos de bancarização: inclusão financeira e social". IT Banking Services Summit. Hotel Meliá Jardim Europa, Sao Paulo, SP, BRASIL.
- 12) November 16th to 17th 2009. Eduardo Diniz presented a lecture entitled "Tecnologia e Finanças Inclusivas" at I Forum do Banco Central sobre Inclusão Financeira, Fiesta Bahia Hotel, Salvador, BRASIL.
- 13) November 30th to December 1st 2009. Eduardo Diniz presented a lecture entitled "Administración de las redes de agentes/corresponsales". Taller sobre Supervisión y Regulación de Banca sin Sucursales organized by CGAP and Banco Central do Brasil at Hotel PortoBay Rio International, Rio de Janeiro, RJ, BRASIL.
- 14) January 07th 2010. René Birochi presented a lecture entitled "Local Development& Distance Education: Autazes Case" at Fondation Maison de Sciences de l'Homme in Paris

- 15) January 25th to 26th 2010. Lauro Gonzalez presented a lecture entitled "Tecnologia e Canais de Distribuição de Serviços Financeiros" at the Seminário do PNMPO, Centro de Convenções da Firjan, Rio de Janeiro, RJ, BRASIL.
- 16) February 25th to 26th 2010. Marlei POZZEBON presented the lecture "Innovative web-based models for social inclusion and citizen mobilization". Invited speaker by UNESCO Web for development, Brasilia, Brazil.
- 17) March 4th and 5th 2010. Eduardo Diniz presented a lecture entitled "Challenges and achivements of correspondent model in Brazil", representing IDRC at the UNDP meeting for GIM Growing Inclusive Markets in Latin America and the Caribbean, held in Bogota, Colombia.
- 18) March 30th to 31st 2010. Lauro Gonzalez presented a lecture entitled "Desafios do Microcrédit" at the Seminário Internacional de Microcrédito. At Anhembi Convention Center, São Paulo, SP, BRASIL.
- 19) April 25th 2010. Eduardo Diniz presented a lecture entitled "Tecnologia e Finanças Inclusivas" at the e-business group meeting of the Brazilian American Chamber (Amcham) in São Paulo.
- 20) April 27th 2010. Lauro Gonzalez presented a lecture entitled "Desafios do Microcrédito" at Seminário de Desenvolvimento Econômico e do Trabalho na Cidade de São Paulo, on Auditório do CAT Luz, São Paulo, SP, BRASIL.
- 21) May 24th to 27th 2010. Lauro Gonzalez presented a lecture entitled "Lessons from Banking Agents in Brazil" at Mobile Money Summit. Hotel Intercontinental Rio, Rio de Janeiro, RJ, BRASIL.
- 22) June 9th 2010. Eduardo Diniz presented a lecture entitled "Visão de Futuro da Tecnologia Bancária" at CIAB, Congresso Internacional da Automação Bancária, organized by FEBRABAN, Brazilian Banks Federation.
- 23) June 22nd 2010. Lauro Gonzalez presented a lecture entitled "Sinergia entre Microcrédito e microsseguros no Brasil" at Forum Internacional para Jornalistas 2010. Hotel Intercontinental, São Paulo, SP, BRASIL.
- 24) August 6th 2010. Felipe Zambaldi and Lauro Gonzalez will present a lecture on "Quantitative Analysis of Correspondent Banking Impacts" in the Microfinance Club of Montreal at HEC Montreal.

- 25) August 25th 2010. Eduardo Diniz presented the lecture "Mobile banking: Realidade e Visão de Futuro" at Mobile Money Brasil 2010 on Amcham São Paulo.
- 26) September 2nd to 3rd, 2010. Eduardo Diniz presented the lecture "La Experiencia de los Coresponsales Bancarios y su Poder de Transformación en Brasil" at Seminario de Coresponsales Bancarios promoted by CGAP, IFC and CNBV. Mexico DF.

6.3 Seminars organized by the research team

In order to disseminate findings from our projects and articulate ourselves as a research group with other important actors in the microfinance, technology and banking scenario either in Brazil and other countries, we organize a number of seminars where we divided panels with invited guests. Bellow a list of those seminars:

1) November 5th 2008. "Correspondents: Agenda 2010" was an event organized by the research team of the project and sponsored by the Center for Excellence in Banking at FGV. This event was conceived to cover future perspectives on the Brazilian model of correspondents as seen by practitioners and regulators. Three panelists were invited for this event: Frederico Queiroz, from Banco do Brasil and coordinator of the correspondents committee at Febraban (Brazilian Federation of Banks); Camilo Bezerra, executive of PagFácil and Multibank, two of the main correspondent network integrators, and subsidiaries of Banco Lemon; Francisco Guerreiro, from the Department of Norms at Banco Central do Brasil. This event was extensively advertised,6 and as a result attracted around 30 relevant players from commercial banks and from the microfinance sector, including managers from banks as Unibanco, Nossa Caixa, Bradesco and Itaú, technology providers as IBM, Tecban, First Data, Orion Integration, FourComm and ShopCred, microfinance institutions as São Paulo Confia and Planet Finance and other companies like, Unimed Seguros and Empresa de Correios e Telégrafos, that is responsible for

⁶http://www.eaesp.fgvsp.br/interna1coluna.aspx?PagId=DLNKMNPJ&ID=714&RoomID=15, http://www.maxpressnet.com.br/noticia.asp?TIPO=CE&SQINF=347424, http://agenda.universia.com.br/fgv-eaesp/2008/09/23/correspondentes-agenda-2010, http://ondequando.com/event/30292/Correspondentes-Agenda-2010.

