Full Length Research Paper

Evaluation of customer satisfaction with services of a micro-finance institution: Empirical evidence from Women Association for Social and Economic Gain customers’ in Togo

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Nowadays, Microfinance industry is affected by competition leading to customers’ switching across MFIs (Microfinance Institution). Thus, MFIs are concerned about customer satisfaction and have to pay attention to understand their customers' preferences to survive in a competitive environment. Using data from 353 Women Association for Social and Economic Gain customers in Togo, this study aimed to: (1) determine the main dimensions of financial services of the microfinance institution (2) determine the customer satisfaction level and (3) assess to what extent customer satisfaction is influenced by customers’ characteristics. Using factorial analysis, customer satisfaction index and ANOVA, we found that responsiveness remains the most important dimension in microfinance sector. Results reveal that customer's branch, customer's revenue and number of services accessed by customers strongly influence customer's satisfaction. Results also indicate that the current customer satisfaction index at WAGES is equals to 71.2%.

Key words: Microfinance customers’ satisfaction dimensions, customer satisfaction Index, customer’ characteristics influence, WAGES, Togo.

INTRODUCTION

The microfinance industry is now affected by strong competition: “commercial banks have begun to target MFIs’ traditional customers, new MFIs have continued to be created in microfinance industry, the microfinance clientele is becoming more sophisticated concerning the quality of service they require or expect” (Daubert, 2002; Cohen, 2006). These factors may negatively affect the MFIs. The microfinance industry is losing customers because of both aggressive competition and MFIs’ weakness to satisfy their clients (Urguizo, 2006). This simple description shows why MFIs are concerned about customer satisfaction and retention. It also justifies why they must “pay attention to understand their customers' preferences and priorities” (IFAD, 2007) to survive in a competitive environment. The microfinance industry has been slow in becoming more “market oriented” and it seems that customer satisfaction is one of the most important tools to run a business and to achieve the mission statement (on sustainability and outreach) in this sector. In this perspective, firms must focus on customer’s satisfaction, studying and determining as soon as possible the customer satisfaction level, to adjust the product to customer needs. Indeed, customer satisfaction has great significance for the future of an institution and it is seen as a basis for securing market position and achieving other objectives of the institution.
Customer satisfaction is a subject with a lot of interest in both the marketing and finance literature. The great emphasis on customer satisfaction has given birth to multiple studies and innovative methodologies to assess and to understand customer’s behavior. Parasuraman et al. (1985, 1988) and Corin and Taylor (1992, 1994) are among the most well-known researchers who assessed customer satisfaction and quality of services using ServQual and ServPerf scale measurements. Today, those scales are used, with adaptations in the banking sector and have supported numerous studies (Pont and McQuilken, 2002; Othman and Owen, 2001). Studies which dedicated to develop or to adapt previous scale measurement for measuring customer satisfaction in microfinance are still rare. Existing studies try to measure customer satisfaction using a list of items without grouping them in structured scale (Muray, 2001; IFAD, 2007). Other studies are more general and are about market orientation in the microfinance sector (Ghani and Mahmood, 2011), marketing strategies for microfinance institutions (Brafu-Insaidoo and Ahiakpor, 2011), relational marketing and its impact of social performance (Jayashankar and Goedegebuure, 2011) and on the link between customer’s satisfaction, service quality and government support for microfinance institutions (Bushir et al., 2012).

This study fills this gap and tries to measure customer satisfaction with microfinance institution services using an adapted version of ServQual scale in the context of microfinance institutions. The objective of this study is to determine the current customer satisfaction level, to understand the main dimensions of service from the customer’s point of view and, at the end, to assess if the customer satisfaction is influenced by some characteristics of customers like: number of services obtained, the location of customer, the age, the sex (gender), the education level and number of years spent as customer in the MFI. This study focuses on customer satisfaction with respect to the services of Microfinance institutions in Togo. Information extracted from Mix Market data base (2011) and Togolese’ MFI sector Togolese’s MFI Network Report (2007) reveal that there are 167 microfinance institutions in Togo serving 736,484 depositors and 109,873 borrowers. Five Microfinance institutions are the most important according to their gross loan portfolio (USD) and the number of their active borrowers: FUCEC-TOGO (GLP=97833277, ACB=60,775), WAGES (GLP=26625253, ACB=64,710), CECA (GLP=5 308849, ACB=2575), COFCEPT (GLP=2700964, ACB=2483), UMECTO (GLP=4024523, ACB=3744). The multiplicity of financial institutions (MFIs and commercial banks), a weak diversification of products and the lack of entry barriers in the MFI sector have led to stiff competition in the sector. To survive in that context, MFIs are obliged to invest in intangible assets like customer’s satisfaction, retention and loyalty which are difficult to copy or to duplicate by competitors (Cohen et al., 2006; Chaoprasert and Elsey, 2004; Gan et al., 2006). Data have been extracted from one MFI: the Women Association and Gain for both Economic and Social (WAGES) for two reasons: (1) with eight branches located in the Togo’ biggest towns, WAGES are the second biggest MFI in Togo. (2) It was easy to access to WAGES’ office and contact customers as the author spent three months of internship in WAGES’ marketing department.

WAGES’ active borrowers and depositors constitute our population frame. A sample of 353 respondents from WAGES’ customers has been extracted using stratified and purposive sample choice. A survey was conducted in July 2009 in WAGES’ six main branches in Togo. Data processing was done using factorial analysis, Anova test and customer satisfaction Index.

This study is divided into six sections. The first section presents the introduction. The second section presents the literature review. The third section focuses on methodology and hypothesis. The fourth section presents data related to customers’ characteristics, different items constituting customer satisfaction and WAGES’ customer satisfaction with financial products. The fifth discusses results providing main dimensions of customer satisfaction, the current customer satisfaction level and assesses if customer satisfaction is related to their characteristics. The sixth section raises limitations, implications and future research from this study.

