Evaluating Banking Agents: A Case of Brazilian Banking Correspondents

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Financial institutions play an important role in the development of any country's economy, but there is still an enormous gap between supply and demand of financial services that meet the needs of the poor. Hence, it is important to analyze the role of the traditional financial system in the expansion of proper financial services, and their accessibility to the poor. Within inclusive finance, the most promising topic seems to be branchless banking. One major example of branchless banking is the case of banking correspondents (BC) in Brazil. In order to deepen the comprehension of the subject, this article will present a case of a banking correspondent performance evaluation. This analysis will present results concerning BC sustainability and social welfare impacts of its presence in the community.

JEL Classifications: E50, O17

Keywords: Banking agents, banking correspondents, microfinance, sustainability, performance evaluation

INTRODUCTION

Microfinance is a potential tool to alleviate poverty, encompassing a range of financial services such as credit, savings, insurance, and mortgages (Duvendack et al., 2011). Due to the enormous gap between supply and demand of financial services to meet the needs of the poor, it is important to analyze the role of the traditional financial system in the expansion of proper financial services and their accessibility to the poor. Financial institutions play an important role in the development of any country's economy (Khattak, Rehman, Ullah, K, & Ullah, M., 2013). Microfinance institutions (MFIs) alone are not able to fill the void. Hence, many experts call for the need of reviewing the position of "mainstreaming microfinance" (Khavul, 2010). The process of integrating microfinance practices into the financial system has been a challenging task and there is a growing field of research focusing on new business models and arrangements that would become part of an inclusive financial system.

Within inclusive finance, one of the most promising topics seems to be branchless banking, which is an effective way of combining the already existing banking technology with local information and proximity that, in turn, are factors directly connected with the practices of MFIs. One major example of branchless banking is the case of banking correspondents (BC) in Brazil. Also called banking agents, BCs are retail agents that have made partnerships with commercial banks, delivering services on behalf of the latter (Diniz, Jayo, & Christopoulos, 2009). Fostered by regulation changes headed by the Brazilian Central Bank, since the year 2000 commercial banks have been allowed to hire partners to increase the distribution of financial services in areas poorly attended or even non-attended by the bank branch network. The banking correspondents (BC) network has jumped from some 14,000 in 2000 to more than 150,000 in 2011 (Banco Central do Brasil, 2011).

A range of publications about BCs have been produced in the last decade (Kumar, 2005; Ivatury, 2006; Kumar, Nair, Parsons, & Urdapilleta, 2006; Diniz, 2007; Mas & Siedek, 2007; Diniz, Pozzebon, & Jayo, 2008; Ivatury & Mas, 2008; Soares & de Melo-Sobrinho, 2008). According to Diniz et al. (2009), there are different business models that combine BC and microfinance in Brazil. However, little has been published about how to evaluate the performance of Banking Correspondents emerging in developing countries (Christopoulos & Marques, 2013). In order to deepen the comprehension of the subject, this article will present a case of banking correspondents' performance evaluation, improving a methodology previously applied by Christopoulos & Marques (2013), by adding a quantitative analysis to it. This process may be applied to evaluate BCs in Brazil. Other countries may replicate the methodology, considering contextual conditions.

This analysis will present results concerning the life conditions of a whole community who benefits from the banking correspondent presence and also regarding the sustainability aspects of the studied BC. We aim to contribute to the understanding of new business models and arrangements at which microfinance activities of banking correspondents are supported and enhanced by the traditional banking system.

In the next section we present the literature review that includes microfinance and banking correspondents' definitions. This is followed by the research approach. Next, we present an empirical analysis of the questionnaire applied, then followed by concluding remarks.

MICROFINANCE MODELS

The lack of interest from financial institutions in serving people outside the main urban centers has contributed to the emergence of alternative forms of microfinance institutions during the last four decades. These institutions have been able to deal with problems not manageable by the traditional banking system such as the lack of collateral for potential loans, the inaccessibility of remote areas, and high level of transaction costs related to monitoring the diversity of individual projects that need credit to be materialized (Ivatury, 2006; Abbink, Irlenbusch, & Renner, 2007).

Microfinance Institutions (MFIs) had started in the mid 1970s, when "Mohammad Yunus started a pilot scheme lending small amounts of money to women in Bangladesh who had no access to conventional loans due to the lack of collateral" (Abbink et al., 2007, p. 614). Since then, distinct models of MFIs have emerged either at national or regional level in developing countries.

