MICROFINANCE PERFORMANCE IN A CHALLENGING ECONOMY: EVIDENCE FROM NIGERIA

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ABSTRACT
Following the challenges posed by increasing wave of global coronavirus pandemic, this study examines Microfinance performance in a challenging economy using monthly time series data from January, 2019 to June, 2021. The study employs the ARDL technique of analysis focusing on the indices of profitability, deposits, credits, interest rates and inflation using monthly data from statistical reports of Microfinance banks/institutions and Returns to Central bank of Nigeria and the Nigeria Deposit Insurance Corporation. The findings reveal that the profitability and economic conditions of microfinance banks/institutions degenerated during the period under study. The results also show that loan portfolio significantly increased during the period due to non-performing status. Expansion degenerates and this affects the profit rate. The work recommends that the government through the Central Bank should provide adequate bail out or financial support to cushion the effect of the challenging environment on the loss of income to the institutions.
Keywords: Challenging environment, Economic performance, Microfinance, Profitability,
JEL Codes; C23, C33, C51, E27

1 INTRODUCTION
Microfinance is evolving with dominant role in the financial sector of any economy to drive financial inclusion. Microfinance institutions (MFIs) provide financial support to poor and low-income households and microenterprises that have been excluded from mainstream financial services on the account of stringent formal requirements. However, the deleterious Coronavirus (COVID-19) pandemic with fatalities at global, national and local levels triggered economic downturn in many economies and colossal shock to financial institutions including microfinance. The pandemic has placed significant pressure on many microfinance providers and their customers, and it is on-going. Continued stress on microfinance customers and opacity around the credit quality of microcredit portfolios indicate that a solvency crisis may be looming. This has become worrisome and a source of deep concern to economists, policy makers and the citizens at all levels. Reports from National Centre for Disease Control (NCDC 2020) and Worldometer report (2020) show a rising trend in the cases of infected persons on daily basis depicting the catastrophic transmission nature of the pandemic across the globe. COVID-19 which was first

reported in Wuhan, China in December 2019 has spread in varying wave of infections and frequency of transmission. The pandemic had devastating effects on the global economy which contracted sharply by 3 per cent, while the economy of SSA contracted by 1.6 per cent in 2020 (World Bank, 2020). Similarly, businesses in Africa were significantly affected by the COVID-19 pandemic as high proportion of businesses went go under. Covid 19 affected the entire world socially, politically and economically impacting the economic activities of enterprises and organizations including microfinance institutions. More troublesome is the ravaging spike of the second wave of the corona virus, the delta variants and Omicron mutation with the fear of increased infections, customers' loss of revenue, inherent economic recession and heightened insecurity which in turn reduces consumption and spending (Ngutsav & Ijirshar 2020). Thus, Covid-19 crisis has affected adversely several sectors of the economy such as manufacturing, sports, agricultural, education, banking, aviation, hospitality and transportation etc. Covid-19 pandemic appeared to have permanently changed the mode of life, wherebycovid-19 mitigating measures have become a unifying world order. All spheres of human life are greatly affected and adversely too (Okonkwo, Ogwuru, Echeta & Manasseh, 2022).

The pandemic has had a devastating effect on the Nigerian economy. In fact, three months after the outburst of the pandemic, the economic growth of Sub-Saharan Africa regressed from +2.4% in 2019 to between –2.1% and –5.1% in 2020 (Calderon, et al 2020), with varying degrees of recession. Although, African countries have put a number of control measures including: closure of schools, restriction of domestic and international travel, use of protective equipment and hand hygiene as well as imposition of curfews, lockdowns and use of vaccines to check the spread of the virus, the pandemic is still ravaging in its spread (World Bank, 2020). These measures have affected SSA economies in various ways including global supply chains. This is likely to have implications for microfinance survival in the new normal with emerging issues as it affects a whole range of economic variables. The following questions are considered germane to this study: What is the profit performance of Microfinance in Nigeria in the face of challenging economic environment? What policies and strategies can put in place to improve the profitability of Microfinance in Nigeria? What are the emerging issues? This study examines microfinance performance in a challenging environment: Evidence from Nigeria.