**LITERATURE REVIEW**

We define customer satisfaction and give insights on its measurement; we discuss the importance of customer satisfaction in relationship with retention and loyalty and present a short empirical literature review.

Customer satisfaction can be analyzed as a general/overall judgment that a customer makes after consuming a product or a service. Customer satisfaction is perceived as “psychological state (feeling) experienced after buying and consuming a product or service …” (Lendrevie and Lindon, 1997; Merouane, 2008/2009). Thus, customer satisfaction reflects “the pleasure level resulting from consuming a product” (Oliver 1997) leading to positive feeling (satisfaction), a negative (dissatisfaction) or indifference (neutral) feeling from consuming a product or a service (Bhattacherjee, 2001b; Swaid and Wigand, 2007). In this perspective, customer satisfaction is conceived as “the emotional state that occurs as a result of a customer’s interactions with the firm over time” (Anderson et al., 1994; Verhoef, 2003). In fact, customers are usually comparing the product received from the firm to their own expectations over time. If the product fulfills and performs to the customer’s expectations, customers will
be satisfied (Conchon et al., 2006; Parassuraman et al., 1985, 1988, 1991).

Several measurements scale have been developed for assessing customer satisfaction and service quality in the domain of goods and services. The ServQual scale is considered as the pioneer scale. Developed by Parasuraman et al. (1985, 1988), this scale attests that service quality is “a function of the difference scores or gaps between expectations and perceptions (P–E)”. "ServQual contains 22 pairs of Likert scale statements structured around five service quality dimensions in order to measure service quality (Cronin and Taylor, 1992): Reliability, Responsiveness, Assurance, Empathy and Tangibles”) (Bloemer et al., 1999). Thus, “a positive gap score implies that expectation have been met or exceeded, and a negative score implies that expectations are not being met” (Parasuraman et al., 1988; Safakli, 2007; Barnes, 2005).

The ServPerf was developed by Cronin and Taylor (1992) as an alternative measurement to compensate the deficiencies from ServQual scale mainly related to its gap scores (P–E) (Teas, 1994). The ServPerf scale suggests that “customer satisfaction with service is based only on performance rather than a gap between performance and expectations, with the performance-only scale termed SERVPERF” (Cronin and Taylor, 1992, 1994; Lowndes, 2001). SERVPERF scale is composed of the same 22 perception items included in SERVQUAL excluding any consideration of expectation (Lee et al., 2000; Buttle, 1996; Johnhson and Fornell, 1991; Gustafsson et al., 2005).

Today, ServQual and ServPerf scales are adapted from marketing to the finance sector and have led to a rapid development of alternative scale measurements. The PakServ scale is using “ServQual dimensions of tangibility, reliability and assurance but replaced the responsiveness and empathy dimensions with three new dimensions: Sincerity, formality, and personalization (Saunders, 2008). The BankServ scale adopts a ‘perception-expectation’ approach to measure service quality in the banking sector with “four main factors: staff conduct, credibility, communication, access to Teller Services” (Pont and McQuilken, 2002) for assessing customer satisfaction in the banking sector in Australia. The Carter scale includes all SERVQUAL five dimensions plus a one specific dimension to capture the compliance with Islamic law and principles (Othman and Owen, 2001; Alhemoud, 2010).

The big interest attached to the development of customer satisfaction’ scale measurements are partially explained by the advantages that satisfied customers can bring to a firm in terms of loyalty and retention. Financial and marketing studies have supposed that satisfied customers constitute an important asset of firm. Previous studies (Anderson et al., 1993; Reichheld, 1996; Verhoef, 2003; Anderson, 1996; Gruca and Rego, 2005) have confirmed that customer satisfaction enhance both customer loyalty and retention through repeated purchases, less price sensitivity and costs reduction. Satisfied customers are also expected to be “less likely to defect to competing products as a result of lower prices” (Fornell et al., 1996; Korauš, 2002; Anderson et al., 2004). For this reason, “greater customer satisfaction may enable a firm to charge higher prices or at least to better resist downward pressure on prices” (Anderson, 1996; Narayandas, 1998). Customer satisfaction will also exert a positive impact on a firm’s costs through retention. In fact, “with client retention, institutional costs decrease as the institution needs to do less marketing, less new client orientation, and fewer new client background checks, staff productivity increases because loan officers work with established clients whom they know well, clients income increases as loan sizes generally increase with experienced clients” (Waterfield, 2008; Korauš, 2002).

Studies that investigate customer satisfaction in Microfinance using structured scale measurements are still rare. IFAD (2007) studied customer satisfaction in rural microfinance institutions in Uganda, Kenya and Tanzania. Combining qualitative (14 focus group of 71 clients) and quantitative approaches (209 interviews), the study assessed the determinants of customer satisfaction for rural customers accessing both credit and savings facilities. Results revealed that “customers prefer unlimited access to their savings while on credit facilities, customers want to have access to loan amounts they actually apply for at a ‘reasonable’ price and on flexible repayment conditions”. The study also suggested that surveyed customers were all satisfied exhibiting a Customer Satisfaction Index of 81%. The study concluded that “financial services should be delivered by courteous stafs that preferably are not being ‘changed /swapped”. Murray (2001) concentrated his study on customer satisfaction levels using data from four MFIs affiliated to Women’s World Banking in three countries: Colombia (America), Bangladesh (Asia) and Uganda (Africa) with a total sample of 3,000 clients. Using Likert’s scale, the author took into account expectations and perceptions items plotting results on a two-axis grid. Results proved that customers are more satisfied by accessing higher loan amounts, faster turnaround times, lower loan requirements and lower prices. However, it seemed that customers preferring to develop a long-term relationship with the MFI want to be given preferential treatment while all customers are demanding increasing levels of customer service.

