

Analysis of the Effect of Governance, Performance and Non-Determinism Factors on Microfinance Institutions' Business Continuity: A Case of Togo

Kouassi Raymond Agbodoh-Falschau¹

Abstract

Lack of results of international aid and projects to reduce poverty in developing countries are becoming of paramount importance for stakeholders. As result paradigm change though Microfinance Institutions (MFIs) is promoted to remedy these problems. This paper introduces the structural equal modelling model that incorporates governance, nondeterministic, performance and business continuity management theories with the purpose of improving MFIs ability to operate as going concern (continuity). To validate this model, primary data were collected from microfinance institutions operating in Togo (West-Africa) and analyzed using structural equation modeling with WarpPls 6.0. The study revealed that performance (financial and social), governance, sectors of activities and clients contribute positively to influence the microfinance institutions' business continuity. Concepts such as governance, performance, and non-determinism help MFIs to operate as going concern. This study has several managerial and academic implications as it provides meaningful insights on policy making to improve MFIs management in addition to theory development.

Keywords: Business Continuity, Governance, Microfinance Institutions, Non-determinism, Performance, Structural Equation Modeling.

1. Introduction

Changes in business models on which credit provision are based have led to the emergence of new financing institutions: microfinance, microcredit and microinsurance organizations [1-7]. The MFIs aim to provide small loans to poor people to reduce social inequity as these clients will not be able to access credits from traditional banking institutions [6-8]. However, the lack of results of microfinance institutions is questioned by different stakeholders [2,3,7]. Additionally, they are face with bankruptcy risks as result of poor-quality selection process and inadequate governance mechanisms [9,10]. These arguments suggest that there is an interdependence between their ability to operate as going concern and governance and nondeterminism factors. The results of research conducted on performance and business continuity indicate that the nondeterminism and governance factors influence success of MFIs [11-14]. Moreover, governance and the clients' socio-demographic factors not only lead to the success of MFIs, but also contribute to the goal of reducing poverty [1,7,15].

Although many authors have addressed some aspects of non-determinism and governance in the context of MFIs, it remains that very few empirical studies have taken a comprehensive view of the issue that integrates both the external and internal factors of governance and nondeterminism as well as the risks posed by project selections and their impact on business continuity. In this context, exploring the influences of non-determinism and governance factors that have effects on performance and business continuity becomes prominence.

¹Département des sciences de l'administration, Université du Québec en Outaouais (UQO), Gatineau, Canada
Kouassi.agbodoh-falschau@uqo.ca, 01@uqo.ca, Département des sciences de l'administration, UQO,
101 Rue Saint-Jean-Bosco, Gatineau, QC J8Y 3G5, Canada

The objective of this research is therefore to explain the relationships between governance, nondeterminism factors, sectors of activity, client socio-demographic factors, performance and business continuity as perceived by MFIs. Using previous studies from the literature on governance, nondeterminism, performance and business continuity, a conceptual model is proposed and then validated by tests of hypothesis. This conceptual model highlights key factors of governance, the socio-demographic dimensions of the clients as well as the impact of sectors of activity on the performance and the continuity of operations of MFIs. Although previous empirical studies have not shown an integrated effect of these factors on the ability of MFIs to operate as going concern [1,11,16], this research is therefore intended to remedy this gap. The outcome of our work will provide relevant lessons that can help practitioners and researchers to better understand the operational and strategic framework of MFIs.

In addition to the introductory section, this paper is organized in five sections. The second section covers the existing literature on factors influencing business continuity. The third section aims on developing the conceptual framework and hypothesises. The fourth section focuses on the methodology and data analysis technique. The results of the structural equation modeling and hypothesis testing are then analyzed and evaluated in the fifth section. The managerial and academic implications are discussed followed by the conclusion with the research limitations.

2. Literature Review

Many studies have indicated the predominance of business continuity issues pause challenges to alleviate poverty [17-19]. Issues relative to internal operational environment, pressure from external stakeholders and funding requirements would likely result in serious business continuity issues when left unmanaged [20-22]. In addressing these issues, Cull et al. [22] pointed that the lack of appropriate funding as well as lack of governance constitute factors impacting MFIs ability to operate as going concern. For these authors, business continuity is the ability for an organization to maintain essential functions during and after a catastrophic event [21,23-24]. This concept is handled in the literature from managerial perspectives that are more relevant to areas of activity such as information technology, financial institutions, and accounting. In administrative sciences, the concept of business continuity is seen and interpreted as measures to be taken to manage the risks that could compromise the achievement of objectives in the event of a disaster [25-26]. From this review it becomes evident that organizational performance in general and MFIs performance are key determinants to business continuity.

The performance of MFIs is governed by two perspectives: financial and social. The financial performance of MFIs is an indicator for assessing business continuity as it clarifies the use of resources to achieve organizational objectives. It is also used by stakeholders to determine the degree of compliance with the prudential rules that apply to MFIs [27]. Through financial performance, the profitability of MFIs is analysed and gives clear indication of their viability [28]. It is therefore assessed using standard financial indicators such as productivity, efficiency and productivity and competitiveness ratios [22,23,29]. Social performance in microfinance is a difficult concept to comprehend, as it is an indicator for measuring poverty reduction.

The social component attached to MFIs performance is addressed via impact assessment [11,29]. As Mia and Chandra [30] point out, measuring impact requires more resources and brings out concepts relative to client's socio-demographics. The social performance of MFIs is the translation of the social mission of MFIs into concrete measures that can justify its impact on poverty reduction [31]. Social performance is also the result of financial actions on the social conditions of the MFIs clients [11,29,30]. These actions have a direct impact on living conditions, i.e. health, education, or housing, which are key determinants used to measure social impact of MFIs activities on poverty reduction [11,27,28,29]. Analysis of governance and nondeterminism factors are important to understand their effect on performance (financial and social) and incidentally on business continuity.

Abuses and misconducts in MFIs are correlated to lack of governance [11, 24]. The concept of governance (although overused in the literature) meaning is understood differently based on the areas of activity. Several authors and institutions have taken interest in this concept and its applications and impact in microfinance institutions [2,11,32]. As the concept of governance is defined differently in the literature leading to diverse understandings depending on the interests and objectives of the stakeholders, this study focuses on corporate governance rather than the other types of governance such as public or global governance [1,5,11, 32]. The pressure of prudential regulation on MFIs pushes them to better define the mechanisms and processes of good governance [11]. Moreover, the pressure to be more transparent and efficient to meet the increasing demands of donors [33,34] is translated into new requirements for these institutions.