Moreover, MFIs usually are associated with non-governmental organizations (NGOs), credit cooperatives, and government agencies with developmental and assistential objectives. In contrast, traditional banks are more concerned with the financial result, requiring that the operations offered to the low-income population be financially sustainable and that offer consistent investment returns (Yokomizo, Diniz, & Christopoulos, 2010).

In order to serve the "unbanked" people, other hybrid models have emerged in developing countries. For instance, some MFIs have initiated a transformation into privately owned models. This transformation was initiated by those institutions that have achieved a certain level of efficiency in terms of cost and scale (Schmidt, 2010). Examples of that hibridization are from Compartamos (México), PRODEM (Bolívia), FINSOL (Hoduras), and ACLEDA (Cambodia). Compartamos has created a limited liability finance company; PRODEM established a Private Financial Fund (PFF) to absorb all its lending activities; ACLEDA was granted a commercial bank license in October 2000; and FINSOL was established as a *sociedad financiera*, by a group of private investors (Campion & White, 2001).

In Brazil, this hybrid model was created by commercial banks, which aware of the potential of the low-income population as a potential market, since the 1970s has invested intensively in the creation of the banking correspondents channel. Banking correspondents in Brazil are non-banking institutions, such as bakeries, drugstores, supermarkets, gas stations, stores, and retailers in general that are paid a comission in order to offer financial services on behalf of the financial institutions. Taking into account the Brazilian context, the main difference between traditional MFI models and hybrid models that include the correspondents is that the latter is fully integrated into the mainstream financial system. The consequences are two-folded. First, correspondents are contracted by regulated banks that, in turn, are liable for the operations and any of its downside consequences on the clients. Potentially, from the point of view of the consumer (client), there is more protection when using correspondents than when using (non-regulated) MFIs. Second, as part of the financial system, BCs use the technological tools that may be not available to MFIs due to costs and/or lack of scale (traditional POS terminals or PCs, connected to the banks' transaction processing systems through already existing transmission technologies).

This hybrid model has succeded in terms of coverage. In 2000, almost a third of the Brazilian municipalities had no access to financial services. By 2003, due to the rapid expansion of correspondents, the access was virtually universal and all municipalities (5,560) were served by at least one bank point of service (Diniz et al., 2009). Adjustments on the regulation mainly aimed at expanding social transfers (Bolsa Escola) enabled Caixa Economica (Federal government savings and loans institution) to use their interconnection with the network of lottery shops to make cash transfers in remote areas, where the (poor) recipients of social transfers lived. At the same time, taking advantage of the same regulation, collecting (arrecadadoras) networks from the Northeast, which is traditionally the region with the lowest coverage of banking services, integrated themselves to traditional banks via ATMs systems, turning pharmacies, small markets, and other retail outlets as points of banking service access. As a consequence, in 2003, there was no town in Brazil without access to financial services (Jayo & Diniz, 2013).

There is evidence that BCs are predominantly concentrated in transactions involving bills collection and social benefits transfers. There is room for diversification in the supply of financial services to the poor. The main reason that supports the potential for expansion is the fact that the correspondent is a channel that operates “where the poor are.” It is a concrete example of the finance of proximity (Magalhaes & Junqueira, 2007). Crucial to this expansion and capillarity was the availability of technology, such as POS (Point of Sale computer terminal), Internet, GPRS (General Packet Radio Service), and PCs.

During the last decade, the branchless banking model has encompassed also the mobile model, based on mobile phones as platforms to operationalize the provision of financial services to unbanked people. However, there are still a number of issues which prevent this population from meaningfully adopting and using the existing services (Medhi, Ratan, & Toyama, 2009; Kimenyi & Songwe, 2012).

It is important to point out that microfinance models have arisen in distinct realities, which enhanced the controversy about effectiveness and even potential adverse effects of microfinance, such as over indebtedness (Hulme, 2007) and credit misuse (Kumar, 2010). The various means of tackling the demand for microfinance services are heavily influenced by the social and cultural representations that operate in different political and socio-economic contexts. As a consequence, the creation of indicators related to microfinance activities is challenging and there is no a one-size-fits-all model (Roodman, 2012) in terms of how MFIs or BCs may affect the welfare of borrowers.