METHODOLOGY AND HYPOTHESES DEFINITION

We describe the items generation processes, we give an insight about data collection and conclude the section by discussing the main techniques used for testing hypothesis.
Items generation for customer’ satisfaction scale measurement

The first group of thirty items was extracted from both the literature (Parasuraman et al., 1988; This and Staes, 2008; Wetzel, 1986) and a questionnaire that we found in the Department of Marketing. This questionnaire was compiled from another questionnaire of Microsave. We made use of focus group interviews to complete the items list and generate more contextual items because global scales which have been developed in developed countries would not be appropriately aligned to the context of developing countries (Karatepe, 2011; Chong “Joanna” Lee, 2006). Eleven focus groups interviews were performed. One hundred and eighteen clients from eight branches participated in the discussions in mixed groups composed of women (88) and men (30). Participants were asked to give their opinions on WAGES’ actual weaknesses, strengths and estimate their current customer satisfaction level (Sower et al., 2001). Data processing was performed using content analysis. Customers’ answers were transcribed in Excel sheet and secondly aggregated using two principal criteria: (a) only attributes which have been cited at least by two persons during the meetings were considered as important. b) Only attributes which have been mentioned at least in one focus group were considered as important. Referring to those criteria, we obtained 15 attributes as being the most important for WAGES’ clients. We obtained a pool of 45 items. Those items have been submitted to three members of the marketing department to identify ambiguous items and ensuring content and face reliability of scale (Korda and Snoj, 2010).

Referring to experts’ points of view, we developed an embedded scale with 32 item-scales and six principal dimensions: Tangibles, comfort and appearance of personal and material (6), Reliability or capacity to accomplish task (4), Responsiveness, dynamism and willingness for helping customers (6), Insurance and confidence (5), Empathy and attention to clients (5); Price, costs and conditions (6). Although the five first dimensions are similar to the Parasuraman scale in terms of structure, the items’ content are deeply different from the original scale trying to incorporate and meet sector (MFI) and context (Africa) matter. Thus, the tangibles dimension give insight about particular items related to loan officers’ using motorcycle and badge as tangible items facilitating loans officers’ mobility and identification on field. The sixth dimension is a new one added to the original scale highlighting how microfinance clients are strongly concerned by services pricing.

Data collection: First and second round

WAGES’ customers were estimated to be 64,710 in 2009 (WAGES’ Marketing Department, 2009). We could not survey all clients because of time and costs constraints. Thus, we extracted a representative sample from this population using the following formula: \( n = \frac{12a^2}{2} \times n^2 \times x^2 \), where: \( n = \) Sample Size; \( 12a^2 \); \( n-1 = \) Value of the Normal distribution at \( \alpha \) level (it is often equals to 1.96); \( \alpha = \) confidence interval (It is often fixed at 95%); \( sx = \) Standard Deviation of sample; \( e = \) the level of precision which is targeted by the researcher himself. “There is a paradox in that formula because the sample size depends on the sample’s standard deviation which is unknown when the sampling’s choice is done (Giannelloni and Vernette, 2001). For solving that matter, we conducted a pilot study on thirty customers proportionally extracted from six branches. We obtained an overall customer satisfaction data and extracted mean (equals 3.88) and standard deviation (equal 0.49) from this sample that enabled us to determine the sample size: \( n = \left(\frac{1.96}{2}\right)^2 \times (0.49)^2 = 389 \). We were able to survey customers in the six selected branches because they were easy to access (were excluded). Respondents were selected on both proportionally stratified and purposive sample basis. Customers were chosen focusing on both time spent as WAGES’ customers and according to the number of financial products they have accessed. Customers selected for the survey needed to have at least one cycle of credit or to be a regular saver and Roscas’ member for at least one year (mature clients). Selected clients were proportionally divided according to three financial products (loans, savings and Roscas) reflecting each product’s weight in total population. The survey took 21 days, from 6 to 27 July, 2009. Data was collected by a multi-disciplinary team composed of 24 loans officers’. To ensure good quality of data, they received a four hour training done by the author. This training focused on the study’s objectives, reviewed sampling techniques, presented the questionnaire and discussed how to administer it by highlighting different mistakes to be avoided.

The questionnaire was prepared in French and loans officers’ ensured translation in local language. Surveyors received also a guide paper reminding them of key principles for gathering data. 369 questionnaires were distributed. 353 were returned and they were well completed giving us a response rate of 96% which was quite very high.

Data was collected through a questionnaire adapted from previous studies and existing questionnaire at WAGES and focus interviews results. The questionnaire contained three sections. The first section was designed to gather information about both customers’ expectations and perceptions. This section had 32 questions. Customers’ expectations and perceptions were gathered using a five point Likert scale ranging from “strongly agree = 5” to “strongly disagree = 1”. For this section, “the statements were administered to the respondents with the following instructions: We would like you to put yourself in place of an MFI customer and then respond to all of the following statements by checking the category which best reflects your opinion”(Yavas, 2006). The second concentrated on the identification of customer satisfaction level for WAGES’ specific products like savings, loans, Roscas, money transfer, training, etc. We used a performance Likert scale ranging from ‘Strongly satisfied = 5’ to ‘Strongly dissatisfied = 1’ for measuring 18 items related to services and products and WAGES’ employees attitudes towards customers (savings, loans, trainings, customers’ welcome at different levels of service). The third section was designed for customers’ identification. Extracted variables were related to customers’ age, sex, education, location in terms of branch, number of years spent as customers, financial services received from Wages, business status, enrolment status and customers’ revenues.