This study is organized into five sections. Section one is the introduction and section two contains literature review, while section three x-rays the research methods used; Section four is the analysis of results of findings. Finally, section five contains summary, conclusion and recommendations as well as suggestions for further study.

2 LITERATURE REVIEW

2.1 Conceptual Review

Microfinance belong to the sub sector driven by microfinance institutions and microfinance banks which carter for individuals and small businesses that could meet up the credit requirements of the formal financial sector of the economy. Microfinance is a form of financial intermediation, which focuses on poverty alleviation. In practice, microfinance is much more than disbursement, management and collection of little bits of loans; it includes the flexible processes and structures by which financial services are delivered to owners of micro enterprises and individual households (Ehigiamusoe, 2005). Modern microfinance has its root in various attempts by donor agencies and government in developing countries to enhance income earning of the small scale farmers and artisans. Microfinance Institutions are not licenced by Central Bank of Nigeria (CBN) but registered with Corporate Affairs Commission (CAC). They can do the business of granting loans

to their customers but they are not allowed to collect deposit from the general public except for equity contributions or mandatory deposits related to the loans they are giving. Their deposits are not insured by Nigerian Deposit Insurance Corporation (NDIC). Microfinance banks are licensed by CBN and registered by CAC. They collect deposits from the general public and do the business of granting loans to their customers. Their deposits are not insured by NDIC. For the purpose of the this study, the generic name microfinance institutions (MFIs) refer to both microfinance banks and microfinance institutions.

Coronaviruses diseases is an infectious disease caused by severe acute respiratory syndrome coronavirus which was first discovered in Wuhan, China in December 2019 and has become a global pandemic (Yonar et al 2020) and (Stanley et al 2020). With its high mutation rate, coronaviruses are zoonotic pathogens that are present in humans and various animals causing infections in respiratory, gastrointestinal, hepatic and neurologic systems (Gilbert 2020).

2.2 Theoretical Review

Risk and Uncertainty Bearing Theory of Profit:

Profits are rewards due to the entrepreneur for bearing risks of uncertainty in changing business environments in the economy. This functional theory opines that profits arise as a result of uncertainty of future. Entrepreneurs have to undertake the work of production under conditions of uncertainty. In advance they have to make estimates of the future conditions regarding demand for the product and other factors which affect price and costs. They realize the value of output produced by the hired factors after it has been produced and sold in the market. But between the times of contracts and sale of output many changes may take place which may upset anticipations for good or for worse and thereby give rise to profits, positive and negative. It should be noted that positive profits accrue to those entrepreneurs who make correct estimate of the future or whose anticipations prove to be correct. Those whose anticipations prove to be incorrect will have to suffer losses. Causes of uncertainty, apart from the innovations which are introduced by the entrepreneurs themselves include: changes in Government policies and laws, movements of prices as a result of inflation and depression such as the present scenario caused by corona virus pandemic amongst others. F.H. Knight who propounded the uncertainty theory of profits draws distinction between insurable and non-insurable risk. Risks of factory catching fire, occurrence of any theft or accident which may cause huge losses to the entrepreneur are the kinds of risk which can be ensured against on payment of an insurance premium which forms a part of the cost of production. But there are risks that cannot be insured such as covid 19 pandemic which constitutes non-insurable risk.

Managerial Efficiency Theory of Profits:

This theory asserts that some firms are more efficient than others in terms of management of productive operations and successfully meeting the needs of consumers for successful outcomes that generate profits. Firms with average level of efficiency earns average rate of return. Firms with higher managerial skills and production efficiency are required to be compensated by above-normal economic profits. This theory is often regarded as compensatory theory of profits.

Innovations Theory of Profits:

The theory posited that economic profits arise because of successful innovations introduced by the entrepreneurs. Joseph Schumpeter asserted that the main function of the entrepreneur is to introduce business innovations in the economy and profits are reward for performing this function. Innovations can be divided into two categories. First types of innovations are those which reduce

cost of production such as the introduction of a new machinery, new and cheaper technique or process of production, exploitation of a new source of raw materials, a new and better method of organizing the firm. Second types of innovations are those which increase the demand for the product such as the introduction of a new product, a new variety or design of the product, a new and superior method of advertisement, and discovery of new markets amongst others. Successful innovations will give rise to profits.