- Banco Postal, one of the main correspondent networks, in partnership with Bradesco.
- 2) October 15th 2009. Seminar Technology and Financial Inclusion organized by the research team to disseminate the findings of the first year of the project. This seminar was held at FGV in Sao Paulo thanks to a partnership between Center of Microfinance Studies and Planet Finance. The seminar had a great impact in terms of influencing policy makers about the importance of increasing inclusive finance in scope. The seminar had participation of 81 people, including some key players in the Brazilian and Latin American inclusive finance debate, e.g., Febraban, Banco Central, STRO, IFC, Brazilian and Mexican banks, Brazilian and Mexican MFIs, Brazilian Federal Government officers, etc. See details of the seminar in the Portuguese). Video of the seminar available Appendix (in is at http://www.vimeo.com/8768172
- 3) November 2009. Marlei Pozzebon organized a presentation in the context of the Microfinance Club of Montreal of two executives of Crediamigo Jeronimo Ramos and Fabio Boa Sorte. The presentation took place at HEC Montreal.
- 4) May 28th 2010. Seminar "Community Banks and Inclusive Finance", organized by the research team to disseminate the findings of the second year of the project, counted with an audience of 150 people from 8 different Brazilian states, and some international participants (from EUA, Canada, France, Uruguay, and one speaker that made his presentation online from India). Video of the seminar is available at http://vimeo.com/13303241

6.4 Scientific papers

Peer-reviewed journals and book chapters

- FONSECA, Carlos E., MEIRELLES, Fernando S., DINIZ, Eduardo H. (2010)
 Tecnologia Bancária no Brasil: Uma História de Conquistas, uma Visão de
 Futuro. 1. ed. SÃO PAULO: Fundação Getulio Vargas SP, 2010. 420 p. v.
- 2) GONZALEZ, Lauro; PIZA, Caio; GARCIA, Daniel (2009). "Sinergia entre Microsseguro e Microcrédito e o Crescimento dos Mercados no Brasil". Revista Brasileira de Risco e Seguro, v. 5 p. 45-84.

- 3) DINIZ, Eduardo; POZZEBON, Marlei & JAYO, Martin (2009). "The Role of ICT in Helping Parallel Paths to Converge: Microcredit and Correspondent Banking in Brazil". Journal of Global Information Technology Management (JGITM), Special Issue on "Information Technology Research in Brazil", 12 (2), April 2009.
- 4) JAYO, Martin; POZZEBON, Marlei & DINIZ, Eduardo (2009). "Microcredit and Innovative Local Development in Fortaleza, Brazil: the Case of Banco Palmas". Canadian Journal of Regional Science (CJRS), Special Issue on Social Innovation and Territorial Development, Edited by Klein, Juan-Luis, 32 (1), April 2009.
- 5) POZZEBON, Marlei; DINIZ, Eduardo & JAYO, Martin (2009). "Chapter II: Adapting the Structurationist View of Technology for Studies at the Community/Societal Levels". In: Handbook of Research on Contemporary Theoretical Models in Information Systems, Editors: Dwivedi, Y.K, Lal, B., Williams, M.D., Schneberger, S.L., and Wade, M.R. Information Science Reference, IGI Global, Hershey, PA, USA. pp18-33.
- 6) DINIZ, Eduardo; JAYO, Martin; CERNEV, Adrian (2009). "As cinco ondas de inovações tecnológicas em bancos". In: Organizações inovadoras do setor financeiro: teoria e casos de sucesso. Editors: Barbieri, José C. and Simantob, Moysés A. Editora Saraiva, Sao Paulo, Brazil, pp 45-65.

Scientific papers – peer-reviewed conferences

- DINIZ, E.H.; JAYO, M.; POZZEBON, M. "Correspondent Banking as Microcredit Delivery Channel". Chicago: Chicago Microfinance Conference, 2007.
- 2) DINIZ, Eduardo; POZZEBON, Marlei & JAYO, Martin. (2007) "Microcredit Delivery Through Banking Correspondents in Brazil". Proceedings of Academy of Management Conference - AOM 2007, TIM Division, August 3-8 2007, Philadelphia, Pennsylvania, US.
- 3) DINIZ, Eduardo; POZZEBON, Marlei & JAYO, Martin. (2007) "Microcredit and Correspondent Banking in Brazil: What is Missing?" Proceedings of

- IFIP 9.4, 9th International Conference on Social Implications of Computers in Developing Countries, May 28-30 2007, Sao Paulo, Brazil, Paper 44-1 (9-13).
- 4) DINIZ, Eduardo; POZZEBON, Marlei & JAYO, Martin. "Correspondent banking in Brazil: Technology to improve microcredit" 2007 OASIS Workshop, IFIP Working Group 8.2, December 9th 2007, Montreal, Canada.
- 5) POZZEBON, Marlei. "The Social Dimension of Information Technology: a Perspective from Canada and Brazil" Invited speaker at TIM PDW Information technology for development in Latin America: raising our own questions, AOM, August 10 2008, Anaheim, CA. 2007
- 6) DINIZ, Eduardo; POZZEBON, Marlei & JAYO, Martin (2008) "Banking Technology to Scale Microfinance: The Case of Correspondent Banking In Brazil". Proceedings of ICIS 2008 (International Conference on Information Systems), December 14th-17th 2008, Paris, France.
- 7) DINIZ, Eduardo; JAYO, Martin; CHRISTOPOULOS, T.P & YOKOMIZO, C.A. (2009). "The Role of ICT in the Microfinance Model of Brazilian Banks and the Use of Banking Correspondents" Proceedings of IFIP 9.4, 9th International Conference on Social Implications of Computers in Developing Countries, May 26-29 2009, Dubai, United Arab Emirates.
- 8) DINIZ, E. H.; POZZEBON, M.; JAYO, M. (2009). "Social innovation in the Brazilian banking area: using correspondents to increase microcredit delivery". 25th EGOS (European Group for Organizational Studies) Colloquium, 2009, Barcelona.
- 9) CERNEV, Adrian; DINIZ, Eduado & JAYO, Martin (2009). "Emergência da quinta onda de automação bancária". Accepted for presentation and publication in the Proceedings at AMCIS 2009, 15th Americas Conference in Information Systems, San Francisco, August 2009.
- 10) JAYO, Martin & DINIZ, Eduardo (2009). "Uso de Correspondentes Bancários como Canal de Distribuição de Serviços Financeiros: o Papel dos 'Gestores de Rede'". Accepted for presentation and publication in