Data processing and hypothesis testing

Three main techniques were used for processing data. We firstly resorted to factorial analysis to “satisfy the need of identifying structure through data summarization and data reduction” allowing us to define customer satisfaction dimensions. Using this technique, we were able to “condense (summarize) the information contained in a number of original variables (items) into a smaller set of new, composite dimensions or factors with a minimum loss of information” (Hair et al., 2010; Sarreal, 2008). We used Bartlett spherical test to test null hypothesis implying that items were not correlated between them (identity matrix ) and Kaiser – Meyer – Oklin (KMO>0.5) for verifying that all items constituted a coherent ensemble performing a good measurement of concept and to prove that all used data fit factorial analysis (Garricano and Poujol, 2008). We captured both customers’ expectations and performance but only performance items were considered in factor analysis (Corin and Taylor, 1992; Teas, 1994; Harrison-Walker, 2000). We used structural coefficients (0.30), communalities (equal or above 0.50),
eigen values (equal or above 1), explained % of variance (at least 60%), Cronbach’s Alpha (≥ 0.70) for obtaining optimal solution (Malhotra et al., 2007; Carricano and Poujol, 2008; Ahmad and Sungip, 2008).

H1: Responsiveness, empathy, price, conditions and costs are expected to exhibit high level of extracted variance proving they are the most representative dimensions of customer satisfaction for WAGES’ clients.

We secondly resorted to customer satisfaction Index for determining WAGES’ current customer satisfaction level expressed as a single number in percentage that tells the supplier where he stands today...(Bhave, 2002) using both customers' expectations and customers' performance (Kumar and Mahaptra, 2006). We obtained WAGES’ actual customers satisfaction “using an important weighting based on an average of 1” inspired from (Bhave, 2002; Netteret and Hill, 2005; Kumar and Tsiros (1999), Mittal et al., 1998) following three stages: First, ‘we calculated the average of all the weightings given by the customer’. Secondly, we divided the individual weightings by this average to find the weighting on the basis of average of 1. Customer’s higher priorities are weighted more than 1 and lower priorities less than 1. The averages of the customers importance scores were calculated and each individual score was expressed as a factor of that average’ (Kumar and Mahaptra, 2006). Thirdly, we expressed the average in percentage terms and obtained the actual customer satisfaction level.

H2: WAGES’ current customer satisfaction level is high; it is also a function of financial services (saving and credit).

We used ANOVA test to assess whether one or a combination of customers’ qualitative characteristics (location, level of education, number of financial services accessed, customer’s revenue, etc) would have an effect on customer satisfaction measured as a quantitative variable from significant factors and items after scale purification. We started by performing a preliminary test for ensuring ANOVA usage (Levene test > 0.05 and Duncan test for identifying the means that were significantly different”) and chose significant variables by examining their attached probabilities (p-value equal or less than 0.05 used as a thumb to judge the relevance of statistics tests at five percent level of significant).

H3: WAGES’ customers’ satisfaction is positively influenced by customers’ characteristics such customers’ branch, customer’ revenue, the number of financial services accessed by clients.

Data presentation

We discuss customers’ characteristics (1) and we provide insights related to customers’ expectations and perceptions (2).

Social, economical and demographical characteristics of the sample

The majority of surveyed clients were women representing 64% of the sample while men constituted only 36%. Surveyed customers were adults with an average age of 37 years. Surveyed clients had achieved at least primary school and secondary for 70% of cases, 5% had vocational skills in various fields including sawing and carpentry, etc. Seventy one percent of the clients were running small business (food, clothes selling) whereas 25% owned a small and informal firm producing mainly services like hair-cutting, restaurant, tailoring units, etc. The importance of commercial and services activities can be explained by short cash turn over periods enabling clients to invest and earn returns within short periods enabling the MFI to collect weekly or monthly payment. Eighty one percent of surveyed clients had accessed an individual loan whereas 18% were members of a group lending. On average, surveyed customers had been WAGES clients for three years and four months. 60% of clients earn monthly income above 43 Euro, the guaranteed minimum wage defined by the Togolese’s governament. Only 10% of surveyed clients were poor in the sense of the aforementioned criterion. This situation was mainly due to the fact that the MFI was mainly focusing on individual clients. Is there a mission drift?

Evaluation of customers’ expectations and perceptions

Data from customers’ expectations proved that the average expectation score is 4.55 for all customers. So, three principal dimensions appear to be of value for customers. These are: (1) Tangibles, (2) Price, costs and conditions and (3) Insurance and confidence. All three dimensions are given high average scores of 4.57 and 4.66, which are above 4.55 the total average score for all sample. Customers weakly rated the three remaining dimensions comparing to total average notes. Thus, they gave an average score of 4.52 to reliability, 4.50 to responsiveness and 4.47 average score to empathy dimensions which are all below the total average for all dimensions (4.55). Briefly, surveyed customers tended to value tangibles, insurance and price dimensions; average importance to reliability and responsiveness dimensions whereas they exhibited less importance for the empathy dimension. The insurance and confidence dimension seemed to be the less important from the client’s point of view.

Data related to customers’ perception exhibited an average perception score of 3.74. Three dimensions were highly appreciated by the sample: Insurance and confidence (1), Tangibles (2) and Responsiveness (3). In fact, the average perception attached to those dimensions exceeds 3.74, the total average perception rate for the total sample (4; 3.88 and 3.87 > 3.74). Customer’s weakly rated perception of three dimensions: Reliability (1), Empathy (2) and Price, costs and conditions (3) giving them average perception scores below than the total perception average score for all dimensions (3.66; 3.49 and 3.52 < 3.74).