It was also identified that the issue of governance is mainly the prerogative of the board of directors and is a function of the organizational structure[11-14] The organizational structure is important in the dynamics of microfinance where the sources of funding define the type of structure put in place[11,35].

Consequently, depending on the structure adopted, the related governance mechanisms will constitute adequate foundation for good management of these institutions. Governance mechanisms can be classified as internal and external. Internal mechanisms building blocks are organizational structure, internal management systems, internal management process and internal management tools[1,6,11,34]. Another element of the internal governance mechanism relies on the quality of the Board of Directors or the presence of donors on the Board. As for external mechanisms, reference should be made to the macro-economic environment in which MFIs operate [2,5,33].Sources of funding as well as prudential regulations are external elements that have an impact on the governance of MFIs. Moreover, ethical considerations should not be neglected[31,33].Nondeterminismfactors are also correlated with the concept of governance as highlighted in the following subsection.

MFIs activities are subject to several uncertainties. Evaluating these uncertaintieshelps mitigate the risk of default by the stakeholders that impede MFIs to reach their goals. Projects financed by MFIs are subject to the quality of information received from the borrowerswhich can be uncertain, imprecise, ambiguous, or unclear [36,37].Uncertainty, imprecision, ambiguity are types of nondeterminism that are prevalent in operational environment of MFIs [39-40. Nondeterminism in microfinance institutions is also characterized by information asymmetry which refers to the concepts of risk and uncertainty [38,39,40,41].

This concept indicates that one of the actors in the relationship has better information than the other and this contravenes the assumption of transparency of information in pure and perfect competition. Imperfection of information refers to the problem of adverse selection[40-41]. MFIs in these conditions are not fully aware of the likelihood of success of projects that are MFIs financed. And as Gale [41] points out, this situation leads institutions to offer high interest rates to cover the risk of default, which in turn leads to limited coverage and therefore impacts the objective of reducing poverty.Lanha[39] also cites the absence of credit bureaus, the unstructured economic environment, and the inadequate skill level of key players as aggravating factors in information asymmetry. Given the nature of nondeterminism, some authors suggestedusing adequate tools, systems, processes,and operating structure for their treatment [39,41,42]. Ignoring them can be detrimental to the social and financial performance of MFIs.

This review highlighted the extent of the problems(governance, performance, non-determinism, and business continuity) that MFIs are facing. Understandingand providing solutions to these problems will enable MFIs to better manage their activities and have control over the continuity of their operations. Therefore, the purpose of the subsequent section is to put forward a conceptual framework that will take into consideration the results of the literature review.

3. Hypothesis Development and Conceptual Framework

The purpose of this research is to identify key governance and nondeterminism factors that influence MFIs business continuity. It seeks to improve these institutions ability to operate as going concern. It can be seen from Table 1 that several variables are extracted and classified according to their direct or indirect effects on business continuity. To address these dimensions that affect MFIs ability to operate as going concern (business continuity), this research will measure five constructs that are highlighted in Table 1. They are governance, nondeterminism, performance, clients that are characterized as dependent variables and business continuity as independent variable[11,17,19,32,38,41].

Theoretical model (conceptual framework) presented in Figure 1 seeks to study the effects of governance and nondeterminism factors [43,46] on performance [11,47], sector of activities and ultimately business continuity [22,48,49]. The conceptual framework also proposes to study the impact that clients have on business continuity, governance, nondeterminism, performance, and sector of activities.The determinants of performance and sectors of activities play an intermediary role between the nondeterminism factors of governance and business continuity. An intermediate variable is a variable constructed to summarize the relationships between a situation and a behaviour, without adding anything to the findings[50].

Table 1:Research Variable and Operation Definition

Variable	Operational Definition	Variable Indicator	Justification
Exogeneous factor: Governance (FACTEXO)	External factors such as macroeconomic environment, funding sources or prudential regulation affect MFIs business continuity.	Macroeconomic environment Funding sources Prudential regulation Stakeholders	Hartarska[11], Trabelsi et Chichti[43], Rashem[44], Pinz et Helmig[45]
Endogenous factor: Non-determinism (FACTEND)	Internal factors such as organizational structure, systems, processes, or tools affect MFIs business continuity.	Structure Systems Process Tools	Alaoui et Tkiout[46], Hartarska[11], Hussainey et Al-Najjar, [47],Rashem[44], Pinz et Helmig[45]
Mediation: Performance (financial and social) (PERFORM)	Results of achievement of objectives translated in outreach, breath, quality of liquidity or solvency ratios are an indication of foreseeable continuity.	Outreach Breath Equity Liquidity ratio Solvency ratio	Trabelsi et Chichti[43]; Hartarska[11], Hussainey et Al-Najjar, [47],Rashem[44], Pinz et Helmig[45]
Mediation: Sectors of activities (DOMACTI)	Sectors of activities such as commercial, handicraft, services, agriculture, construction, or other sectors may influence the continuity of MFIs.	Commercial Handicraft Services Agriculture Construction	Moyoukou et Kertous[22], Sengupta et Aubuchon, [48],Pearlman [49],Trabelsi et Chichti[43], Kartra et al.[50]
Control: Clients (PORTPOJ)	Quality of projects funded materialized by age, education, amount of loans or types contribute to MFIs future.	Age Education Amount of loans Types of loans Types	Moyoukou et Kertous[22], Sengupta et Aubuchon[41], Pearlman[42], Trabelsi et Chichti[36], Kartra et al.[50]
Dependent: Business continuity (CONTEXP)	Results of funding projects that contribute to sustainability and of MFIs and social and performance impact.	Return Social impact	Hartarska[11], Trabelsi et Chichti[43], Rashem[44], Pinz et Helmig[45]

Source: Author

Clients are consequently positioned as controls variables since they have an impact on business continuity factors utilized in this research [22,41,42]. This positioning affects nondeterminism, governance, sector of activity, as well as performance variables. Finally, clients have a significant impact on the continuity of operations, as they are important to the existence of a microfinance institutions [22,36,41,42].