- the Proceedings at AMCIS 2009, 15th Americas Conference in Information Systems, San Francisco, August 2009.
- 11) YOKOMIZO, C. A.; DINIZ, E. H., & CHRISTOPOULOS, T. P. (2009). "Tecnologias de Informação e Comunicação na Oferta de Serviços Financeiros para a População de Baixa Renda: os Correspondentes Bancários do Banco Lemon". Proceedings of the XXXIII Encontro da ANPAD, EnANPAD, São Paulo, Brazil, 19th to 23rd September, 2009.
- 12) DINIZ, Eduardo; JAYO, Martin; CHRISTOPOULOS, T. (2009) "Monitoring and Evaluating Microfinance Delivery Through ICT-Based Correspondent Banking" Paper accepted for presentation at the ECIME 2009, 3rd European Conference on Information Management and Evaluation, Gotemburgo Sweden, September 2009.
- 13) YOKOMIZO, C. A., & DINIZ, E. H. (2009). "Mensurando uma inovação no acesso a serviços financeiros para a população de baixa renda: evidências do uso de correspondentes bancários do Banco Lemon". Proceedings of the XIII Seminario Lation-Iberoamericano de Gestión Tecnológica, ALTEC, Cartagena de Indias, Colombia, 25th to 27th November, 2009.
- 14) YOKOMIZO, C. A., DINIZ, E. H., & POZZEBON, M. (2009). "Financial services to lower income population through the correspondent banking technology: lessons from the Brazilian experience at Banco Lemon". Proceeding of the 35th European International Business Academy Annual Conference, EIBA, Valencia, Spain, 13th to 15th December, 2009.
- 15) DINIZ, Eduardo; BIROCHI, René; POZZEBON, Marlei. (2010) "Financial Inclusion through Correspondents: the case of Amazonian Autazes". European Group for Organizational Studies EGOS 26th Colloquium. June 30- July 3, 2010, Lisbon, Portugal.
- 16) LAVOIE, F., & POZZEBON, M. (2010) "Challenges for Inclusive Finance Expansion: the Case of CrediAmigo, a Brazilian MFI". Academy of Management Conference - AOM 2010, Social Issues in Management Division, August 6- 2010, Montréal, Canada.

- 17) BIROCHI, R., & POZZEBON, M. (2010) "Theorizing in distance education: the quest for conceptual foundations". PDW (Professional Development Workshops. Academy of Management Conference AOM 2010, Social Issues in Management Division, August 6-10, Montréal, Canada.
- 18) DINIZ, Eduardo; JAYO, Martin; ZAMBALDI, Felipe; CHRISTOPOULOS, Tania. (2010) "Network integration models and groups of services delivered by Brazilian branchless banking" Academy of Management Annual Meeting 2010. AOM 2010, Social Issues in Management Division, August 6-10, Montréal, Canada.
- 19) CHRISTOPOULOS, Tania. "Banking Correspondents as Social Network The Palmas Institute Case" (2010) Enanpad (Encontro Nacional da Associação de Pós- Graduação em Administração no Brasil), Rio de Janeiro, Brasil. September 25th to 28th 2010.
- 20) JAYO, Martin; DINIZ, Eduardo. (2010) "Uso da tecnologia dos correspondentes bancários no Brasil: o papel dos gestores de rede". Enanpad (Encontro Nacional da Associação de Pós-Graduação em Administração no Brasil), Rio de Janeiro, Brasil. September 25th to 28th 2010.
- 21) YOKOMIZO, Cesar; DINIZ, Eduardo. (2010) "(Micro?) Crédito para a população de baixa renda: como gerar cadastro positivo por meio da tecnologia de correspondentes bancários" Enanpad (Encontro Nacional da Associação de Pós-Graduação em Administração no Brasil), Rio de Janeiro, Brasil. September 25th to 28th 2010.

Scientific papers – working-papers

 JAYO, Martin; POZZEBON, Marlei & DINIZ, Eduardo (2008) "Microcredit and Innovative Local Development in Fortaleza, Brazil: The Case of Banco Palmas", Cahier du GReSI no 08-02, HEC Montréal, Canada, September 2008. DINIZ, Eduardo; POZZEBON, Marlei; JAYO, Martin (2008) "The Role of ICT in Improving Microcredit: The Case of Correspondent Banking in Brazil", Cahier du GReSI no 08-03, HEC Montréal, Canada, September 2008.