Connecting customers’ expectations and perceptions, we noted that for all dimensions perceptions average scores were below expectations average scores. There was then a gap between customers’ perceptions and expectations indicating that WAGES services were meeting customers’ expectations (1.05 for price, costs and conditions dimension and 0.63 for responsiveness dimension). It is clear that the survey included rational and more demanding customers, who are able to state clearly what they expect from an MFI.

RESULTS AND DISCUSSION

We present the main dimensions of customer satisfaction (1); we highlight results related to the current customer satisfaction level (2) and assess customers’ characteristics influence on customer satisfaction (3).

Determination of customer’s principal items and dimensions

The main customers’ satisfaction items and dimensions
have been using factor analysis (principal component) with Varimax orthogonal rotation on 32 items from 353 observations summarizing customers' answers about customer satisfaction issues. KMO and Bartlett tests have been used to test if the data fit factor analysis requirements. The two tests were strongly significant (KMO = 0.906, Bartlett = approx chi-square = 2.262, df = 190, sign = 0.000) allowing us to apply factor analysis. Table 1 summarizes the main results about factor structure.

We obtained a factor structure with five dimensions and 20 items by iterative approach. Items which did not contribute to final solution were cancelled. Thus, seven items had to be removed because they presented low communalities (below 0.5) and five others were eliminated because they did not show any significant contribution on at least one principal factor (having coefficient above 0.20 on many principal factor) (Bressolles, 2006; Parasuraman et al., 1988).

Reliability and validity analysis showed that overall 20 remaining items belonged to the same concept of customer satisfaction applied to MFI. In fact, the Cronbach's Alpha was high and above 0.70, it was equal to 0.890 indicating a very good reliability of scale measurement, attesting that our scale was measuring what it was supposed to measure, according to Parasuraman et al. (1988) who state: "the scale items capture key facets of the unobservable construct being measured". The Cronbach's Alpha after item deletion is also high and above 0.80 proving that it is not possible to remove one item for improving the final solution.

The 20 remaining items are regrouped in five dimensions. This result did not confirm one part of our first hypothesis which predicted a factor structure with six principal factors corresponding to the basic scale model. This was due to the fact that a number of factors from the original model had disappeared (reliability) and corresponding items had been integrated in other factors (tangibles and empathy). Responsiveness and insurance dimensions have been combined to form one dimension (responsiveness) whereas price, costs and conditions once singular dimension were engendered into two separate dimensions (Parasuraman et al., 1988). We obtained a factor structure with five factors showing that customer satisfaction with service in an MFI is a multidimensional construct that allows explaining 62% of variance.

The first factor is the responsiveness factor named "responsiveness, dynamism and willingness for helping customers" combining responsiveness and assurance aspects. This factor was the most important and it explained 35.1% of the total variability. This result confirmed one part of our first hypothesis that mentioned a relative greater importance of this dimension in MFI context where people strongly interact. In fact, as consumers "do not clearly differentiate the interaction aspects of reliability, responsiveness and assurance ...." (Harrison-Walker, 2000), they will judge and appreciate the MFI service quality through the quality of the interaction they have with the MFI's employees. The more kind, polite and competent will be the employees, the more customers will appreciate the service they will receive reinforcing assurance and confidence they have in the MFI. Briefly, the human interaction between customers and Women Association for Social and Economic Gain officer staff impacts more on customers' satisfaction and enhance loyalty and retention. In fact, experience has proved that "banks customers' attitudes towards the human provision of services and subsequent level of satisfaction will impact on bank switching" (Othman and Owen, 2001).

The second dimension is a tangible factor that refers to the appearance of MFI's employees, buildings and equipments. This factor explained 9.1% of the total variance. The appearance of this dimension is a surprising result since Microfinance institutions are normally located very close to the market. So, we did not expect customers to attach so much importance to such items as external appearance of individuals, buildings and equipments. However, focus group interviews had already raised tangible aspects as an important dimension on customers' point of view since customers do not get access to the products and services in time because of the limited ressources (logistical resources like motorcycles) of the credit officers. In fact, customers desire to be served by employees who have their own motorcycle, who can clearly be distinguished by a badge or a pullover or shirt marked by MFI's branding or signs. Motorcycles enable loan officers to attend to client at their houses quickly for collecting savings and weekly installments. Motorcycles enhance loan officers' mobility on field, increase their productivity and indirectly reduce transactions costs (time and money saved) on customer's point view leading to great satisfaction level. By well identifying the MFI's employees, the badge is an authenticity indicator improving confidence and assurance mainly for new customers who do not know all employers of MFI. Tangibles aspects reflect also the MFI's ability to perform services by a certain time and offer customers receive reinforcing assurance and confidence they have towards the human provision of services and subsequent level of satisfaction will impact on bank switching. Women Association for Social and Economic Gain officer staff impacts more on customers' satisfaction and enhance loyalty and retention. In fact, experience has proved that "banks customers' attitudes towards the human provision of services and subsequent level of satisfaction will impact on bank switching" (Othman and Owen, 2001).

The third factor is banking factor reflecting conditions to be satisfied by customers for accessing MFI's financial services. This factor is labeled "loan conditions" and explains 6.9% of the total variance. The appearance of this dimension highlights the importance that customers attach to the loan term, loan amount and the grace period. These results indicate that Micro-finance customers will be more satisfied with a loan with a long term maturity, with grace period and with loan amount...
Table 1. Factor structure with principal dimensions and items after rotation.