Analyzing the effects of exogeneous variables (governance) on performance and sector of activities is to improve ultimately MFIs ability to operate as going concern. Sound governance mechanisms lower chances of disruptive events occurrences and reduce the impact of unanticipated outcomes [11,43,44,45]. The measures that characterize these variables give rise to:

- **H₁**: Governance (FACTEXO) has a positive effect on performance(PERFORM)
- **H₂**: Governance (FACTEXO) has a positive effect on sectors of activities(DOMACTI)

The prevalentof nondeterminism factors on MFIs activities may hinder efficient operating conditions [38]. The significance of establishing strong internal processes, procedures, systems, and tools enhance the performance of these institutions [11,38,43,47,45]. Furthermore, it creates conditions to adequately manage the institutions clients [43].When implemented effectively, it is expected to influence performance and the quality of clients:

- **H₃**: Non-determinism (FACTEND) has a positive effect on performance (PERFORM)
- **H₄**: Non-determinism (FACTEND) has a positive effect on sectors of activities (DOMACTI)

Performance increase will irrevocability strengthen MFIs position and capability to operate as going concern [11,22].Earnings and positive social impacts will improve as result of putting adequate governance measures and

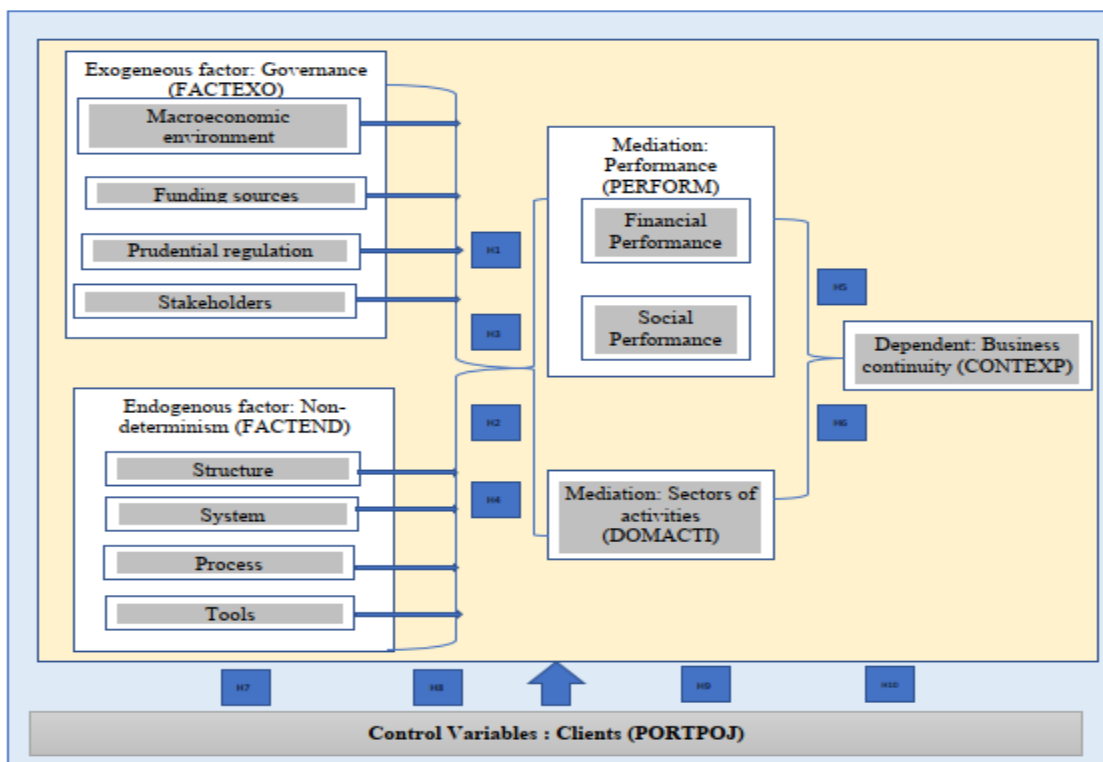
mechanisms to manage nondeterminism factors[43,47].Strong social and financial performance in addition to impactful sectors of activities will result in MFIs resilience [11,45]. This connection leads to the development of:

- **H5:** Performance (PERFORM) has a positive effect on business continuity (CONTEXP)
- **H6:** Sectors of activities (DOMACTI) have a positive effect on business continuity (CONTEXP)

To be profitable and sustainable, MFIs seek effective partnerships from clients [15,17,22]. When these partnerships are conducted effectively, it provides appropriate ground for MFIs to establish themselves as reputable institutions that would not experience business interruption [9,10,29,39].Avoiding disruption, increasing resilience and healthy financial outlook are facilitated by the quality of clients that cooperate with MFIs [41,42.50]. The above analysis lead to the following hypotheses:

- **H7:** Clients (PORTPROJ) has a positive effect on business continuity (CONTEXP)
- **H8:** Clients (PORTPROJ) have a positive effect on performance (PERFORM)
- **H9:** Clients (PORTPROJ) has a positive effect on sectors of activities (DOMACTI)
- **H10a:** Clients (PORTPROJ) have a positive effect on governance (FACTEXO)
- **H10b:** Clients (PORTPROJ) have a positive effect on nondeterminism (FACTEND)

Figure1: Conceptual Framework



Source: Author

Consequently, subsequent section intends to validate hypotheses of the theoretical model through the methodology that is adopted.

4. Methodology

Population of this study comprises all the MFIs that are in operation in Togo. In reference to data collected in July 2019, the number of microfinance institutions operating in Togo is 191. This study attempts to obtain a comprehensive picture on governance, performance, nondeterminism impacting business continuity of these institutions. Questionnaire was used as data collection technique in this research. Questionnaire was sent to 191 MFIs out of which 78 responses were received. The response rate is 41 % which is adequate to generalize the results of this

research [55]. The respondents are identified as executives of the MFIs who have appropriate authority and understanding of the challenges these institutions are facing.

There are four sections in questionnaire that includes 74 measurement items to which respondents are asked to rate using 7-point Likert scale, with 1 ‘indicating strongly disagree’ and 7 ‘strongly agree’ [54]. The questionnaire was pre-tested with five participants, who are executives of MFIs. These executives are chief executive officers, chief operating officers, chief financial officers, vice presidents and chief audit executives who are involved in defining the MFIs strategies. Questionnaire completed by the respondents is considered the source data. Data is then arranged and transposed for better analysis.