Papers under evaluation (submitted but not yet accepted) or in progress

- 1) LAVOIE, Frédéric; GONZALEZ, Lauro; DINIZ, Eduardo (2010). "Microcredit methodologies and their replication: an introduction", in progress.
- 2) YOKOMIZO, Cesar; DINIZ, Eduardo; CHRISTOPOULOS, Tania. "Information and Communication Technologies to Deliver Financial Services for the Low-Income Population: Correspondent Banking at Banco Lemon". Submitted and under evaluation to be published by JISTEM (Journal of Information System and Technology Management)
- 3) DINIZ, Eduardo; JAYO, Martin; ZAMBALDI, Felipe; CHRISTOPOULOS, Tania.

 "Groups of services delivered by Brazilian branchless banking and respective network integration models" Submitted and under evaluation to be published by Electronic Commerce Research and Applications (Call for Papers for the Special Issue Poverty, Technology and Microfinance).
- 4) DINIZ, Eduardo; BIROCHI, René; POZZEBON, Marlei. "Triggers and barriers to financial inclusion: a field study in an Amazon's County". Submitted and under evaluation to be published by Electronic Commerce Research and Applications (Call for Papers for the Special Issue Poverty, Technology and Microfinance).
- 5) LAVOIE, Frédéric; POZZEBON, Marlei (2010). "Conditions facilitating the replication of microcredit methodologies: an empirical investigation of a Brazilian MFI", in progress.
- 6) DINIZ, Eduardo; JAYO, Martin; POZZEBON, Marlei. "Social Innovations in the Brazilian Banking Area: Using Correspondents to Increase Microcredit Delivery", in progress.
- 7) DINIZ, Eduardo; JAYO, Martin; POZZEBON, Marlei. "ICT helping to scale up microcredit: The case of a successful bank-MFI partnership in Brazil", in progress.

Master's theses and PhD dissertations

Concluded:

- YOKOMIZO, Cesar Akira. "O papel das tecnologias de informação e comunicação na oferta de serviços financeiros para a população de baixa renda: o caso dos correspondentes bancários no Banco Lemon".
 127 f. Master's thesis aproved on the 20th March 2009 at Escola de Administração de Empresas de São Paulo FGV. Advisor: prof. Eduardo H. Diniz
- LAVOIE, Frédéric (2009). "Conditions facilitating the replication of microcredit methodologies", M.Sc., Montréal, HEC Montréal, 181 p. Advisor: Emmanuel Raufflet (co-supervision Marlei Pozzebon)
- 3) JAYO, Martin. "Correspondentes bancários como canal de distribuição de serviços financeiros: taxonomia, histórico, limites e potencialidades dos modelos de gestão de redes". 195 f. PhD dissertation aproved on March 15th 2010. Advisor: Eduardo Henrique Diniz

In progress:

- 1) MOREIRA, Alexandro. "MODELOS TECNOLÓGICOS E SUAS RESPECTIVAS
 ESTRUTURAS DE CUSTOS E RECEITAS NA OPERAÇÃO POR MEIO DE
 CORRESPONDENTES BANCÁRIOS NO BRASIL". M.Sc. thesis to be
 concluded in 2011. Advisor: prof. Eduardo Diniz.
- BIROCHI, René. "e-Learning, microfinance and social development". PhD dissertation to be concluded in 2011. Advisor: prof. Fernando Meirelles (co-supervision Marlei Pozzebon).
- 3) YOKOMIZO, Cesar Akira. "Potenciais e Desafios da Adoção da Tecnologia de Correspondentes Bancários para a Expansão do Microcrédito". PhD dissertation to be concluded in 2012. Advisor: prof. Eduardo Diniz.
- 4) FOGUEL, Flavio. "Tecnologias Sociais, Redes Sociais, P2P Lending e Desenvolvimento". PhD dissertation to be concluded in 2013. Advisor: prof. Eduardo Diniz.

7. Project Outcomes

Outcomes produced in our research work should be considered in terms of contributions for academic community, for professionals and policy makers, and to consolidate a research group focused on the important subject of ICT for financial inclusion.

7.1 Contributions for academic community

To analyze data collected in most of our field work, we first developed a conceptual framework, published as:

POZZEBON, Marlei; DINIZ, Eduardo & JAYO, Martin (2009). "Chapter II: Adapting the Structurationist View of Technology for Studies at the Community/Societal Levels". In: Handbook of Research on Contemporary Theoretical Models in Information Systems, Editors: Dwivedi, Y.K, Lal, B., Williams, M.D., Schneberger, S.L., and Wade, M.R. Information Science Reference, IGI Global, Hershey, PA, USA. Pp 18-33.

The framework has proved as useful tool to help us understand the consolidation process of correspondent network in Brazil, particularly as an instrument for financial inclusion. This conceptual framework is based on three levels of analysis: first is the identification of the social relevant groups involved and their respective technological frame and business perspective; second is to understand the interaction and negotiation process among all the groups involved; third is the analysis of outcomes resulting from this negotiation process.

These three levels of analysis are not necessarily taken in one single specific sequence and can start from the analysis of the outcomes, for example. The most important aspect of this conceptual framework, however, is that it allows understanding implementation of such a complex network involving many social groups with different points of view and interests interacting to produce an effective outcome. Outcomes considered can be a portfolio of services, a specific technological set, a business arrangement, and so on.

After using this framework in a number of research analyses along the two years of our project, we truly believe that besides being quite useful in our own

research, this very same framework can help other academic researchers to develop consistent evaluation on different kinds of complex technological process involving a number of social actors or groups of actors. A significant number of papers we have published (listed in the previous item) show different approaches on how this framework can be applied.