<table>
<thead>
<tr>
<th>No.</th>
<th>Dimension</th>
<th>Significant item</th>
<th>Principal factors/components</th>
<th>Communalities</th>
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<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>Responsiveness, dynamism and willingness for helping customers $\alpha = .882$</td>
<td>Employees of excellent MFI would always manifest willingness to help clients</td>
<td>.653</td>
<td>.587</td>
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<tr>
<td></td>
<td></td>
<td>Excellent MFI would allow customers to access to their savings when they intend to withdraw money without any constraint</td>
<td>.749</td>
<td>.579</td>
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<td></td>
<td></td>
<td>Behavior of excellent MFI employees would inspire confidence to customers</td>
<td>.814</td>
<td>.728</td>
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<td>Customers of excellent MFI would feel in secured environment when doing transactions with the MFI .</td>
<td>.707</td>
<td>.607</td>
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<td>Employees of excellent MFI would regularly be polite, welcomed and courteous with clients.</td>
<td>.734</td>
<td>.694</td>
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<td>Employees of excellent MFI would have a good knowledge of their tasks and respond easily to customers</td>
<td>.680</td>
<td>.608</td>
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<td>Excellent MFI would have employees that attach particular attention to each client without any preference.</td>
<td>.677</td>
<td>.573</td>
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<td></td>
<td>Employees of an excellent MFI would be well dressed and easily to distinguish by their uniform and badge.</td>
<td>.676</td>
<td>.541</td>
</tr>
<tr>
<td>2</td>
<td>Tangibles, comfort and appearance of personal and material $\alpha = .883$</td>
<td>Excellent MFI would have vehicles and motorcycles that facilitate work especially for field agents (loans officers and collectors</td>
<td>.575</td>
<td>.509</td>
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<td></td>
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<td>Offices , Hall and cash desk of an excellent MFI would be well cleaned , with fresh air and allowing confidentiality</td>
<td>.764</td>
<td>.683</td>
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<td>Excellent MFI would have chairs for clients in case of affluence</td>
<td>.665</td>
<td>.630</td>
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<td>Excellent MFI would provide services when it has promised to do it</td>
<td>.592</td>
<td>.581</td>
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<td></td>
<td></td>
<td>Excellent MFI would define loan term which is relatively long</td>
<td>.795</td>
<td>.675</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Excellent MFI would increase loan amount according to the customers’ activities.</td>
<td>.615</td>
<td>.596</td>
</tr>
<tr>
<td>3</td>
<td>Conditions $\alpha = .886$</td>
<td>Excellent MFI would provide grace period (partial or total ) to its customers</td>
<td>.612</td>
<td>.567</td>
</tr>
</tbody>
</table>
Table 1. Contd.

<table>
<thead>
<tr>
<th></th>
<th>Costs and price $\alpha=.890$</th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Excellent MFI would ask caution or guarantee when customers ask an loan amount above 500,000 F CFA</td>
<td>.669</td>
<td>.580</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Excellent MFI would not put a ceiling on loan amount, it would also not fixed amount for Rosca contribution</td>
<td>.614</td>
<td>.632</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Excellent MFI would ask an amount of 1000 CFA as origination fees.</td>
<td>.762</td>
<td>.699</td>
<td></td>
</tr>
<tr>
<td></td>
<td>When clients have a problem, excellent MFI would show sincere interest for understanding them and solve the problem</td>
<td>.664</td>
<td>.700</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employees of excellent MFI would tolerate customers for a bit delay (installment or Rosca contribution) when clients has been struck by some uncertainties (illness, robbery, etc).</td>
<td>.755</td>
<td>.648</td>
<td></td>
</tr>
</tbody>
</table>

Cronbach’s Alpha=.890

<table>
<thead>
<tr>
<th></th>
<th>Eigen Values</th>
<th>Explained Percentage variance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7.016</td>
<td>9.135</td>
</tr>
<tr>
<td></td>
<td>1.827</td>
<td>6.902</td>
</tr>
<tr>
<td></td>
<td>1.380</td>
<td>5.804</td>
</tr>
<tr>
<td></td>
<td>1.161</td>
<td>5.158</td>
</tr>
</tbody>
</table>

Source: Computations inspired from Bressolles (2006, p. 29).

increasing for each loan cycle. Hence, the strategic dynamic incentives will enable clients to undertake projects with great impact while allowing MFI to increase its revenues and efficiency. In fact, when customers have access to bigger loan amounts and to other advantages such as grace period, they are likely to be loyal and unlikely to switch to another institution (Murray, 2001).

The fourth factor can be named “costs of financial services” from the MFI. This factor explained 5.8% of the total variance. It is related to the importance that customers attach to guarantee, original fees and transaction costs due to the limitation of amount customers can access (loan) or can contribute in Rosca. This factor reveals that customers will be more satisfied if some costs or conditions are released. For example, customers with growing business will be penalized when they intend to develop a large business because they cannot borrow or withdraw an amount around 763 Euro without having a collateral. The same statement would be done for poor people who are acting in Rosca. As contribution amount is fixed and invariable, they cannot contribute an amount below the standard. Consequently, as they are solicited by daily needs, they will spend money for food putting them in contribution delay. This result suggests need for a re-examination of costs procedure for both customers and MFI effectiveness.

The fifth factor is an empathy factor showing attention on clients in some particular situations. This factor explained 5.2% of the total variance. Although its percentage of variance is low, it remains significant for clients. Indeed, since focus on social impact of Micro-finance becomes more important, MFIs must develop loans and savings collection methods that valorize clients’ human rights. In this perspective, aggressive loans and savings collecting methods might not produce expected effects in the long run as customers may switch to avoid being injured by loans officers. Briefly, “why should MFIs punish customers when delay is due to illness? More flexibility is required”. “Don’t harm clients”.

**WAGES’ customer current satisfaction level**

WAGES’ customers’ actual satisfaction was obtained by the customer satisfaction index using both customers’ expectations and perceptions on the 20 remaining items. Table 2 gives us more explanation.