The Partial Least Square (PLS) – Structural Equation Modelling (SEM) was used to review the relationship between the data [52-56]. It permits a series of multiple regression equations which examines the structure of inter relationships between constructs. The equations reveal the entire relationships between independent and dependent variables implicated in the analysis. The endogenous variables are explained in the relationship defined by the effect of governance, nondeterminism, clients, and performance on MFIs business continuity. The SEM process includes hypothesis testing is enabled by WarpLS 6.0 version. Conceptualisation of the model, determination of algorithm analysis, determination of resampling procedure, delineation of path diagram and evaluation are stages that are considered when PLS-SEM is utilized in WarpPLS 6.0 version. These steps are utilized to assess the relationship between the indicator variables and their corresponding constructs.

The methodology used to measure the influence of factors effects on MFIs business continuity indicate that this an empirical research. The next section is then dedicated to analysing the results of PLS-SEM model.

5. Results

Evaluation of PLS-SEM model requires exploring the results of the latent independent variables, the effect, and the significance of the regression coefficients (path coefficient) of the model. The analysis of the reliability, the validity and the dimensionality of each construct of the conceptual model from the results of the exploratory factor analysis aim to assess the Average Variance Extracted (AVE), the quality of the fit of the model through the Tenenhaus GoF value (GoF), reliability measures as well as correlations between constructs that are determined by the strength of the Simpson's paradox ratio [52-56].

The statistical suppression ratio (SSR) indicates whether the model is exempt from statistical suppression and it occurs when the absolute value of the beta coefficient (β) is greater than the correlation between two associated latent variables. Finally, the non-linear bivariate causality (NLBCDR) is the last index assessing the effectiveness of the model. It indicates whether the beta coefficients (β) associating two variables vary according when use non-linear algorithms [52-56].

5.1. Measurement Model and Assessment

Evaluation of measurement model is performed to review reliability and validity of indicators representing latent constructs in this research. According to Hair et al. [52], the measurement of reliability and validity through reflective constructs should focus on two important components that are convergent validity and discriminant validity. The convergent validity assesses the factor loadings (value is > 0.7), composite reliability (value is > 0.7), and Average Variance Extracted (AVE) (value is > 0.5). The discriminant validity evaluates cross loading with Average Variance Extracted (AVE) root square [52-56].

According to Hair et al. [52], convergent validity refers to the extent to which a measure correlates positively with alternate measure of the same construct. Table 2 presents details of each construct used in the conceptual framework. The composite reliability is verified according to the threshold value. This is done by verifying the indicator reliability values.

Table 2: Convergent Validity: Construct Reliability and Validity

<p>* Latent variable coefficients * *****</p>
--

R-square coefficients					
FACTEXO	FACTEND	DOMACTI	PORTPRO	PERFORM	CONTEXP
0.349	0.027	0.365		0.655	0.363
Adjusted R-squared coefficients					
FACTEXO	FACTEND	DOMACTI	PORTPRO	PERFORM	CONTEXP
0.341	0.014	0.340		0.641	0.338
Composite reliability coefficients					
FACTEXO	FACTEND	DOMACTI	PORTPRO	PERFORM	CONTEXP
0.489	0.254	0.536	0.000	0.437	0.829
Cronbach's alpha coefficients					
FACTEXO	FACTEND	DOMACTI	PORTPRO	PERFORM	CONTEXP
0.537	0.412	0.270	0.077	0.340	0.589
Average variances extracted					
FACTEXO	FACTEND	DOMACTI	PORTPRO	PERFORM	CONTEXP
0.318	0.192	0.330	0.256	0.277	0.709
Full collinearity VIFs					
FACTEXO	FACTEND	DOMACTI	PORTPRO	PERFORM	CONTEXP
1.813	1.177	1.647	3.120	1.140	2.974
Q-square coefficients					
FACTEXO	FACTEND	DOMACTI	PORTPRO	PERFORM	CONTEXP
0.350	0.169	0.323		0.597	0.621
Minimum and maximum values					
FACTEXO	FACTEND	DOMACTI	PORTPRO	PERFORM	CONTEXP
-1.709	-1.649	-1.496	-1.794	-2.259	-1.590
1.318	1.418	1.249	1.422	1.326	
1.576					
Medians (top) and modes (bottom)					
FACTEXO	FACTEND	DOMACTI	PORTPRO	PERFORM	CONTEXP
0.186	-0.464	0.127	0.006	0.040	-0.004
1.318	-0.705	1.249	-1.044	-0.184	-
1.590					
Skewness (top) and exc. kurtosis (bottom) coefficients					
FACTEXO	FACTEND	DOMACTI	PORTPRO	PERFORM	CONTEXP
-0.223	0.165	-0.222	-0.175	-0.812	-0.193
-1.208	-1.375	-1.472	-1.193	0.070	-0.962
Tests of unimodality: Rohatgi-Székely (top) and Klaassen-Mokveld-van Es (bottom)					
FACTEXO	FACTEND	DOMACTI	PORTPRO	PERFORM	CONTEXP
No	No	No	Yes	Yes	
Yes,	Yes	No		Yes	Yes Yes
Tests of normality: Jarque-Bera (top) and robust Jarque-Bera (bottom)					
FACTEXO	FACTEND	DOMACTI	PORTPRO	PERFORM	CONTEXP
Yes	No	No	Yes	No	Yes
Yes	Yes	Yes	Yes	Yes	

Source: WarpPLS 6.0 results – Primary data are processed (2019)

The Average Variance Extracted (AVE) value of each construct are below the threshold (value is > 0.5) except for business continuity (0.709), and consequently it does somehow satisfy the convergent validity term. Table 2 shows that Composite Reliability value of each construct are below the threshold (value is > 0.7) except for business continuity (0.829), and consequently it does somehow satisfy the term of internal consistency[53,54,56].