Social relevant groups involved in the correspondent network

Another academic contribution driven from the use of our conceptual framework is the identification of the most relevant social groups involved in the correspondent network. This is important because establishes the starting point for future studies on the use of ICT for financial inclusion and sets a preliminary focus of observation on how this groups act based on their own interests to implement such kind of network.

Studying the Brazilian case, we found out that are five main relevant social groups interacting to build a correspondent network for financial inclusion: clients, correspondent points (retail stores), network integrators, banks and government. It is important to point out that these social groups are not homogeneous and they can be broken and several other sub-groups. Clients can be organized in sub-groups depending on services used or regions where they live; correspondent points can be organized in sub-groups related to main activity of the point or the fact of being part of a business chain or being an isolated retail store; network integrators differentiation is based on level of services delegation, as explained before; banks can be divided by business orientation or capital control; government can have different points of view, depending on the level of government, if they are related to a financial supervision area, a social area or even to a law creation or enforcement area.

Table 2: Motivations and constrains of correspondents for each social group

Social group	Motivations	Constrains
Clients Local access; friendly environment compared to bank branches; Correspondent Increased foot traffic to business points; income for delivering		Lack of familiarity with financial services; lack of experience with technology and electronic cards use;
		Risk related to cash management;

points	financial services; partnership with banks;	lack of management skills;	
Network Integrators	New business opportunities; income for delivering financial services; partnership with banks;	Risk related to fraud at the correspondent point; investment to prospect point and operate network;	
Banks	Access to new clients; low cost of operations; channel for bill payment collection; source of positive information from good payers;	Risk related to fraud at the correspondent point; lack of expertise with services for low income clients;	
Government	Primary channel to deliver government benefits and to expand banking services access;	Managerial and technological instability of correspondent points, mainly in remote areas;	

In two years of research, we could identify the main motivations and restrictions (summarized in table 2) to incentive the correspondent as a financial channel for the poor, considering opinions of these five relevant social group related to the expansion of the correspondent networks in Brazil.

Despite the heterogeneous characteristics of those groups, the list of motivations and constrains will not differ much from the presented in table 4. Nevertheless, many other points – pros and cons the expansion of services through correspondents – can emerge when analyzing different sub-groups.

There are other social groups, as bank workers unions, for example, but from the research work we have been conducting so far, they haven't proved as important to impose any directions to the process of constituting the Brazilian network of correspondents. On the other hand, since the network of correspondents have been growing consistently in the last ten years at annual rates of up to 30%, this means that benefits for major social groups involved can be considered significantly positive.

7.2 Contributions for knowledge on Brazilian correspondent model

In our research we have added some new knowledge on the Brazilian correspondent model and its potential for microfinance. This knowledge can be useful for academic and practical aims, and might have significance for policy makers and practitioners involved with the financial inclusion business.

Research work developed by our team has raised contributions that can be summarized in three dimensions:

- 1) Managerial business models
 - a. Models of integration between correspondent and microfinance
 - b. Models of correspondent network integration
- 2) Public policy
 - a. Cash transfer policies and correspondent network
 - b. Policy design for implementation and transferability
- 3) Implications for development
 - a. Implications of correspondents at local level
 - b. Indicators to measure social performance of correspondents

Managerial business models dimension

a. Models of integration between correspondent and microfinance

We investigated how the correspondent model contributed to deliver microfinance services by the analysis of seven cases7 concerning correspondent networks as a channel for microfinance delivering. The analysis of the seven cases allowed us to notice that, no matter the bank's size, source of control or strategic orientation, what makes the biggest difference for considering the integration between a correspondent network and microfinance operations is, in first place, the presence or not of a microfinance institution (MFI). Even when a MFI is dealing with the microfinance operations for the bank, the nature of the partnership between bank and MFI plays a significant role to explore the integration of the correspondent network and microfinance.

It was also noticeable that as more independent is the MFI from the bank's strategy, the most it assumes control on the microcredit methodology and responsibility for risk involved. In the same way, for MFIs under some kind of control by the bank, the risk and methodology is also assumed as part of the bank's job. When no MFI is involved, the bank relies more on its correspondent network to deal with its

⁷ The seven cases studied represent the major banks involved with microfinance and correspondent networks in Brazil.

microfinance operations and, of course, assumes all responsibility for risk and methodology.

In sum, two critical dimensions have allowed us to classify different models of integration between correspondent networks and microfinance: (1) the presence and nature of a MFI in the arrangement of microcredit-CB integration and (2) who assumes the responsibility for risk and methodology of microcredit operations. The seven cases studied were classified according to these two criteria and the final result is taxonomy of three different business models that encompass all the microfinance-correspondent integration models structured by Brazilian banks (table 1).

Table 1 – Three models of microfinance-correspondent integration

Model	Description and examples	Dimension 1	Dimension 2
Model 1 Direct	Bank without MFI Bank 1 and Bank 2.	The bank provides its financial services directly, i.e., without the intermediation of a dedicated MFI.	The bank assumes responsibility for risk and methodology.
Model 2 Integrated	Bank with high degree of control over the MFI Bank 3, Bank 4 and Bank 5.	Microfinance operations are provided by an appointed MFI that operates as a bank intermediate (MFI can be a bank subsidiary or an external partner).	The bank assumes responsibility for risk and methodology (this later is however provided by the MFI).
Model 3 Partnership	Bank-MFI partnership Bank 6 and Bank 7.	The presence of the bank in the micro financial segment is intermediated by MFIs that operate as bank correspondents.	The MFI assumes responsibility for risk and methodology.

b. Models of correspondent network integration

We look for understanding on the different correspondent network integration models practiced in Brazil. We identified eight different types of activities or services

as part of operational management of correspondent networks grouped into two major groups related to categories of management for correspondents' networks. Those activities and categories are presented in Table 2 below:

We also investigated a number of cases of correspondent networks to find out when those activities are performed internally by a bank and when they are delegated to third parties. We was also found that delegation, when it occurs, involves one or the other entire category, i.e. banks usually delegate to a third party the full group of activities related to negotiation, and/or the full group of activities related to technical and logistic operations.