Results revealed that WAGES’ customers scored a satisfaction rate estimated to 3.56 in average. As we used a Likert scale of 5 points, we divided the customer satisfaction index by five to express it in percentage terms for obtaining the
actual level of satisfaction for clients of 71.2% (3.56/5 = 0.712}*100). This result is in line with our second hypothesis that predicted that WAGES’ customers will be highly satisfied.

Results also indicate that customer satisfaction is a function of financial services. Results reveal that customers are more satisfied by savings products. In fact, for all kinds of savings, the average satisfaction scores are above 3.56 (71.2%), the global satisfaction rate for all services. Results also prove that clients are more satisfied by the cash deposit saving (F= 6.27 p=0.000) than other kind of savings. Indeed, the average satisfaction score is high than average satisfaction score attributed to other kind of savings, 4.06 > to 3.76, 3.87 and 3.91 for term deposit(F=2.25, p=0.023), mandatory savings and Roscas savings. Results show that for each category of savings, customers are more satisfied by the requested documents for account opening than the minimum savings balance required to access savings products. In fact, WAGES is only requiring three documents for opening account whereas the minimum balance required seems to be a bit high (9 Euro) comparing to the revenue of targeted population (see section of WAGES products). Except for cash deposit, the average satisfaction score for both documents and minimum savings balance are below the median score indicating that at least 50% of customers highly rated those two dimensions than the means score and reversely for the cash deposit savings.

Customers are less satisfied by all the credit products. For all kinds of loans, the average satisfaction score is below the total average score, 3.56 > to 3.12, 3.14 and 3.17 for direct credit, special credit and Rosca credit. However, customers appreciate Rosca credit more than other credits with an average satisfaction score of 3.17 > 3.12 and 3.14 for direct credit and special credit. Clients differently appreciate conditions related to those kinds of loans. Three conditions are almost critical for all kind of loans and less appreciated by customers: Risk on loan, origination fees and guarantee (direct credit especially). In fact, the average satisfaction score attached to those elements are below the total average satisfaction scores attributed to each kind of loans (2.94, 2.91 and 3.11 < 3.12 for direct credit; 2.91 and 2.97 < 3.14 for special credit; 2.88 and 2.90 < 3.17 for Rosca credit). Even if the average customer satisfaction score for those elements is below the median proving that at least 50% of surveyed customers gave notes above the means, it seems that those conditions are badly appreciated by clients and need to be adjusted for the future. Interest rate is apparently better appreciated by clients. In fact for all kinds of loans, the average satisfaction score attached to this variable is high than the total average score attached to each kind of loans. This result meets and confirms the theoretical hypothesis that “poor people and entrepreneurs in developing countries will afford a high interest rate” (Armendariz de Aghion and Murdoch, 2005).

For the six agents identified (customers service, cash desk officer, loan officers, deposit collectors, secretariat and other persons in the offices), the total average satisfaction score is high than the total average satisfaction score for all services (3.75 > 3.56). Surveyed customers gave high average satisfaction scores to customer’s service, loans officers and deposit collectors (4; 3.98 and 3.78 > 3.75 the total average satisfaction average for all persons and services). Customer rated less the Cash desk officer, secretariat and other persons giving them average satisfaction scores below the total average satisfaction score for all persons and services (3.4; 3.66 and 3.66 for cash desk officer, secretariat and other persons in the officer). These data indicate that as employees interact daily with customers; their behavior is a critical factor of customers’ satisfaction. This result is compatible with “internal marketing literature (as well as services marketing”). However, we would nuance satisfaction rates related to loan officers and deposit collectors because they would be affected by a bias selection. In fact, as data collection has been mainly done by loans officers and deposit collectors, customers did not hesitate to give them good comments knowing that they will deal with them for loan matters in the future.

The influence of customers characteristics on customer satisfaction

Primary tests attested that data fitted optimal conditions
in which ANOVA test can be applied and provide sound results. The Levene’s test provided a significant result (0.47 > 0.05, F = 1.032, df1 = 298, df2 = 47) allowing us to accept null hypothesis of intragroup variance homogeneity. This result enabled us to apply ANOVA test on data basing the decision of the significance of variables on Fischer test. Table 3 presents the important results obtained from ANOVA test.

Results show that only three customers’ characteristics significantly influence the customer satisfaction level (Mittal and Kamakura, 2001): the number of total services which customers can access (F = 3.78; p = 0.000) (1), the customers’ branch (F = 3.62; p = 0.003) (2) and the customer’ estimated revenue (F = 3.21; p = 0.008) (3). Those three characteristics are explained 19% of the variance. Results reveal that the higher the number of products to which clients have access to, the less is the satisfaction level. Thus, when customers access three services, the average satisfaction score is 3.43, it decreases from 3.43 to 3.20 when customers access all products offered by the MFI. However, when customers access only one product or at least to two products, the average satisfaction score goes up to values of 4.12; 3.71 and 3.60 when customer accesses only savings, loan and Rosca credit only. Only combination of both credit and savings gives a high average satisfaction scores (3.68) than other possible combinations.

Results from Duncan test prove that customers from Lomé are less satisfied than clients from other branches exhibiting an average satisfaction rate below average satisfaction scores from other branches (3.61 < 3.94 for Tslevie, 3.93 for Agee, 3.88 for Sokode, 3.81 Agodrafo and 3.72 for Adidogome). These results suggest that there is a variance in quality of services through branches leading to different levels of satisfaction rate. Is there a problem of general management or an absence of marketing plan in branches? Results from Duncan test also suggest that average satisfaction scores vary with customer’s economic class. Thus, very poor customers are less satisfied by services (mean = 3.51) whereas middle and high income customers are highly satisfied by services (Mean = 3.77 for clients with a revenue range from 22 Euro to 60 euro and 3.63 for rich clients with revenue above 60 Euro per month). Do those results suggest market segmentation for products and services to customers in terms of revenues and branches?

