Assessing Contemporary Challenges Crippling the Sustainability of Microfinance Industry in Accra Metropolitan Area

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Abstract— **The aim of this article is to identify the main contemporary challenges affecting the sustainability of MFIs in Greater Accra Metropolis. Notwithstanding the benefits accrue from microfinance business in other part of the world; most MFIs have failed in delivering their promises in the Republic of Ghana (Awojobi 2011).Employing a cross-sectional survey design, data on the variable was collected via self-administered questionnaires, distributed to 30 licensed microfinance institutions with sample size of 300 respondents in Accra. A multi-stage sampling technique procedure was adopted for the study. Analyses of data from the 300 retrieved questionnaires involved descriptive statistics and standard multiple regression techniques. The study revealed that regulation and supervision, institutional framework, coordination, access to finance for the development of MFIs in Ghana is challenged with poor implementation and corruptions. Also respondents rated regulation and supervision as the most challenging among all the dimensions under consideration. On the other hand, the data/information and dissemination has significant positive effect on microfinance sustainability based on respondents' response**

Index Terms— **Microfinance, Contemporary, Challenges, Sustainability, Industry, Microfinance**

I. INTRODUCTION

Empirical evidences have indicated that microfinance helps households that are very poor to meet their basic needs and serves as a protection against risks, it therefore has an association with improvements in the welfare of household economic (Khandker, 1998; Zaman, 2000; Robinson, 2001; Khandker, 2005; Dahiru & Zubair,2008).Credit facilities therefore play significant role for the development of the informal sector and consequently translate in to national development. Knowing this, most developing countries including Ghana have opened up structures for the influx of microfinance businesses.

Notwithstanding the important role of MFIs in poverty reduction and economic growth, the microfinance sector faces a number of challenges (Asiamah & Osei, 2007). Literature shows that most Ghanaian MFIs are increasingly collapsing in recent times (ghanabusinessnews.com, 2013). This has affected the populaces who have responded to the calls by these MFIs. The instability raises important questions such as:

What are the main challenges affecting the sustainability of MFIs in Ghana?

The specific objectives of this study include:

- To find out the level of institutional framework challenges of microfinance institutions in Ghana.
- To investigate the extent to which capacity building and funding constitute a contemporary challenge to MFIs in Ghana
- To find out the level of credit delivery and management contributes to malfunctioning of MFIs in Ghana
- To examine the extent to which of data/information dissemination challenges affect MFIs in Ghana
- To ascertain the level of regulation and supervision challenges of microfinance institutions in Ghana

It is therefore important to identify the contemporary challenges influencing the sustainability of microfinance industry. Despite the problems militating against the growth and sustainability of MFIs in Greater Accra Metropolis in Ghana, there is still enormous room for the growth and development of Microfinance in Ghana.

II. PROBLEM STATEMENTS

The research problem is about the fact that significant number of those engaged in microfinance services continue to struggle with sustainability. Again, the recital of microfinance institutions in terms of institutional sustainability seems not encouraging in spite of the fact that international and national development programs have been giving high priority on sustainable microfinance to the poor for many years (Tang, 2002). MFIs therefore face an obvious worry between achieving sustainability and contribution to poverty reduction. It is evident that the impact of the challenges of MFIs has been felt in reduced size and collapses.

In spite of these challenges, the current and prospective players within the sector need to survive and grow. In view of these, there is the need for management of MFIs to uncover the critical success factors that would lead to survival and growth, enhance their areas of core competencies and strength and also address areas of weaknesses and to formulate and implement more effective strategies to counter the contemporary challenges within this ever changing business environment.

III. METHODOLOGY

The study is cross-sectional survey design in nature. The first hand data were collected from 300 randomly selected respondents of microfinance staffs using a well-structured administered questionnaire distributed among the group of the respondents selected for the study. This study therefore

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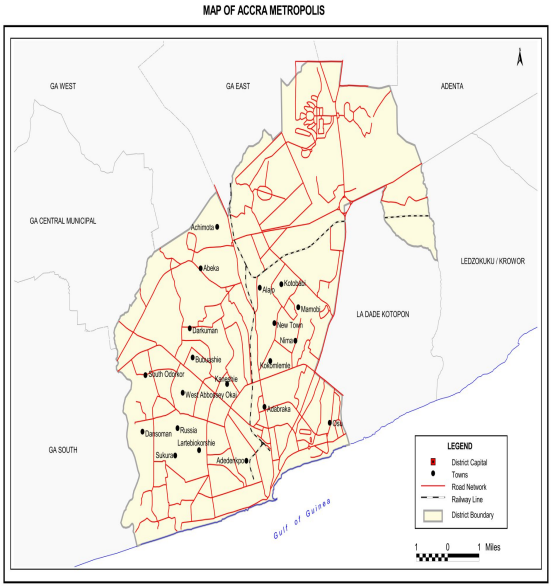
provides methodological framework to investigate the relationship between the contemporary challenges and sustainability of microfinance institutions in Accra Metropolis in Ghana.