Table 2: Activities and respective categories associated to correspondent network integration management

Category	Activity	Description
Negotiation	Prospection	searching and selection of retail stores or other
activities		non-bank agents able to become correspondent
	Hiring	hiring selected points to be correspondents as well
		as subsequent disqualification of the store as a
		correspondent bank.
	Risk and cash	Responsibilities related to risk of losses at the
	management	correspondent level (fraud, theft, etc)
Technical	Installation	Installation and set up procedures in hired stores of
and		the technical infrastructure needed for
logistics		correspondent operation. Includes both software
activities		and hardware installation
	Training	Training people that will operate correspondent
		systems at stores. Includes both technical (systems
		functionalities) and business (characteristics of
		financial products and services) training.
	Help-desk	Remote assistance to retail stores through PBX, to
		solve problems related to systems operation
	Technical	Repairing and replacement of malfunctioning
	Support	equipments
	Material	Provision of supplies and consumables such as
	Supply	tapes and paper print

Given this, different models of network management could be identified based on two criteria: (1) a bank delegating (or not) negotiation activities; and (2) a bank delegating (or not) technical and logistics activities.

The resulting taxonomy is summarized in Table 3 and it includes six different integration network management models, grouped into three classes according to the level of delegation, from a bank to a third party (network integrators), of the two categories of activities (negotiation and technical-logistic).

Table 3: Activities and respective categories associated to correspondent network integration management

Class	Class description	Model	Model description
1.Full Delegation	Both categories of activities (negotiation and technical & logistic) are outsourced to an integrator	1.1 Outsourced integrator subrogates contract	Bank hires thirdparty integrator as correspondent, and the outsourced manager hires independent retailers under sub-agency contract
	Outsourced integrators have greater participation and influence on channel operation Tends to be more frequent at less banked areas (especially 1.1) Outsourced integrator bears risks of non-transfer of net balances collected by agents	1.2 Outsourced integrator operates own points	Bank hires thirdparty integrator as correspondent, and the outsourced integrators operate own points of services, mostly inside big retail stores
Delegation performed technical activities of integrator payment r (VAN) Tends to be in areas al traditiona (branches Bank bear transfer of	Negotiation services performed by bank, technical & logistics activities outsourced to an integrator (in this case, a payment network acquirer (VAN)	2.1 VAN without prospection	Bank prospects and hires individual retailers, usually through its regular branches, that suggest potential correspondents among their corporate clients. VAN is hired to provide needed infrastructure to capture transactions.
	Tends to be more frequent in areas already served by traditionalional channels (branches) Bank bears risks of nontransfer of net balances collected by agents	2.2 VAN with prospection	Bank prospects and hires individual retailers from a list of stores already served have by a VAN network that capture transactions.
Delegation network outsou Models prevale first years of the	Arrangement not involving network outsourcing Models prevalent in the first years of the	3.1 Proprietary network	Bank take advantage of its pre- existing infrastructure by delivering services though a network already in operation
	correspondent channel CBs (before 2003)	3.2 Direct management	Bank assumes all activities related to integration services, negotial and technical- logistics.

Public policy dimension

a. Articulation between cash transfer policies and correspondent network

Programs of cash transfer, such as "bolsa família" in Brazil, have grown in importance around the world and are being proved as very important for fighting against extreme poverty. A very important aspect of such programs is the delivery process of the government benefit. Since "bolsa escola", the governmental program that preceded "bolsa família" as the main Brazilian program directed to support the poorest, it was clear that the benefit must be paid close to where the beneficiaries have residence. Actually, it was the creation of "bolsa escola" in 2000 that forced Caixa Econômica Federal, the public bank responsible for deliver the benefit, to develop the Brazilian correspondent model, first integrating the lottery network and later expanding the same infrastructure to other kinds of retail shops.

It is important to emphasize that besides being one of the drivers for the creation of correspondent model in Brazil, the program of cash transfer is also dependent of a pervasive delivering network. In Brazil, some 80% of "bolsa família" is delivered through the correspondent network, revealing the relevance of that infrastructure for the very success of the program. On the other hand, some of the major problems of the program are also related to operational deficiencies of the correspondent network. Officers from the Ministry of Social Development in Brazil have reported to members of our research team that the locations that are more difficult to deliver the benefit are also the same ones where the correspondent infrastructure is deficient or unstable.

Three main problems have been associated with the inefficiency of correspondents in those cases: cash management, when the beneficiaries came to the correspondent point to make their withdrawals and there is no cash available; technological instability, when the network is off because of technical problems either related to telecommunications or terminal failure; mismanagement problems, when the business point where the correspondent is settled fail in its contractual obligations with the bank or integrator and the network is turned off or blocked and the beneficiaries cannot have access to cash out operations.

As the Brazilian "bolsa família" has been considered to be adopted in many other developing countries, it is important to consider the adoption of a delivering infrastructure such as the correspondent network as being intrinsically part of the program. Meaning that the success of any cash transfer program is related to the

delivery of benefits close to where the poorest people live. Since the total amount of money delivered in each operation is necessary low, the transaction cost for such operations must be justifiable with an infrastructure as efficient and pervasive as the correspondent network. Also the problems related above must be adequately addressed to minimize failures risk for the entire program.

b. Policy design for implementation and model transferability

Since the matter of ICT use for financial inclusion has worldwide interest, and considering that Brazil is leader in use of the correspondent model (see table 4) in developing countries, one of the objectives of our research work is to identify elements for transferability of the model we have investigated to other regions.