Considering the aforementioned aspects, the methodological approach selected for evaluating the case in this study followed a bottom-up approach and considered the participation of all interested in the subject, integrating them in a process of empowerment, since the different parties were allowed to develop specific indicators related to the local environment (Fraser, Dougill, Mabee, Reed, & McAlpine, 2006). A s a result, not only the individuals from the community may be engaged in the process of indicators development—ensuring that locally important factors are considered in the evaluation (Chambers, 1994a, 1994b) —but also all those interested in the subject.

METHODOLOGICAL APPROACH

The methodological approach is comprised of two sequential phases, namely, the creation of microfinance indicators in a bottom-up manner and an empirical validation based on questionnaires application. The use of the bottom-up approach was based on Chamaret, O’Connor, and Récoché (2007) already applied by other authors interested in the microfinance subject, such as Christopoulos and Marques (2013). The bottom-up approach implies participation and empowerment of all involved actors, appropriate to capture the dynamics the situation in this case, where multiple actors and interests are at stake (Lavoie, Pozzebon, & Gonzalez, 2011). In this fashion, we conducted a case study in a MFI (which is formally organized, as mentioned before, as a community bank but, for the sake of this article, will be called simply MFI) located in a vulnerable neighborhood comprised by 800 families in Brazil. In addition, the MFI is a banking correspondent. In other words, there is a Banking Correspondent that operates inside the MFI (formally the banking correspondent “is” the MFI) supplying financial services in behalf of a commercial bank in Brazil. This is one of the main motivations of this work since the MFI is, to a certain extent, integrated to the traditional financial system.

Chamaret et al. (2007) proposed a bottom-up approach divided in four distinct steps for the creation of indicators. We followed this methodology and, differently from earlier applications of that, we added a fifth phase to

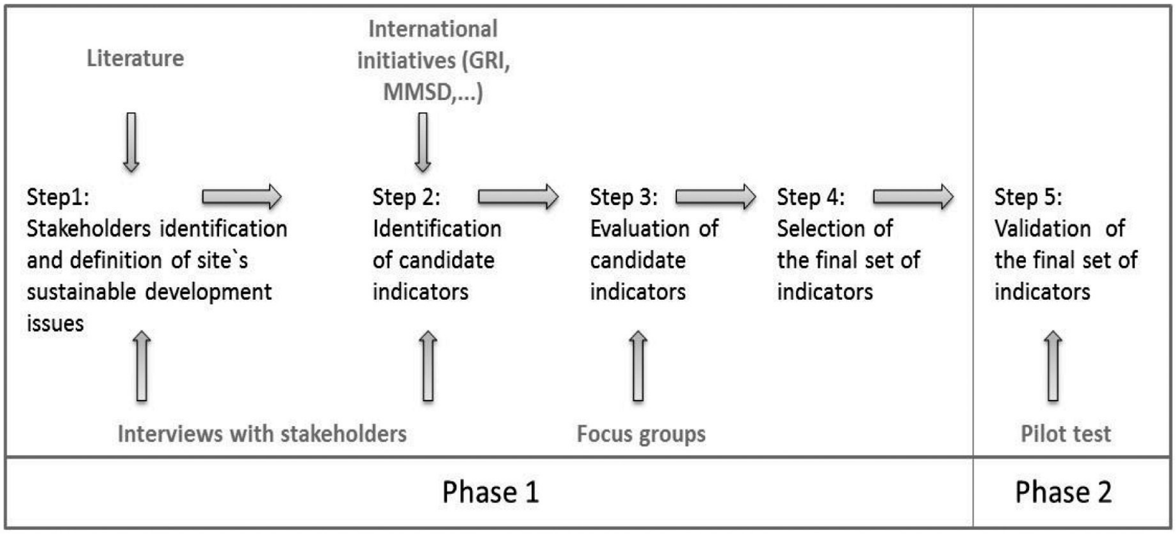

Figure 1. **The five steps of the process. Adapted from Chamaret et al. (2007).**

it (Figure 1) in order to validate the qualitative results and follow to a quantitative analysis. This is the first step of our methodological approach.

In the first step, those that influence or are under influence of the implemented policy were classified in units of analysis: internal actors, external actors, amplified external actors and the external agent, following Chamaret et al. (2007). Internal actors were those whose interests were related directly to the implemented actions (members from the community where the BC is installed, including BC workers). External actors were those who established a commercial relationship with internal actors (the commercial bank). Amplified external actors were partners of internal actors during the policy implementation (University members who helped to implement the community bank processes and activities), and finally, the last category was the coordinator authority (the government department that provided resources for the bank implementation).