The research area for the study is to assess the contemporary challenges crippling Microfinance Institutions (MFIs) in Accra Metropolis. Since its establishment in 1898, the Accra Metropolitan Area (AMA) has been the Regional capital for the Greater Accra Region. In addition, it serves as the national capital of Ghana. The City of Accra is bounded to the North by Ga West Municipal, the West by Ga South Municipal, the South by the Gulf of Guinea, and the East by La Dadekotopon Municipal. It covers a total land area of 139.674 Km^2.

Below is the map of Accra metropolis



IV. Data Analysis Results and Discussions

The data was analyzed using statistical tools such as descriptive statistics and multiple regressions. The target population of the study is the staff of microfinance institutions in Accra Metropolis with sample size of 300. This study seeks to assess the contemporary challenges of the microfinance institutions in Greater Accra Metropolis of Ghana. To achieve this specific objective, the objectives are operationalized into six research questions base on the key explored challenges reviewed in the literature. The contemporary challenges construct in this study comprised six, namely, institutional framework, capacity building and funding, credit delivery and management, data/information dissemination challenges, regulation and supervision challenges and coordinating challenges. Each of these dimensions of the construct further consists of indicators or statements established and captured on the data collection instrument.

The level of each dimension of the construct is independently determined with mean scale. The study followed Dess, Lumpkin and McFarlin (2005) and Yeboah (2011) to undertake the assessment of the level of the dimension. Following these authors, the cut-off point for assessing the minimum and maximum point on the scale is the midpoint minus 0.1. The midpoint for scale of 1 to 5 is 3, therefore the cut-off point is 2.9 (3.0-0.1). Thus, mean value of 1 to 2.9 represents low level and 3 to 5 denotes high level. The levels of the variables are determined first at dimensional levels and subsequently at the composite level using the grand mean.

The first dimension of the construct is institutional framework challenges. This measures the extent of challenges focusing on lack of defined scope of operation, the roles and responsibilities overlap of principal stakeholders, absence of clear mandate and vision, absence of consensus between institutional mandate and operating values, lack of strong leadership etc. As shown in table 1 respondents generally emphasized relatively high levels of institutional framework challenges among the players of the microfinance sector ($\overline{X}$ = 3.02). $\overline{X}$ denotes the mean value of the dimension. This suggests that microfinance institutions in Ghana face high institutional framework challenge. The implication is that the institutions do not have adequate institutional directions and framework to support their mandate. This may have significant effect on their operations and sustainability or going concern assumptions. It should however be noted here that this deduction or implication drawn does not conclude that institutional framework significantly influence the sustainability of these institutions negatively. To draw such a definite conclusion requires further higher order analysis requiring cause-effect analysis which is outside the scope of this first objective.

The second dimension of the contemporary challenges is capacity enhancement and funding. This examines the level of staffing and competency challenges, in-house training facilities and strength, funding challenges and string attached to available funds. It is evident from the analysis that the microfinance institutions admit that capacity and funding is one of the major challenges they face. The mean value ($\overline{X}$ = 3.53) crosses the cut-off of 2.9 and this demonstrates that the institutions are confronted by staffing, competency, technical and financial challenges.

This suggests that the respondents believe that the microfinance institutions do not have the strong staffing and technical capacity as well as adequate funding to championing their course of vision and mandates. It implies that these institutions lack the requisite capacity to provide the quality of financial support services to their target group.

The third component or dimension of the contemporary challenge to consider in this study is credit delivery and management. This measures the weaknesses in the current strategies for credit delivery and management in terms of the inadequacy and inefficiency in credit diversifications and the likelihood of not fully meeting the rather varying demands of the market and different categories of customers. Per the results from the table 1, the respondents considered credit delivery and management as key contemporary challenge they face in their microfinance operations. This is evident in the high mean score ($\overline{X}$ = 3.56). This mean value exceeds the cut-off point and hence considered as relatively high. This means that the respondents suffer greatly from malfunctioning of their credit strategies. They are unable to develop effective and efficient credit delivery systems to meet the needs of the complex customers. By intuition, it is expected that this high credit delivery and management found among the respondents hinders the sustainability of these microfinance institutions.