Table 3: AVE Root-Squared and Cross-Constructs Correlation

* Correlations among latent variables and errors *

Correlations among l.vs. with sq. rts. of AVEs

	FACTEXO CONTEXP	FACTEND	DOMACTI	PORTPRO	PERFORM	
FACTEXO	0.564	0.102	-0.065	0.585	-0.108	0.648
FACTEND	0.102	0.438	0.330	-0.012	0.031	0.128
DOMACTI	-0.065	0.330	0.575	-0.368	-0.248	-0.014
PORTPRO	0.585	-0.012	-0.368	0.506	-0.075	0.732
PERFORM	-0.108	0.031	-0.248	-0.075	0.526	-0.189
CONTEXP	0.648	0.128	-0.014	0.732	-0.189	0.842

Note: Square roots of average variances extracted (AVEs) shown on diagonal.

Source: WarpPLS 6.0 results – Primary data are processed (2019)

Table 3, presents an overview of the result of analysis on AVE root-squared, compared with cross-constructs. The results indicate that AVE root-squared value of each construct is higher than cross-constructs correlation value, and consequently every construct in this research has fulfilled discriminant validity term [53,54].

5.2. Structural Model and Evaluation

The structural model is used to predict relationship of variables by examining variances explained by these variables. It is also used to evaluate the significance level of P-value [54]. It is therefore utilized for hypothesis testing. Hypothesis from Figure 1 are then tested and evaluated by the structural model. Evaluation of constructs relationship must be preceded by evaluation of goodness-of-fit in our research model[56]. The results of this evaluation are shown in Table 4.

Table4: Goodness-of-Fit of Structural Model

Model fit and quality indices
Average path coefficient (APC)=0.399, P<0.001
Average R-square (ARS)=0.352, P<0.001
Average adjusted R-squared (AARS)=0.335, P<0.001
Average block VIF (AVIF)=1.268, acceptable if <= 5, ideally <= 3.3
Average full collinearity VIF (AFVIF)=1.979, acceptable if <= 5, ideally <= 3.3
TenenhausGoF (GoF)=0.349, small >= 0.1, medium >= 0.25, large >= 0.36
Sympson's paradox ratio (SPR)=0.727, acceptable if >= 0.7, ideally = 1
R-square contribution ratio (RSCR)=0.884, acceptable if >= 0.9, ideally = 1
Statistical suppression ratio (SSR)=0.818, acceptable if >= 0.7
Nonlinear bivariate causality direction ratio (NLBCDR)=0.818, acceptable if >= 0.7

Source: WarpPLS 6.0 results – Primary data are processed (2019)

Table 4 indicates that research model has a good fit. The Average path coefficient (APC) = 0.399, the Average R-square (ARS) = 0.352 and the Average adjusted R-square = 0.335 with P-value at significance level at P<0.001. The values of the Variance inflation factor (variance inflation factor - VIF) are 1.268 and 1.9779. These values are within the acceptable threshold (Average block VIF (AVIF)=1.268, acceptable if <= 5, ideally <= 3.3). The Average full collinearity VIF (AFVIF)=1.979, acceptable if <= 5, ideally <= 3.3) as shown in Table 3. This indicates that there is no multicollinearity problem across indicators and across variables. The Goodness-of-fit (GoF) is valued at 0.349 (<0.36), which means that model has close to good fit if not good fit. All values of SPR = 0.727, RSCR = 0.884, SSR = 0.818 and NLBCDR = 0.819 are acceptable. Further to this conclusion, results indicate that there is no causality issue in the model [54].

Results of estimated constructs relationship are given in table 4 and Figure 2 below. Estimated path coefficient and p-values exhibited that external governance factors have a significant and positive effect on performance proved by P-value < 0.01 and path coefficient value of 0.51. It can therefore be said that Hypothesis 1 is supported negatively. Likewise, External governance factors have a significant and positive effect on sectors of activities evidenced by P-value < 0.05 and path coefficient value of 0.20, and thus Hypothesis 2 is supported positively. These results are supported by Hartarska[11]and McConaghy[16]findings proving that governance and nondeterministic factors have a considerable impact on performance.

Relative to nondeterminism factors, results demonstrated significant and positive effect on performance proved by P-value >0.1 and path coefficient value of 0.09. It can therefore be said that Hypothesis 3 is not supported. Nondeterminism factors have a significant and positive effect on sectors of activities evidenced by P-value < 0.01 and path coefficient value of 0.46, and thus Hypothesis 4 is supported positively. These results are supported by Hartarska[11]and McConaghy[16] findings proving that governance and nondeterministic factors have a considerable impact on performance.

Performance characteristics have a negative effect on the MFIs ability to operate as going concern. This is justified by P-value < 0.05 and path coefficient value of 0.17, and hence Hypothesis 5 is supported.

Tableau5:Results of Estimated Constructs Relationship

Description Path	Hypothesis	Path coefficient β	Significance levels (P value)	Conclusion
FACTEXO - PERFORM	H1	0.51***	0.01	Support
FACTEXO-DOMACTI	H2	0.20**	0.03	Support
FACTEND-PERFORM	H3	0.09	0.22	Not support
FACTEND-DOMACTI	H4	0.46***	0.01	Support
PERFORM-CONTEXP	H5	0.17**	0.05	Support
DOMACTI-CONTEXP	H6	0.28***	0.01	Support
PORTPRO-CONTEXP	H7	0.58***	0.01	Support
PORTPRO-PERFORM	H8	0.88***	0.01	Support
PORTPRO - DOMACTI	H9	0.44***	0.01	Support
PORTPRO-FACTEND	H10a	0.59***	0.01	Support
PORTPRO-FACTEXO	H10b	0.16**	0.06	Support
Significance levels at * = $p < .10$; ** = $p < .05$; *** = $p < .001$, respectively.				