During the second step, the indicators were identified based on previous bibliographical research, regarding MFIs assessment models. In this research, data from the World Bank (Prennushi, Rubio, & Subbarao, 2002; Hashemi, Foose, & Samer, 2007) and Grameen Bank lists of indicators (Yunus, n.d.) were used. Then, these indicators were presented and suggested to the four groups of actors already selected, who should approve them or suggest others. These indicators approached a range of themes, such as employment in the community, access to credit, income increasing, and others related to life improvements.

During the third step, the selected indicators were evaluated, considering their relevance for the community. All actors were organized in smaller groups in order to participate in a focus group dynamics and selected five indicators (maximum) from each key category. On the fourth and last step proposed by Chamaret et al. (2007), a final set of indicators were selected for further validation (Table 1). This table summarizes the final set of categories and variables that will be empirically validated in the next step where we aim at verifying if the indicators capture the reality of the chosen community. The final indicators followed some principles that originated from consensus and encompass the biggest range of questions previously discussed.

Table 1

Categories of Demands, Indicators and Questions

Category	Indicators	Questions
Scope: measures if clients are being served by the MFI services	• Number of clients served (men and women).	1. "What is the number of clients served? Men and Women"
	• Number of new bank accounts opened per month (men and women).	2. "What is the number of new accounts opened per month?
	• Number of beneficiaries of microcredit policy.	3. What is the number of loans made per month?"
Financial Sustainability: measures whether the commercial bank is contributing to maintain **the financial sustainability of the MFI.**	• Volume of payments in arrears.	4. "What is the balance of loans made and the number of loans that are at least 30 days late?
	• Remuneration MFI (Banking Correspondent inside Community bank) receives.	5. "What is the average revenue of the correspondent bank (total)?" 6. "What is the total amount in collected in fees by the banking correspondent per month?"
	• Total costs of MFI (BC inside the Community bank).	7. What is the average monthly liability (the average cost to maintain the correspondent over the period of a month)?
	• Replicability of the MFI/ BC model.	8. "Are there other experiments that use this same methodological model of accessibility to financial services?"
Quality and relevance of services: measures whether the target market is satisfied with the services provided (variety and quality).	• Efficiency of the establishment.	9. How do you evaluate the establishment you use to access financial services? BC, Lottery, Bank, and Other (1 being the worst and 10 the best rating)" 10. Do you suggest improvements regarding to line reduction and security issues?"
	• How many community households use the financial services available at MFI.	11. "What establishment do you use most frequently in order to access financial services? (Number from 1 to 4, with 1 being the most utilized)"
	• Increase in the volume and variety of access to financial products and services.	12. What are the BC services that you use?
	• Access to loans and its impacts.	13. "Have you taken out a loan? How much was it worth?" 14. "Do you owe any money?"
	• Increase in the volume of lending in social currency	15. Have you already gotten a loan in social currency? How much?

Table 1 continued...

Category	Indicators	Questions
Transparence in provision of services: measures the ability to explain to agents and target market what the services are offered, how they work, how the costs are calculated.	• Awareness of banking correspondents nearby the community.	16. "Do you know what banking correspondents are in the region (have you been there or heard about)?"
	• Training to manage money, savings and indebtedness.	17. "Is there any institutionalized initiative or related program that explains how to manage your money, savings, and the consequences of indebtedness for the clients?"
	• Ability to discern what are the services offered by BCs.	18. "Which are the services offered by the banking correspondent?"
Income and employment generation: measures how much the MFI presence has contributed to local income and employment.	• Retailers that accept payment in social currency.	19. "Do you know how many shops accept social currency in the region?"
	• Increasing in local employment rates through local cooperatives.	20. "Do you know if there are cooperatives in the region? How many?"
	• Increasing in the variety of products consumed in the region.	21. "What types of products/services do you usually consume in the region?"
	• Increasing in the employment rate in the region.	22. "Was there an increase in employment rate in the region after the BC implementation? How many new jobs were created?"
Social welfare: measures whether households have increasing access to health services.	• Increase in the community education level.	23. "What is your level of education?"
	• Volume of medicine bought by community members.	24. "Do you have access to health services and medicines?"
Depth of outreach: measures whether the services are reaching the poorest of the poor.	• Increase in the households' income.	25. "What is your average income?"
	• Increase in the average amount of savings.	26. "What is your average amount of savings?"
	• Increase in the individual value of lending.	27. "What is the average value of loans you take?"
	• Increase in the individual amount of received Social benefits.	28. Do you collect your benefits at the community bank? What is the average of benefits that you receive (value)?
	• Reduction of expenses.	29. Does the presence of BC contribute to reduce your expenses?