CONCLUSIONS, IMPLICATIONS, LIMITATIONS AND FUTURE RESEARCH

This study pursued three objectives: identification of items and dimensions affecting WAGES’ customer satisfaction (1), determination of the current level of WAGES’ customer satisfaction (2), test that the customer satisfaction is influenced by customer’s characteristics (3). To achieve these objectives, factor analysis, customer satisfaction index, and ANOVA test were applied. Factor analysis was applied on a scale measurement with 32 items. Through an iterative process we obtained a refined scale with 20 items represented by principal dimensions: a) responsiveness, b) tangibles, c) conditions, d) costs and (e) empathy. Those 5 factors explained 62% of the total variance of customer satisfaction. The test of validity of scale measured by the Cronbach’s Alpha was very good with 0.890 indicating that the remaining 20 items belonged to the same concept, showing that scale measurement actually

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected model</td>
<td>20,671 \textsuperscript{a}</td>
<td>35</td>
<td>.591</td>
<td>2,134</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>44,291</td>
<td>1</td>
<td>44,291</td>
<td>160,020</td>
<td>.000</td>
</tr>
<tr>
<td>School level</td>
<td>.975</td>
<td>4</td>
<td>.244</td>
<td>.881</td>
<td>.476</td>
</tr>
<tr>
<td>Number of services</td>
<td>6,280</td>
<td>6</td>
<td>1,047</td>
<td>3,781</td>
<td>.001</td>
</tr>
<tr>
<td>Type of credit</td>
<td>.556</td>
<td>2</td>
<td>.278</td>
<td>1,004</td>
<td>.368</td>
</tr>
<tr>
<td>Branch of customer</td>
<td>5,013</td>
<td>5</td>
<td>1,003</td>
<td>3,632</td>
<td>.003</td>
</tr>
<tr>
<td>Sex</td>
<td>.625</td>
<td>2</td>
<td>.328</td>
<td>1,185</td>
<td>.307</td>
</tr>
<tr>
<td>Business</td>
<td>.785</td>
<td>3</td>
<td>.262</td>
<td>.945</td>
<td>.419</td>
</tr>
<tr>
<td>Revenue</td>
<td>4,448</td>
<td>5</td>
<td>.890</td>
<td>3,214</td>
<td>.008</td>
</tr>
<tr>
<td>Age</td>
<td>.376</td>
<td>5</td>
<td>.075</td>
<td>.272</td>
<td>.928</td>
</tr>
<tr>
<td>Time spent as customer</td>
<td>.982</td>
<td>3</td>
<td>.327</td>
<td>1,182</td>
<td>.317</td>
</tr>
<tr>
<td>Error</td>
<td>85,804</td>
<td>310</td>
<td>.277</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>483,447</td>
<td>346</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>106,474</td>
<td>345</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(a\). R squared = .194 (Adjusted R Squared = .103)

Source: Computed using SPSS.
measured what we intended it to measure. Among the retained 2 dimensions, 3 belong to the standard scale whereas 2 are related to the conditions and costs of MFI services. The results confirm that responsiveness remain the most important dimension in micro-finance sector. The actual WAGES' customer satisfaction level has been estimated by the customer satisfaction index. We found that the actual customer satisfaction level of WAGES' customers was high at 71.2%. However, we noted that the satisfaction level varied as a function of specific financial services and employees. In general, customers are more satisfied with saving services than with loans products. They are also mainly satisfied with customer' service, loans officers and Rosca collectors.

The influence of customer’s characteristics on customer satisfaction was tested using ANOVA test. Results revealed that customer’s branch, customer’s revenue and number of services accessed by customers positively influence customer satisfaction. In fact, clients receiving services in the central branch are less satisfied than those who receive services in the other branches showing that peripheral branches where achieving high satisfaction level to clients like Tsevie and Sokode. Clients were less satisfied by a high number of services preferring first accessing to saving, credit or both. Results revealed that clients who have medium income and high income are more satisfied by services than poor clients.

Responsiveness seems to be a driving force of customers’ satisfaction in microfinance sector. That is to say efficient MFIs should focus on the personnel by allowing them to extend services to the customers. That behavior will influence customer satisfaction and enhance customer’s retention and loyalty. As customer satisfaction will vary with time, managers would periodically assess the current satisfaction level and defining the most modifications to be done to services to allow it to fulfill the customer’s needs. The variance of satisfaction level depends on the number of services, customers’ level of income and branches seem to have practical and marketing implications. It means that MFIs should focus more efforts to perform current services avoiding brutal diversification of products (consolidation strategy) whereas the difference in customer satisfaction in relating to revenue and branches suggests a segmentation strategy for lending methods and marketing implementation. It suggests also a level of monitoring on the way customer care is handled among the different groups.

Although this study provided sound results, it has some limitations which are sources for future research. In fact customers surveyed in this study are coming from one MFI. Thus, results do not allow any comparison. So, the first improvement of our results might be built on a survey of two, three, or more MFIs, test the variability of results and validity of the scale measurement enabling to move towards a scale measurement for Micro-finance sector in general. The second way is to submit differently data from customers’ expectations and perceptions (gap analysis) to factorial analysis and compare results. Such a study could complete (Taylor and Corin, 1994) and adapt it to the Micro-finance field. The third way and last one is to conduct cluster analysis on branches and revenues to determine marketing strategies to be implemented for satisfying clients in different branches and with different revenues.

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