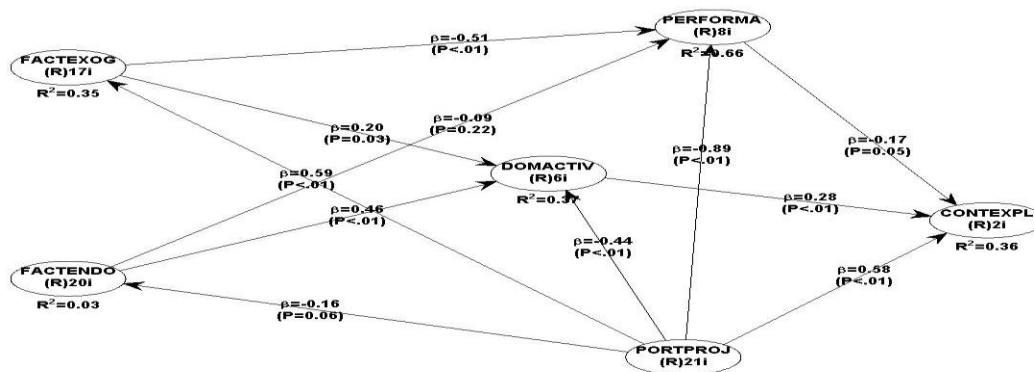
Source: WarpPLS 6.0 results – Primary data are processed (2019)

Sectors of activities characteristics results demonstrated significant and positive effect on performance (P-value >0.1 and path coefficient value is 0.28). Hypothesis 6 is supported. Clients characteristics results demonstrated significant and positive effect on business continuity (P-value >0.1 and path coefficient value is 0.58). Hypothesis 7 is supported. Clients characteristics results demonstrated significant and positive effect on performance (P-value >0.1 and path coefficient value is 0.88). Hypothesis 8 is supported. Clients characteristics results demonstrated significant and positive effect on sectors of activities (P-value >0.1 and path coefficient value is 0.44). Hypothesis 9 is supported. Clients characteristics results demonstrated significant and positive effect on external governance factors (P-value >0.1 and path coefficient value is 0.59). Hypothesis 10a is supported.

Clients characteristics results demonstrated significant and positive effect on internal nondeterministic factors (P-value >0.1 and path coefficient value is 0.16). Hypothesis 10b is supported.

As indicated by Figure 2, the estimated value of the regression coefficients shows the strength of the connections or the strength of the influences indicated by the correlation links. The data are used in this research to test the parameters of the structural model through the weights or path coefficients to determine the adequacy of the model. The predictive value of endogenous variables was highlighted using the path coefficients and as for exogenous variables, the correlation between the predictive values and the values of the constructs suggests that the structural model of this study has acceptable predictive validity.

Figure 2: Structural Model



Source: WarpPLS 6.0 results – Primary data are processed (2019)

6. Discussion

This research has demonstrated a fit between the proposed model and the data based on quality indices presented in Table 4. The findings of this study show that clients characteristics have a direct influence on MFIs busines continuity. Similarly, Elloumi and Kammounles[23], Kalra et al. [50], Pearlman [42], Moyoukou and Kertous[22] and Trabelsi and Chichti[23] indicate that clients predict the ability of MFIs to operate as going concern. Elloumi and Koummounles[23] and Moyoukou and Kertous[22] show that values related to the clients’ socio-demographic characteristics such as age, education level and family situation affect the performance and continuity of MFIs. Perlman [42], Alaoui and Tkiout[46] consider that clients are the centrepiece in the strategy of MFIs that can adequately contribute to their longevity.

Sectors of activities embodied by the agricultural, commercial, service, construction, craft, and small businesses have a direct influence on MFIs ability to operate as going concern. Items associated with agriculture have an important influence on the sustainability of MFIs. Miller [57] and Mas [58] show also that sectors of activities have an influence on going concern. Margret and Hoque [19]examine the importance of sectors of activities and conclude that they have a significant impact on going concern. Geiger et al.[59]concur with this view by noting that the risk of defaultis correlated to sectors of activities.

Performance is a significant determinant of going concern[23]. However, the results of our study indicate that performance has a moderately significant effect on going concern. The concept of performance is addressed without distinction between social and financial performance in our research [60]. This treatment of the concept of performance explains the moderate effect it has on business continuity [61]. This moderate effect is justified by the social aspects of performance that are very little considered by the actors of microfinance institutions, because the definition of social performance indicators requires more expertise[60].

The results of our research also show that MFIs are focusing more on financial performance to ensure their ability to operate as going concern[62]. This is corroborated by the findings of Hashemi and Foose[63]as well as the studies of Guarneri et al. [64]which indicate that the determinants of social performance are not measured by MFIs, and they strongly recommend that board members promote the integration of social performance indicators in

accountability. Ekka[65] indicates that social performance is positively correlated with going concern, if only MFIs put in place appropriate indicators to measure its effects.

Robinson and Hartarska[1,11]note that financial performance, which is regularly monitored and reported, provides more insight relative to the financial health of the MFIs. The financial health is an important indicator used to measure going concern[19].Moreover, our research findings indicate that both exogenous and endogenous factors have a direct and somehow indirect effect on going concern. However, studies by Hartarska[11]and McConaghy[16] indicate that governance factors such as resources, systems and processes are critical to going concern. These results provide some support for the utility theory model (direct and indirect relationships) in determining factors impacting MFIs business continuity.

7. Conclusion

The objective of this research is to conduct empirical test and validate the effects of governance and nondeterminism factors on MFIs business continuity. It aims to operationalize measures that will improve MFIs ability to operate as going concern. Consequently, the conceptualization of the research model helps verify the validity of the constructs relative to the continuity of operations. The results suggest that performance, clients, and sectors of activities have positive impact on MFIs ability to operate as going concern. However, governance and nondeterminism factors have indirect impact on these institutions business continuity.

This research contributes to the advancement of microfinance theory and literature on two levels: managerial and theoretical. The theoretical contribution consists in validating the measurement dimensions used to assess the hypotheses that contribute to MFIs' ability to operate as going concern. The confirmatory analyses noted that direct and indirect relationships of the research model prove that the theory behind our research is validated in the operational environment of MFIs.

The managerial or practical contribution takes the form of adaptive modes that can better structure the rationale for considering nondeterminisms and governance factors that positively and directly influence the performance and sectors of activity of MFIs.

Due to the small number of respondents, analysis could not be conducted according to the participants locations and size of their institutions. Another limitation is that the research focused primarily on some determinants that we deemed relevant, but which reflect a partial view of the governance, sectors of activity and socio-demographic factors of clients. The use of a self-assessment questionnaire makes causal inferences difficult because of the cross-sectional data. It should be added to this constraint that this scale was only tested on samples taken from MFIs in Togo. The data collected was done through the APSFD and direct interaction through interviews with respondents would be desirable. These limitations should be addressed in future similar research.