During the fifth step, we conducted a pilot test based on interviews with 10 households, the MFI coordinator, one bank manager, and one member from the university. As a consequence, a new protocol and provisional results were obtained from the pilot test, resulting in two questionn aires, which were submitted to a process of content validation, ensuring that the concepts of interest were comprehensively represented by the proposed questions (Terwee et al., 2007). Processes of item selection/reduction and interpretability were applied during this step. Finally, these questionnaires were applied for validation of selected indicators, as presented in the next section.

EMPIRICAL ANALYSIS SAMPLING AND DATA COLLECTION

As proposed in the beginning, this article will present a case of a banking correspondent performance evaluation. After applying the methodology proposed by Chamaret et al. (2007), in the fifth phase, we developed, tested for content validation, and applied two questionnaires to validate the indicators of Table 1. The first was entitled "Institutional," and addressed specific issues related to the scope of the studied BC, its financial sustainability and its impact on income generation, which was answered by the BC managers. The second questionnaire called "Social Welfare" focused on users and non-users of BC from 802 families, which were potentially affected by the installation and operation of the BC.

Data for the "Social Welfare" survey were collected from a random sample drawn from the total population of 802 families, with 90% confidence level. In this sense, 246 questionnaires were applied. In order to determine the sample size, 5% was estimated as the maximum error. The sample was selected based on the non-experimental design method, since it was not possible to previously define a control group for analyzing the banking correspondent impacts (Karlan & Goldberg, 2007). Hence, for carrying out the random selection of the sample, considering its geographical diversity, households were previously classified by their respective postal code and, for each code, the sample was selected proportionally to the total size sample. The population consisted of women (65.5%) with a monthly income between R$1,230.00 and R$1,520.00 (between US$639.00 and US$790.00) with a mean age of 49.5 years. In addition, 45.4% of the population received some type of social benefit, mainly retirement pensions.

Analysis

Institutional questionnaire. The perspective of managers is presented and analyzed in the following items.

Scope: For question (1), in relation to the number of users served by the BC, the data indicated that approximately 900 clients were served every month, 35.6% of them are men and 64.4% women. Monthly, 20 new accounts are opened (question 2). The average of undertaken loans per month (question 3) is two loans for productive purposes and four loans for consumer purposes, which seems too low, considering the number of BC clients.

***Financial sustainability*:** With regard to question (4), the BC extended R$2,500.00 in loans to two of the region's businesses—one of them in a single installment of R$1,000.00 and the other in three installments of R$500.00. Both loans were intended for the purchase of assets. The rate of repayment on time was 100%.

Nevertheless, answers for question (5) showed that the average revenue of the correspondent bank was no more than R$200.00 monthly. These amounts are obtained via different types of transactions. Further, the data obtained with regard to question (6) showed that with approximately 900 clients, there is an average of 2,600 transactions on a monthly basis, which are carried through the banking correspondent, thus generating an average income of about R$200.00 a month. It is necessary to explain that the BC receives a fee from the commercial bank it works in behalf of. This fee amount is different for each type of operation performed (cell phone recharging, receiving, serving, savings, loans, deposits, and opening of new accounts).

Further, question (7) shows that the operating costs of the analyzed BC, which include the salaries of two workers (R$780.00) and utilities such as water, electricity, Internet, and telephone service (R$600.00), are high, compared to the revenue earned by the banking correspondent in servicing the commercial bank. This is not enough to cover the BC operational costs.

In question (8), regarding the replication of this microfinance institution model—based on a) the use of social currencies[1], for strengthening consume and local development, and b) on banking correspondent, for strengthening access to financial services and productive microcredit in a national currency—BC managers affirm that there are 103 community banks in the country that adopt social currency and, at the same time, has a BC inside its installations, located in 19 different states.