Table 4: Number of correspondent points in selected countries

Country	# of correspondents		
Brazil	150,000		
India	25,000		
Kenya	20,000		
Philippines	20,000		
Tanzania	10,000		
Pakistan	7,200		
Peru	6,800		
Colombia	5,909		
Ghana	1,200		

Source: CGAP

Implementation strategy should take in account a number of factors. However, to set up and expand a wide spread correspondent network seems to be one of the first tasks to be overcome. Independently of the diversity of services that can possibly

be offered through this type of channel, since it depends of a combination of diversified interests of the social relevant groups involved, it makes some sense to think about a limited range of services as a strategy to first build up the network, and let the expansion of portfolio of services to a second stage.

In the Brazilian case, the network of correspondent was first set to attend only two kinds of services: payment of government benefits and bill collection. Since these two services met the interests of the five main social relevant groups involved in the process of settling down a significant network of correspondent points, the Brazilian network could expand very quickly right in the beginning. From 2000, when the model was first regulated for operations, to 2003, all municipalities could be covered in the country and the number of correspondent points more than doubled the number of regular bank branches.

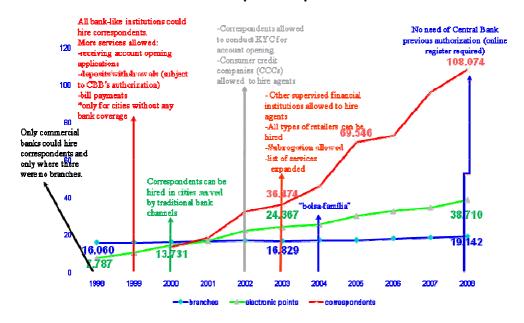


Chart 1: Evolution of correspondent points in Brazil

As shown in chart 1, only in 2002, when the network was already significantly important to the financial system as a whole, regulation has changed to allow bank accounts to be open from a correspondent point. And only in 2003, after new round of regulation changes, MFIs could join the network and the subrogation clause was included, allowing a major re-organization of the network integrators business. As we started our investigative work in 2006 (receiving IDRC support in 2008), we could tell

that story based on interviews and data collection from governmental documents. Our first research question posing an investigative point on how the correspondent network could deliver microfinance services (mainly microcredit) would only make sense after an extensive network infrastructure has been built.

Transferability of such model is not an easy matter, though. Our empirical research on the transferability of different models allowed us to produce not only academic knowledge, but also a number of suggestions and guidelines for practitioners (the reports sent to practitioners are available in our web site). After producing a first work on the transferability of Crediamigo, we applied a same logic on the replication of Palmas model in São Paulo. We learnt that there are core features of a given model that should be preserved during the implementation in a new setting, and that there is a set of contextual, cultural-related features, that should vary from one context to another and to which managers and practitioners should pay particular attention. All these concrete results are reported in our publications about transferability.

Implications for development dimension

a. Implications of correspondents at local level

Results of our field studies suggest that financial inclusion through correspondents' process positively contributes to local socio-economic development however, at the same time, presents some clear negative signs as: low-income population over indebtedness, reproduction of social exclusion practices and power asymmetries reinforcement.

Although access to financial resources is a fundamental way to promote local development to low-income population, we have identified tension between social groups at the local and non-local spheres. For the non-local groups (mainly federal government and big retail banks) point of view, signs of economic growth can be clearly seen in poor and remote locations where correspondents were introduced, based on perceptions of the positive impact to the local economy due to the fact that money circulates locally.

For local groups, however, there are contradictory visions. While local government, local retail stores and part of the local population (mostly the wealthiest) share the same positive view of the non-local groups, significant part of the local

population (mostly the poorest and new financially included) suffers the risk of mismanagement of personal bank accounts and the dangerous over indebtness scenario.

As beneficiaries of some of the government social support can be enrolled in the offer of pay roll loans, most of the new financially included population accept the offer in order to have access to more expensive consumer goods, without understand clearly the compromise of this enrollment to their income.

Non-adequacy of financial products offered through correspondents to the local population was also reported. High bank fees and low level of more elaborate financial products (such as insurance and savings) was identified as problems by local groups. Indeed, whereas some services are perceived as unnecessary (e.g., insurance products), others are avoided due to a lack of capital, collateral or trust in the bank (e.g., savings).

Such findings bring valuable and original contribution for both policymakers and researchers concerning the implementation and evaluation of public policies to foster social development. To overcome the tensions and restrictions related to the people's high indebtedness and the lack of information, we think that some sort of educational action will be needed to comprehend necessities of the local actors and characteristics of financial services. It is important to notice that all effort for financial inclusion should be taken together with some kind of financial education process.

To overcome the tensions and restrictions related to inadequacy of services offered at the correspondent level, we think that a set of actions will be needed, aiming to better serve local actors' interests through a new articulation between the non-local and local spheres. These actions must maximize the potential of the local actors' productive characteristics and go beyond the sole promotion of consumption.

Economic growth provided by the correspondent network is desirable but will attend only part of the population, unless financial access is accompanied by financial education in order to build sustainable social development.

b. Indicators to measure social performance of correspondents

Indicators on the correspondent network currently available refer usually to three dimensions: channel extension, geographical outreach and transaction volumes.