References

- [1] Robinson, S, M. *The Microfinance Revolution: Sustainable Finance for the Poor*: Marguerite Robinson; Washington, D.C.: The World Bank, 2001, pp. 304
- [2] Ledgerwood, J., Gibson, A. *The Evolution of Financial Landscape. The New Microfinance Handbook. A Financial Market System Perspective. The World Bank, 2012, p15-48.*
- [3] Rutherford, S., Collins, D., Johnson, S. *Clients. The New Microfinance Handbook. A Financial Market System Perspective. The World Bank, 2012, p49-70.*
- [4] Staschen, S., Nelson, C. *The Role of Government and Industry in Financial Inclusion. The New Microfinance Handbook. A Financial Market System Perspective. The World Bank, 2012, p71-96*
- [5] Earne, J., Sherk, L. *Funding. The New Microfinance Handbook. A Financial Market System Perspective. The World Bank, 2012, p379-412.*
- [6] Lauer, K., Staschen, S. *Regulation. The New Microfinance Handbook. A Financial Market System Perspective. The World Bank, 2012, p413-436.*
- [7] Ferrand, D. *Building Inclusive Financial Markets. The New Microfinance Handbook. A Financial Market System Perspective. The World Bank, 2012, p459-478.*

- [8] Staschen, S., Nelson, C. The Role of Government and Industry in Financial Inclusion. The New Microfinance Handbook. A Financial Market System Perspective. The World Bank, 2012, p71-96
- [9] Sagamba S., Schneider, A. Do Microloan Officers Want to Lend to the Less Advantaged? Evidence from a Choice Experiment. World Development Bank, 2013,42:182-198
- [10] Aubert, C., Janvry, A., Sadoulet, E. Designing credit agent incentives to prevent mission drift in pro-poor microfinance institutions, *Journal of Development Economics*, 90: 2009, 153-162
- [11] Hartarska, V. Governance and Performance of Microfinance Institutions in Central and Eastern Europe and the Newly Independent States. The William Davidson Institute Working Paper, University of Michigan Business School, 2004, no 667.
- [12] Adair, P.; Berguida, I. How do social and financial performance of microfinance institutions interact? A panel data study upon the Mena region (1998-2011). *Savings and Development*.2013,No 1 - XXXVIII
- [13] Cull, R., Asli, D., and Morduch, J. "Financial Performance, and Outreach: A Global Analysis of Leading Microbanks. » *Economic Journal*, 2007,F107-F133.
- [14] Ledgerwood, J., O'Keeffe, G., Arevalo, I. Monitoring and Managing Financial and Social Performance. The New Microfinance Handbook. A Financial Market System Perspective. The World Bank, 2012,p321-350.
- [15] El-Zoghbi, M., Gahwiler, B. The Role of Donors in Financial Inclusion. The New Microfinance Handbook. A Financial Market System Perspective. The World Bank, 2012, p97-110.
- [16] McConaghy, P. Governance and Managing Operations. The New Microfinance Handbook. A Financial Market System Perspective. The World Bank, 2012, p350-376.
- [17] Kaur, P. Efficiency of Microfinance Institutions in India: Are They Reaching the Poorest of the Poor? *Vision: The Journal of Business Perspective*, Vol.20 (1), 2016, pp.54-65
- [18] Camara, S; Crossler, R; Midha, V; Wallace, L. Teaching Case: Bank Solutions Disaster Recovery and Business Continuity: A Case Study for Business Students *Journal; West Lafayette* Vol. 22, N° 2, 2011, : 117-122.
- [19] Margret, J.; Hoque, Z. Business continuity in the face of fraud and organizational change. *Australian Accounting Review*; 2016, 26 (1): 345-363
- [20] Veysey, S. Companies recognize catastrophe risks but fail to prepare. Survey, Chicago. 2013, P.21
- [21] Geiger, M, A., Raghunandan, K., and Riccardi, W.The Global Financial Crisis: U.S. Bankruptcies and Going-Concern Audit Opinions. *Accounting Horizons*, Vol. 28, No. 1, 2014, pp. 59-75.
- [22] Cull, R., Asli, D., and Morduch, J. (2007). "Financial Performance, and Outreach: A Global Analysis of Leading Microbanks. » *Economic Journal*, F107-F133.
- [23] Elloumi, A., et Kammounles, A. Les déterminants de la performance de remboursement des microcrédits en Tunisie. *Annales of Public and Coopérative Economics*,2013, 84:3.
- [24] Campbell, J, E., et Mutchler, J, F. The « Expectations Gaps » and Going-Concern Uncertainty. *Accounting Horizons*, Vol.2, Iss. 1988, 1, 42
- [25] Levitan, A, S. Predicting failure: The going concern assumption - University of Kentucky, ProQuest Dissertations Publishing, 1983. 8401362.
- [26] Venuti, E, K.The Going-Concern Assumption Revisited: Assessing a Company's Future Viability, *CPA Journal*. May2004, Vol. 74 Issue 5, 2004, p40-43. 4p.
- [27] Medori, D. and Steele, D. "A framework for auditing and enhancing performance measurement system", *International Journal of Operations and Production Management*, Vol. 20, No. 5, 2000, pp 520-533.
- [28] Delery, J. E., & Doty, D. H. Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of Management Journal*, 39(4), 1996, 802–835.
- [29] Fila, J. European Microfinance - Relevance, Efficiency and Impact, *Comparative Economic Research*, Volume 18, 2015, Number 4.
- [30] Mia Md., A., Chandran, V. G. R. Measuring Financial and Social Outreach Productivity of Microfinance Institutions in Bangladesh. *Soc Indic Res*, 2016, 127: 505-527
- [31] Guérin, G. et T. Wils. « La gestion stratégique des ressources humaines ». *Gestion, revue internationale de gestion*, 27 (2), 2002, 14–23.
- [32] Robbins, S., DeCenzo, D., (2004). *Management, l'essentiel des concepts et pratiques*, 4ème édition, Pearson, 521 pages
- [33] Armendariz de Aghion, B.; Morduch, J. *The Economics of Microfinance*, MIT Press, 2005, 360 pages.
- [34] Mintzberg, H. Patterns in Strategy Formation. *Management Science*, 24, 1978, 934-948.
<http://dx.doi.org/10.1287/mnsc.24.9.934>