Evaluating the performance of the analyzed BC in the light of financial sustainability indicators, it is possible to infer that BC has no debt in arrears, which is a positive effect on its performance. On the other hand, the BC has very low average revenue as regards with the number of monthly transactions, which may jeopardize its financial sustainability. However, when analyzing the sustainability of the BC model, we may see that its sustainability has been reached, through its expansion to other 103 community banks.

***Income and employment generation*:** Data collected in response to question (22) indicate that there has been an increase in the number of local businesses after the implementation of the studied BC. Seven new jobs were generated by the BC, employing neighborhood residents in local businesses. Since it was implemented, the BC provided loans in the total of R$2,500.00 for the businesses in the region, which were later invested in new assets, providing other employments, which this study are unable to measure.

Regarding generation of local income and employment, the analyzed BC presented a slightly positive performance since it contributed to the creation of new jobs and local business.

"Social Welfare" questionnaire.

The perspective of households is presented and analyzed in the following items.

Quality and relevance of services: This item is covered in the questionnaire by questions 9 to 15. Table 2 compares channels of access to financial services and their relationship with the variables related to "Quality and Relevance of Services". In its first column, the table presents the score that users attributed to their satisfaction with the channel (the answer to question (9), in its second column, the percentage of the population that prefers that channel as its first choice, and in the third the percentage of the population that uses each channel, regardless of their preference (the answer to question (11).

Table 2

Evaluation, Selection, and Usage

	Evaluation (1-10)	First Choice (%)	Usage (%)
BC	8.08	30	77
Lottery	6.90	34	92
Bank	8.01	33	92
Other	5.11	2	51

Given the data presented in the column "First Choice", one can observe that the BC is the third channel in terms of preference of use and also in terms of quantity of users. Answer to question (10) may help to justify it: in spite of the fact that the majority of users (84%) seemed satisfied with the average time they wait in lines—which is usually a big issue for commercial banks, they are very unsatisfied regarding security issues—92% of respondents answered that they think it is necessary to improve security inside the BC.

Table 2 shows that the BC has the best evaluation (8.08) of customer satisfaction. In this context, it can be also seen that the evaluation of the BC is close to the evaluation of the commercial bank's services. However, users prefer other options (Lottery shops or commercial banks) to BC (column 3). We may infer that security issue may contribute to this contradiction.

In question (12), all clients (users) revealed that they use the BC for bill payment (100%), followed by the use for cell phone recharging (62.23%). Nevertheless, answers to questions (13) showed that only a small portion of the population use loan services: about 3% of the total. On the other hand, answers to question (14) showed that a significant portion of the population (44.6%) has some form of debt. From the perspective of question (15), the result shows that 97% of people have never used the social currency, only 2% have already received social currency loans in the range of US$ 50-100 and 1% has received loans in the range of US$100-150. Thus, the use of it is not of great relevance. According to managers, some possible reasons are that, despite being accepted by 14 commercial establishments in the region, the little real demand for social currency is mainly due to a quite restricted limit of funds for social currency credit (reserves in Reais in BC, required by legal authorities), being only R$200 for consumer credit and R$1,000 in credit for productive enterprises. This in turn, influence the low demand for social currency, restricting its use to cases of emergency issues, such as households with financial impossibility of acquiring basic goods.

In summary, the performance evaluation of the analyzed BC is satisfactory regarding efficiency and variety of services provided. However, security issues affecting users' preferences for BC as a channel for accessing financial services, low access to loans in regular form or in social currency form impact negatively the BC evaluation performance in terms of "quality and relevance of services."

***Transparence in provision of services*:** Questions 16 to 18 covered this item in the questionnaire. As for question (16), the region studied has a total of four BCs and almost all of the analyzed population (90.6%) is conscious about (have been there or heard about) the existence of the BC studied.

The answers to question (17) reveal that the BC does not have any type of program for financial education, or at least not through an institutionalized initiative. Despite that fact, the studied population affirmed that they received explanations concerning management of money (67.6%), on how to save it (75.3%), and 72.3% considered the consequences of not paying a debt as important or very important. Related to question (18), households revealed to be aware that services offered by the BC are insurance, cell phone recharging, saving deposit, receipt, payment, and loans.