The respondents have demonstrated that data/information dissemination is a challenge to their microfinance institutions.

It however falls within the weaker part of the higher region as it exceeds the cut-off point by mean of 0.04 (2.94-2.90). This component of the contemporary challenges measured the extent of lack of information on microfinance operation and client base, approach to and methodology of data collection problem at national level, reporting challenges, and intra and inters institutional informational gap. From the table 1, the mean value that measures the extent of the variable-high or low is relatively high ($\overline{X} = 2.94$). The implication is that the microfinance institutions of the respondents have data/information dissemination challenges. This may have significant effect on their operations and sustainability.

Regulation and supervision is the fifth dimension of contemporary challenge. It measures both external and internal oversight challenges or weaknesses that these microfinance institutions face. Referencing the findings displayed in table 1, this is the most outstanding contemporary challenge the institutions face. The respondents rated regulation and supervision as the most challenging among all the dimensions under consideration. This is being demonstrated by the highest mean value ($\overline{X}$ =4.32). This mean value is near the highest point on the scale. The findings imply that the respondents strongly agree to the statements used to measure this challenge. If the position of intuition holds true, this will have significant negative implications on the sustainability of these institutions.

The last dimension of the contemporary challenge in this study is co-ordination. This dimension measures the challenges respondents face in coordinating microfinance activities. Currently, there is no formal body that is responsible for coordinating all activities. The results in table 1 show that coordination is the second most challenging factor to the microfinance operation in Ghana. The mean value as reported in table 1 dominates all the indicators other than regulation and supervision ($\overline{X} = 4.20$). The grand mean is relatively high with mean value crossing the cut-off point ($\overline{X} = 3.59$). This demonstrates how alarming the overall challenges are.

Table 1: Level of dimensions of contemporary challenges

CC Dimension	Indicator	Mean
Institutional framework	InstFrame	3.02
Capacity enhancement and funding	CapacityFund	3.53
Credit delivery and management	CreditMgt	3.56
Data/Information and dissemination	DataDissem	2.94
Regulation and supervision	RegSuperv	4.32
Coordination	Coordina	4.20
Grand Mean		3.59

*Scale (Mean): 0-2.9 = low and 3-5= high.
Source: Field data, (2016)

Influence of Contemporary Challenges on Sustainability of Microfinance Institutions

The second objective of this study sought to examine the influence of contemporary challenges on sustainability of microfinance institutions in Accra Metropolis of Ghana. Since contemporary challenges have six dimensions, its influence on sustainability of microfinance institutions would be a combination of the individual influences of each of those dimensions and the composite. The analyses are therefore presented in two parts. The first analysis examines how each dimension of the contemporary challenges influence sustainability of microfinance while the second part focused on the influence of composite contemporary challenges on sustainability of microfinance by testing respective hypothesis formulated for that purpose.

The standard multiple regression technique is used in analyzing the second objective (Leech, Barrett & Morgan, 2005). Prior to running the standard multiple regressions, some key assumptions are tested to ensure appropriateness of this technique. This is to avoid any spurious regression analysis. These assumptions relate to sample size used linearity of the study variables, normality of the distribution, homoscedasticity of residuals, and multi-collinearity. The study follows Tabachnick and Fidell's (2007) formula for calculating minimum sample size for multiple regressions. The formula is given as: N > 50 + 8m (where 'N' = sample size and 'm' = number of predictors). In this study, the m=1, namely, contemporary challenges. Therefore per the formula, the minimum requirement for regression is 58. However, the study used sample size of 300 which is far greater than the minimum requirement hence the first assumption is met.

The assumption of linearity, normality, homoscedasticity of residuals and multi-collinearity are tested using the Tables and Figures below. The Figure 1 which is the Normal Probability Plot can be used to test for linearity, normality and homoscedasticity of residuals (Pallant, 2007). It is believed that reasonably straight diagonal line from the bottom left to top right suggests linearity, normality and homoscedasticity. The figure 1 also tests these assumptions and outliers.