- [35] Labie, M. Réflexions préliminaires pour une approche éthique de la gestion des organisations de microfinance. *Éthique et économique / Ethics and Economics*, 2007, 5 (1).
- [36] Klir G, J., & Folder, T, A. (1988). *Fuzzy Sets, uncertainty, and information*. Prentice-Hall, Englewood Cliffs, New Jersey.
- [37] Smithson, M. (1989). *Cognitive Science. Ignorance and uncertainty: Emerging paradigms*. New York, NY, US: Springer-Verlag
- [38] Tchuigoua, H, T., et Nekhili, M. Gestion des risques et performance des institutions de microfinance / Risk management and performance of microfinance institutions. *Revue d'Économie Industrielle*; Brussels Iss. 138, 2012, 127-148.
- [39] Lanha, M. Résolution des problèmes d'information en microfinance, Analyse à partir de la stratégie de Vital-Finance Bénin. *Mondes en développement*, No 119, 2002, p.47-62
- [40] Hugon, P. « Incertitude, précarité et financement local », *Revue Tiers Monde*, tome 37, n° 145, 1990, p. 13-49.
- [41] Gale, W. Collateral rationing and government intervention in credit market. In R. Genn Hubbard, Editor, *Asymmetric Information, Corporate Finance, and Investment*, 1990, pp. 43-61. University of Chicago Press. Chicago.
- [42] Azondékon, H, S. Construction de Relations de Préférence floues dans un contexte non déterministe avec Information Incomplète. Thèse de Doctorat. Université Laval, 1991.
- [43] Trabelsi, M. A., Chichti, J. Les institutions de microcrédit et la lutte contre la pauvreté : l'initiative d'Enda inter-arabe en Tunisie. *La Revue des Sciences de Gestion, Direction et Gestion*, 2011, no 249-250
- [44] Rashem, M, H. Factors Influencing the Growth and Penetration of Microfinance Institutions: A Case of Egypt. *Academy of Accounting and Financial Studies Journal*. Volume 22, 2018, Special Issue.
- [45] Pinz, A., Helmig, B. Success Factors of Microfinance Institutions: State of the Art and Research Agenda. 2015, *Voluntas* 26,488–509. <https://doi.org/10.1007/s11266-014-9445-2>
- [46] Alaoui, Y.; L., Tkiout, M. Assessing the performance of microfinance lending process using AHP-fuzzy comprehensive evaluation method: Moroccan case study. *International Journal of Engineering Business Management*, 2017, Volume 9:1-11
- [47] Hssaineu, K., Al-Najjar, B. Understanding the Déterminants of Risk Metrics/ISS Ratings of the Quality of UK Companies' Corporate Governance Practice. *Canadian Journal of Administrative Sciences / Revue Canadienne des sciences administratives*. 2012, 29: 366-377
- [48] Sengupta, R., Aubuchon, C, P. The Microfinance Revolution: An Overview. *Federal Reserve Bank of St. Louis Review*, 90 (1). 2008, Pp. 9-30
- [49] Pearkman, S. Too Vulnerable for Microfinance? Risk and Vulnerability as Determinants of Microfinance Selection in Lima. *Journal of Development Studies*, Vol. 48, No. 9, 2012, 1342-1359
- [50] Karla, V., Mathur, H. P., Rajeev, P. V. Microfinance client's awareness index: A measure of awareness and skills of microfinance clients. *IIMB Management Review*, 27. 2015, 252-266
- [51] Lebart, L. and Marineau, A. and Piron, M. (1995) *Statistique exploratoire multidimensionnelle*, Paris
- [52] Hair, JF., Ringle CM., Sarstedt, M. PLS-SEM: Indeed, a silver bullet. *Journal of Marketing Theory and Practice*. 19: 2011, 139-152
- [53] Tabachnick, Barbara G., et Fidell, Linda S. *Using Multivariate Statistics (5e édition)*.2006. Boston: Allyn and Bacon.
- [54] Hair, J, F., Black, W.C., Babin, B.J., et Anderson. R.E. *Multivariate Data Analysis (7th edition)*, Upper Saddle River, N.J.: 2009. Prentice Hall, 819p.
- [55] Sekaran, U.& Bougie, R. *Research methods for business: A skill building approach*. Seventh Edition, 2016. John Wiley & Sons, Inc.
- [56] Tenenhaus M, Vinzi, V., Chatelin, Y., Lauro, C. PLS path modeling. *Comput Stat*; 2005, 48: 159-205
- [57] Miller, C. Agriculture Finance. *The New Microfinance Handbook. A Financial Market System Perspective*. The World Bank, 2012, p231-248
- [58] Mas, I. Beyond Products: Building Integrated Customer-Experiences on Mobile Phones. *The New Microfinance Handbook. A Financial Market System Perspective*. The World Bank, 2012, p299-319
- [59] Geiger, M, A., Raghunandan, K., and Riccardi, W. The Global Financial Crisis: U.S. Bankruptcies and Going-Concern Audit Opinions. *Accounting Horizons*, Vol. 28, No. 1, 2014, pp. 59-75.

- [60] Bédécarrats, F., Baur, S., Lapenu, C. Combining Social and Financial Performance: A Paradox? Workshop paper commissioned for the 2011 Global Microcredit Summit, Valladolid, Spain, November 2011, 14-17
- [61] Pistelli, M. Social performance standards. Report MIX, 2010, Washington, DC
- Campion, A., Linder, C., Knotts, K. E. Putting the Social into Performance Management: A Practice-Based Guide for Microfinance. Brighton: Institute for Development Studies. 2008, P.227.
- [62] Gonzales, A. Microfinance Synergies and Trade-offs: Social vs Financial performance outcomes ins 2008., Report MIX, 2010, Washington, DC
- [63] Hashemi, S., Foose, L. Beyond good intentions: measuring the social performance of microfinance institutions. Focus Note 41, CGAP, 2007, Washington, DC
- [64] Guarneri, M., Moauro, A., Spaggiari, L. Motivating your board of directors to actively promote and deepen the social mission. Workshop paper commissioned for the 2011 Global Microcredit summit, Valladolid, Spain November 2011, 14-17
- [65] Ekka, R., (2011). Risk management: Integrating SPM into microfinance capacity building. Guidance note, Impact Consortium, 2011, Washington, DC