According to those available indicators, Brazilian correspondents are usually seen as a successful microfinance instrument. Even if they are still used mostly to deliver a limited range of services – bill payments alone is responsible for more than 50% of all transactions of the correspondent network – they have made bank presence available in large scale at low-income locations underserved by most basic bank services.

If there are clear signs of the economic relevance of the correspondent network in Brazil, we still lack a range of indicators that can measure its social, environmental and economic performance for the different social groups involved. The three groups of indicators mentioned clearly represent dimensions related to the point of view of banking organizations, such as the banker's federation and the Central Bank. They are largely used mainly because other groups involved in the correspondent business have not proposed different ones yet. To consider clients' and retailers' point of view, for example, new dimensions of evaluation would be necessary, as well as social performance from the point of view of low income clients and small retailers involved in the correspondent network arrangements.

Based on those assumptions, our research group has worked to develop a new set of indicators aiming to contribute to understand the social relevance of the correspondents. On that perspective, we have developed a new set of indicators covering economic, social and environmental performance of the correspondent network from around 20 dimensions other than the three previously mentioned. Since this work is still in the theoretical phase, we have not tested those indicators in the field yet. Only after testing the list of new indicators we have created they can be said as approved for being used operationally.

Once those new indicators are proved to be useful, the success of correspondents from a social performance point of view will be measured and it will be possible to know if the channel implies positive influence on clients' incomes, living conditions, and poverty reduction.

7.3 Consolidation of the research group

Another important aspect that can be pointed as one of the outcomes of our research project is the consolidation of research group. Such a research group

recognized by both academic community and by policy makers and practitioners in the area, besides producing new theoretical knowledge can also disseminate consistently its main findings, being listened by all relevant groups involved and effectively contributing to evolution of the model and its possible replication in other regions.

After the two years of the project we could consolidate ourselves as a very productive group that can bring contributions to the field. The long list of outputs listed on item 6 of this report show how productive we were both in the academic front and for practitioners and policy makers, either in Brazil and in other countries. As well as participating in academic conferences, practitioners' seminars and forums, it became possible for us to initiate new conversations with people and institutions interested in the subject of correspondents as a microfinance channel. Although some of those conversations are still at a preliminary stage, it is possible to mention them as potentially relevant for what we intended to do next, in accordance with the goals of our research project. Some important partners we are already in discussion to evolve the work we have been done so far are:

Banco Palmas – since it became one of our case studies in the first stage of our research, we have been in contact with this very innovative institution in a quite often basis. Recently we decided to partner in promoting the Seminar "Community Banks and Inclusive Finance", as a matter of starting for other ventures related to the subject of our project;

CGAP – this World Bank related organization has been in touch with our team since two years ago, when we first started disseminating our research results. Besides invitations to present our work in a number of occasions (in India, Colombia, Mexico and Brazil), last year we developed a joint research program, which results are available at:

http://www.microfinancegateway.org/gm/document-1.9.43583/agent-networks-in-brazil-cgap-fgv1.pdf)

Banco Central do Brasil – we have been in close discussions with officers from this institution since the beginning of our work, participating or being invited to speak on their meetings dedicated to microfinance. Recently we have kept close contact with staff of the financial inclusion dedicated team inside this institution and we are

exchanging ideas constantly on how to create new opportunities to develop joint projects;

Febraban – we have been present at a number of technology or legal meetings and seminars dedicated to discuss the correspondent model, either as panelists or discussants;

Planet Finance – in 2009 we organize together an international seminar on ICT for inclusive finance, and also developed some joint activities related to field research on the correspondents in Brazil. We are in constant contact and will probably have new opportunities to develop some partnership;

Ministério do Desenvolvimento Social – responsible for disbursement of "bolsa família" in Brazil, officers from this ministry are in quite often contact (either in open meetings or in close conversations) with our team to discuss ways to improve processes related to correspondents operations;

We also have intense contact with a number of MFIs, banks, technology providers, governmental institutions, and NGOs interested in the Brazilian correspondent model, either in Brazil or in other countries, mostly in Latin America.

8. Overall Assessment and Recommendations

Our research project is a successful illustration of the benefits of creating partnerships between Canadian and Brazilian universities. From the one site, the Brazilian researchers contributed with their huge experience and rich knowledge of the Brazilian reality, technologies and business models. From the other side, the Canadian researchers bring their tradition in using theoretical models and methodological designs that fit each other. This combination of actionable, practical, and more theoretical knowledge was one of the most interesting elements of putting together FGV-EAESP and HEC Montreal. Likewise, the partnership allowed Brazilian students to spend some time in a Canadian academic context, and Canadian students, to carry our field work in the Brazilian territory. This was also a nice product of our partnership.

From a perspective of contributing to development, we estimate that for a new project to be financed by IDRC for the next two years, our research team could provide enormous results towards social and economic development. We deal with a subject

with a big potential. Brazil has nowadays the larger branchless banking model around the world and the potential to produce social benefits from this network are enormous. We are applying our management skills in applying information and communication platforms in order to better mobilize them from social inclusion. The previous sections described a number of practical and academic outcomes and results. We believe that the first steps were done; the foundations in terms of building a solid knowledge of the different components of microfinance in Brazil are established. The next years of our research agenda are promising. The next steps of our collaboration with IDRC should be planned in that direction.

Regarding our experience with IDRC, apart the huge volume of technical and financial reports that should be produced each six months, we learn how to work more closely with a funding agency and how to adjust our objectives and activities accordingly. We have invested a huge amount of time and effort to make this first phase of our research project a valuable project for society. We really hope that the collaboration will follow.