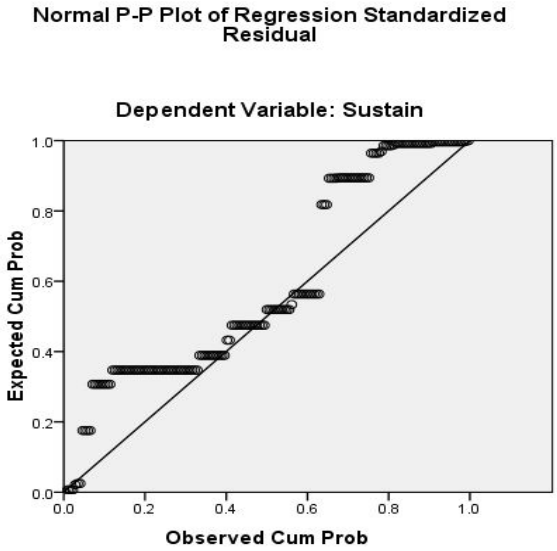


Figure 1: Normal Probability Plot for Sustainability and contemporary challenges

It can be observed that there is relatively straight diagonally shaped line from the normal probability plot of regression standardized residual. This indicates linear relationships between the predictor variable and sustainability. Furthermore, reasonable constancy in variances of the residuals shows homoscedasticity. However, there is no level of deviations suggesting there is no certainty in the normality. Since the deviations are not wide, they may not have significant effect on the results. In addition, according to Pallant (2007), since there is no nonparametric method for regression, one may still use regression to run predictive analysis when the violations of the assumptions are not severe.

Table 2 also presents the results for the test of the multi-collinearity. This assumption is tested using correlation matrix, tolerance and variance inflation factor (VIF). Where the correlation coefficients between independent variables or predictors are 0.9 and above, there is strong case of multi-collinearity. Studies have shown that there are instances where multi-collinearity problems are not identified through the correlation matrix. Therefore, the present study supports the matrix with the Tolerance and VIF. The tolerance measures how much of the variation in a given predictor is not explained by the other predictors included in the model. The decision rule is that If this value is less than .10, then there is multi-collinearity problem. it indicates that the multiple correlation with other variables is high, suggesting the possibility of multi-collinearity. Similarly, the VIF values above .10 also indicate multi-collinearity. Variance inflation factor is the inverse or reciprocal of the Tolerance value.

Table 2 : Correlation Matrix for Sustainability and Contemporary Challenges Dimensions

Pearson Corr.	Sustainability	Institutiona Framework	Capa Fund	Credit Management	DataDiss	RegSup	Coord
Sustainability	1.000	.120	-.130	-.132	.396	-.167	.581
Institutional Framework	.120	1.000	.475	-.244	-.022	.631	.218
Capacity building& Funding	-.130	.475	1.000	.123	-.057	.861	.036
Credit Management	-.132	-.244	.123	1.000	-.017	.111	.226
Data Dissemination	.396	-.022	-.057	-.017	1.000	-.170	-.218
Regulation & Supervision	-.167	.631	.861	.111	-.170	1.000	.221
Coordination	.581	.218	.036	.226	-.218	.221	1.000

Source: Author's analysis (2016): Computed from SPSS 17.0

It is evident from the table 2 that none of the predictors have correlation coefficient of 0.9 or more. This suggests that there is no multicollinearity problem. The coefficient between regulatory and supervisory challenges (RegSup) and Capacity building and funding challenges (CapaFund) is relatively high (corr. = 0.861). Although this is not up to 0.9, the study proceeds to use the Tolerance and the VIF as explained earlier to further scrutinize the variables. The results are reported in table 2

Table 3: Collinearity Analysis of Contemporary Challenges Dimensions

	Tolerance	VIF
(Constant)		
Institutional Framework	.459	2.180
Capacity Funding	.223	4.484
Credit Management	.749	1.335
Data Dissemination	.889	1.125
Regulation & Supervision	.164	6.098
Coordination	.764	1.308

Source: Author's analysis (2016)

The model, as shown in table 3 shows that there is no multi-collinearity problem. All the variables had Tolerance values of more than 0.01. Similarly, the VIF values are less than 10. Thus, no VIF value was equal or above the 10 threshold. It is therefore conclusive that there is no

multicollinearity problem as all the three methods have yielded similar conclusion. However, to avoid any possible regression problem, the study segregate the variables into two separate standards multiple regression models, one include capacity building and funding without regulatory and supervisory challenges and the second model include regulatory and supervisory challenges but not capacity building and funding. Thus, overall the study uses three models, namely, these two models as explained above and the model that combines the score of all the dimensions.

Having tested the assumptions the study further investigates how the contemporary challenges influence the sustainability of the microfinance institutions. As explained earlier, each of the six (6) dimensions used to explain the variation in sustainability and subsequently, the combined dimensions are also used to predict the variation in the variable (sustainability).