In spite of the fact that households do not recognize the existence of a formal program for financial education, the results suggest that they recognize the effects of another process performed by a credit agent who periodically visits the debtors and analyses how they are using the money, tracking the usage and investment of credit granted via loans, both for enterprises and individuals, through a loan officer. The results suggest a high level of awareness of households and so a positive impact in terms of evaluation performance of transparence in provision of services.

***Income and employment generation*:** This item was covered by questions 19 to 21 in the questionnaire. A relevant issue, which is perhaps central in microfinance, is approaching the context of local development, from the perspective of employment generation and income, development of new businesses, and strengthening the network of local shops. Thus, in response to question (19), the microfinance institution inside where the BC is located works in partnership with 14 shops, including markets, bakeries, grocery stores, and bars, which work with local social currency offering lines of credit for local consumption, 74.2% of households were aware of that partnership.

In response to question (20), we found the existence of a cooperative of seamstresses, which provides economic inclusion for a group of elderly women. Only 46.3% of interviewed people showed awareness of that cooperative. As for question (21), data relative to goods consumed in the neighborhood, a measure of local economic development, showed that the most relevant products are still largely consumed in other regions: 78.7% makes their purchases in stores outside the neighborhood, as local businesses offer products at non-competitive prices, with the exception of propane gas cylinders, which is consumed by 81.1% of the population. One reason for the low consumption of product sold or produced locally is the fact that only 22% of people living in the neighborhood work in the same region.

The BC performance evaluation in terms of income and employment generation seems positively impacted by the effect of cooperatives in the region that are financed by credit taken from BC. However, by analyzing the impact of the acceptance of social currency by the majority of local retailers, considering data obtained in "Quality and Relevance Services, we may conclude that it does not impact the local consumption.

Social welfare: Questions 23 and 24 in the questionnaire covered this item.

Table 3

Level of Education and Use of BC

Use BC* Escolaridade Crosstabulation

			Escolaridade							
			1	**2**	**3**	**4**	**5**	**6**	**7**	**Total**
Use BC	YES	Count	8	18	21	1	4	4	2	58
		% Within UseBC	13.8%	31.0%	36.2%	1.7%	6.9%	6.9%	3.4%	100.0%
	NO	Count	18	56	62	1	8	9	32	186
		% Within UseBC	9.7%	30.1%	33.3%	0.5%	4.3%	4.8%	17.2%	100.0%
Total		Count	26	74	83	2	12	13	34	244
		% Within UseBC	10.7%	30.3%	34.0%	0.8%	4.9%	5.3%	13.9%	100.0%

Legend columns

1 – No schooling
2 – Basic School completed
3 – High School completed
4 – Vocational
5 – Technical
6 – College
7 – Literacy course for adults

In reference to question (23), most of the population have no schooling or only a basic level of education (the sum of columns 1, 2 and 7 in line Total (Table 3), is equal to 54.9% of the population). Taking into account users and non-users of the BC, the distribution does not differ much between households with elementary (column 2 in the legend) and complete high school (3 in the legend), corroborating the inference that the use of BC has no relation with the education level.

From the perspective of question (24), access to health services occurs mostly through the use of public service, with only 24% of the users using private health services. The other 76% use public hospitals in the region, or public health clinics in the neighborhood, or both. As for the use of medication, only 26% consume the needed medication inside the community when freely available in public hospitals or clinics. The majority (74%) try to find it in other localities. These occasions also contribute for the consumption of other products outside the community.

Therefore, we cannot make inferences related to the impact of the studied BC on social welfare aspects in the community, and its performance evaluation is inconclusive at this point. Future studies should explore this point in depth.

Depth of outreach: Questions 25 to 29 addressed this issue in the questionnaire.

The horizontal axis of Table 4 (RendaFamil – family income), which answers question (25), should be read as following: 0 – the ones who did not want to answer, 1 – respondents with no income, 2 – R$ 360.00 per month, 3 – between R$ 360.00 and R$ 650.00, 4 – between R$ 650.00 and R$ 940.00, 5 - between R$ 940.00 and R$ 1,230.00, 6 – R$ 1,230.00 and R$ 1,520.00 and, 7- more than R$ 1,520.00. Table 5 results show that for households with an average income up to R$650.00, the correspondent goes mostly unused and only in higher average income levels, the majority of families use it as an access channel for financial services.

The average savings of the users is between R$3,000.00 and R$4,000.00 (question 26).