Table 4: Standard multiple regression analysis summary for dimensions of contemporary challenges predicting sustainability of microfinance institutions in Ghana

	Beta(β)	Std. Error	t-stat	Sig.	R^2
Model 1					0.858
(Constant)	-1.739	0.153	-11.360	0.000	
Institutional Framework	-0.105	0.027	-3.895	0.000	
Capacity Fund	-0.081	0.037	-2.206	0.029	
Credit Management	-0.172	0.026	-6.721	0.000	
Model 2					0.680
(Constant)	-0.309	0.191	-1.618	0.107	
DataDissem	0.386	0.026	15.011	0.000	
RegSuperv	-0.140	0.020	-7.067	0.000	
Coordina	0.760	0.035	21.471	0.000	
Model 3					0.823
Contemporary Challenges	-0.336	0.052	-6.454	0.000	

Source: Author's analysis (2016):

As shown in the figure above and evidenced in the beta values of all the six dimensions, contemporary challenges(CC) contributed uniquely to explaining variances in sustainability of microfinance institutions in Ghana. The model 1, contains three dimensions of CC, namely, institutional framework, capacity building and funding and credit delivery and management. Consistent with the illustration on the conceptual framework and the apriority, all these variables have negative influence on the sustainability of microfinance institutions. Credit delivery and management made the most significant contribution to sustainability (β: -0.172; Sig: 000) while capacity building and funding contributed the least (β: 0.081; Sig: 0.029) in absolute terms. The other remaining dimension, institutional framework is the second most significant dimension to explain the variance in microfinance sustainability (β: -0.105; Sig: 000) in the model 1.

Since all the dimensions in the model 1 are significant (institutional framework and credit delivery and management at 1 percent and capacity building and funding at 5 percent), the null hypotheses of no significant influence on microfinance sustainability are rejected. The negative coefficients (beta) indicate that these dimensions have negative contribution to predicting microfinance institutions. This implies that these dimensions are indeed part of the contemporary challenges that microfinance institutions face. They are therefore threats to the survival of the microfinance businesses.

By inference, holding other variables constant I percent increase in credit delivery and management challenges leads to 0.172 decreases in the level of microfinance sustainability and vice-versa. Similarly, when the institutional framework challenges of these institutions increase by 1 percent, sustainability of the institutions is threatened by 0.105, much the same way a decrease in these challenges will lead to an increase in the level of sustainability by 0.105, all other things being equal. Capacity building and funding challenges also threaten these institutions. The coefficient suggests that a percentage increase in these challenges will decrease microfinance institutions by 0.081 and vice-versa, all other factors being constant.

Regarding the model 2, where relationship between the three remaining CC dimensions and microfinance sustainability were tested, coordination challenges have a strong coefficient with microfinance sustainability (beta =0.760). This coefficient is positive and significant (sig.>0.05). This suggests that coordination challenges have positive influence on microfinance sustainability (beta =0.760; sig=0.000). It implies although microfinance institutions face coordination problems, these problems do not weaken the survivorship of the institutions. The statistics suggest that 1 percent increase in the coordination challenges among the microfinance institutions will lead to 0.760 increases in the sustainability rate and vice-versa, holding other factors constant.

Data/information and dissemination made the second most significant contribution to sustainability in the model 2 (β: 0.386; Sig: 000) while regulatory and supervisory challenges contributed the least (β: -0.140; Sig: 0.000) in absolute terms. Like the coordination, both variables are significant at 1 percent. The data/information and dissemination has significant positive effect on microfinance sustainability. This means that data/information and dissemination is not also a threat to sustainability of microfinance institutions. Thus, an increase in data/information and dissemination problem by say 1 percent, will lead to 0.386 increases in the sustainability. However, the coefficient of regulatory and supervisory challenges meets the study expectations as it exhibited negative influence on sustainability. This implies that challenges in regulating and supervising such as rigidity in regulation, lack of specified operational guidelines, and absence of formal board structure and board oversights significantly deplete the sustainability of these institutions.

CONCLUSIONS AND RECOMMENDATION

It has been proven in practice that microfinance enterprises constitute the back- bone of the economy of a country. These enterprises play an important role in the development of the economy of a country. Apart from dominating in terms of numbers in the economy of a country, they also represent an incomparable source of new jobs.

This study assessed the levels of contemporary challenges on the sustainability of microfinance institutions in Greater Accra Metropolis. This study revealed that the respondents rated regulation and supervision as the most challenging among all the dimensions under consideration. This was

demonstrated by the highest mean value ($\overline{X}$ =4.32). The coefficient of regulatory and supervisory challenges meets the study expectations as it exhibited negative influence on sustainability. On the other hand, data/information and dissemination has significant positive effect on microfinance sustainability based on respondents' response. This means that data/information and dissemination is not also much threat to sustainability of microfinance institutions.

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