Table 4

Average Income Level and Use of BC

Use BC* RendaFamil Crosstabulation

			RendaFamil								
			0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Total**
Use BC	YES	Count	3	1	3	4	9	12	11	15	58
		% Within RendaFamil	33.3%	100.0%	75.0%	66.7%	30.0%	18.5%	15.9%	24.2%	23.6%
	NO	Count	6	0	1	2	21	53	58	47	188
		% Within RendaFamil	66.7%	0.0%	25.0%	33.3%	70.0%	81.5%	84.1	75.8%	76.4%
Total		Count	9	1	4	6	30	65	69	62	246
		% Within RendaFamil	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Answers for question (27) showed that loans made by users have an average value of $50 Apuanãs (local social currency, which has a parity of 1 to 1 to Brazilian Reais) for consumption and R$500.00 for productive endeavors. As for question (28), data showed that 23.6% of users that received some type of social benefit used the BC as the channel to receive it, and the average value of it is R$150.00. Besides, regarding question (29), the presence of a BC does not significantly alter transportation costs for the majority of BC users (i.e. the cost of reaching places where they had access to financial services), since 66.3% of them are retirees who do not pay for public transportation. However, for the other 33.7% of users, the presence of the BC brought an important reduction of expenses, since they do not have to pay R$7.00 for transportation to branch banks in other neighborhoods. Thus, the installation of the BC in the region had a direct impact on the economics of those families.

The performance evaluation of the studied BC, regarding depth or outreach presents positive results since its presence seems to impact positively, reducing expenses with public transportation for 33.7% of the population to access financial services. Other items such as volume of lending, savings, and income have not showed relation with BC presence in the region.

CONCLUSION

The purpose of this paper was to contribute to deepening understanding about how to evaluate the performance of banking correspondents' activities. Based on a bottom-up methodology, seven dimensions and 26 indicators were created (Table 1). For each of these indicators, we associated questions that were posed to a sample of residents and to the BC managers. In most cases, these questions were able to capture the context and the needs of the different actors involved.

We conclude that the proposed objective was achieved due to the use of a bottom-up approach, legitimized through the involvement of all stakeholders in financial services provided by banking correspondents. Another factor that contributed to the achievement of our objectives was the use of standard indicators already in use by other MFIs as an initial reference so that all stakeholders could select the most relevant among them, discarding those that did not fit their needs, and creating others that did not exist.

In the studied case the main aspects revealed by the indicators were that the BC is not the unique channel of access to financial services, despite being a major player in this context, serving approximately 77% of the local population.

Furthermore, on the issue of financial sustainability, this specific case of a BC does not have a positive balance, since the revenue obtained by the operations does not offer an effective means to cover the costs. Therefore, the BC cannot be understood as a financially sustainable institution. Besides this, data show no depth in the reach of the poorest, since, as shown in the results, most of the lowest income families do not use the BCs.

On the other hand, data shows that the BC has been very highly rated by its users, despite of the fact that 92% of respondents showed high concern regarding security issues.

Given these results, it can be stated that the studied BC has accomplished a relevant function as a channel of access to financial services. It has also brought positive impacts to local development, by providing credit, contributing to employment and income generation, strengthening of local network of consumption and production, even in a restricted way as pointed by the data.

We state that the proposed assessment is legitimate and appropriate in the studied context, reiterating that we do not intend to design a single model for evaluation or propose that the applied indicators be adopted in other situations.

Rather, we state that this methodology should be adapted according to local realities, including or excluding indicators according to changes proposed by public or private action (Gomes, 2001).

In this perspective, future researches may also replicate the methodology proposed here, exploring the differences between the various types of banking correspondents since some are located within community banks, yet others in facilities dedicated to retail purposes.

It is also worth noting the need for future adaptations and updates of the proposed indicator model. With its roots in an emerging economy and considered a tool for social and financial inclusion, the banking correspondent has undergone constant modifications on its mechanisms and related technologies that empower its operations. As an example, today in Brazil, we are witnessing the creation of new regulations that will transform the banking correspondent into a service provided through mobile technologies, which will require new processes and assessments to measure its effectiveness.

NOTES

[1] Social currency is a currency created by any community bank and controlled by it. This currency is not allowed to circulate outside the community where it is created. According to the Brazilian law, it is necessary the existence of reserves in real currency in the same amount of the social currency is created (Christopoulos & Marques, 2013).

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