2.3 Empirical Review

Some of the reviewed studies suggest that a pandemic-induced economic downturn will put pressure on banks' loan portfolios and can lead to a large withdrawal of deposits, particularly in poor and developing countries (Beck, 2020; Ogbebor & Ashakah, 2020; Lagoarde-Segot & Leoni, 2013). In line with this view, we expect that the socioeconomic damage caused by COVID-19 should deliver a negative effect on MFI financial performance. Firstly, MFI may experience deterioration in performance as small and medium-sized businesses (SMEs) and vulnerable households, which are among the most exposed to the COVID-19, have been struggling to meet their debt obligations. Businesses are likely to generate insufficient cash flow to service their debt owing to factory shutdowns, supply chain disruption, and a sudden fall in demand for goods and services during the pandemic. Secondly, the excessive build-up of non-performing loans arising from the COVID-19 shock will affect sentiment negatively, so a wider decline in confidence in banks by depositors may result in large-scale withdrawals of deposits (Beck, 2020). Thirdly, due to the lockdown operational activities of microfinance were hampered while physical marketing face challenges. Ultimately, MFI profitability measures and survival would be affected

Ajibo, Chukwu and Okoye (2020) investigated Covid-19 and lockdown experiences in Nigeria in 2020. Their findings revealed that Covid-19 had catastrophic impact on the Nigerian economy and individual wellbeing. Furthermore, a qualitative study by Ajibo (2020) examined the effect of Covid-19 on Nigerian socio-economic wellbeing and health sector pandemic preparedness in 2020; the outcome showed that Covid-19 had distressing impact on the socio-economic wellbeing of Nigerians; the health sector was poorly equipped and unprepared to handle the pandemic.

Ngutsav and Ijirshar (2020) asserted that, the COVID-19 pandemic has had a devastating effect on the Nigerian economy in numerous ways, particularly in the supply and demand sides of SMEs. Thus, on the supply-side, firms experience a decrease in the supply of labour, because employees may fall sick, yet they have to look after their children or some dependents, schools are shut down and people's movement are restricted in order to curtail the spread of the pandemic. This situation affects capacity utilization. Also, in terms of demand-side, there is a probability of an abrupt and dramatic loss of demand and in consequence, revenue for SMEs. This limits the ability of SMEs to function, and this leads to serious liquidity shortages. In addition, consumers loss income, there is fear of being infected by the pandemic, as well as fear of uncertainty which makes consumers to reduce spending and consumption. In fact, the effects are further deepened by employees' layoff and inability of companies to pay salaries. Moreover, a lot of businesses have been affected by low demand for their services and products and supply chain disruptions as a result of weakened consumer purchasing power due to the pandemic (Okhankhuele, 2020).

Sopko et al (2020) affirmed that COVID-19 pandemic appears to have had a devastating effect on social security especially in developing economies like Nigeria. They further stated that the pandemic has paralyzed virtually all economic activities of organisations and enterprises, affected the demand and supply sides of the organisations and enterprises and therefore leaving employees with the likelihoods of survival via social security packages. Thus, SMEs have significantly laid

off several employees, reduced their monthly expenses on employees' welfare and worsened the state of social security of workers.

In fact, the world is undergoing a global crisis different from what we are used to in terms of currency, financial and debt crises (Salisu et al., 2020). Markets and investors are facing a high degree of uncertainty due to both financial and physical effects of the pandemic (Baek et al., 2020). The outspread of the pandemic has significantly raised the uncertainty surrounding economic activities and this would upturn the financial institutions' hesitancy to make loans available.

Shruthi & Ramani (2020) carried out a research on statistical analysis of impact of COVID-19 on India's commodity markets, by depending on the current environment and using it to assess the public health actions, fiscal policies, and contracting procedures that were executed during the period. The study evaluated the unpredictability transmission over the financial crisis. Newly established connection in instinct response variance and functions test to everyday data from January 2020 were implied. Statistics were divided into two intervals (pre-COVID period and the post-COVID period) in order to acknowledge the consequence of the food cost crisis.

Salisu et al. (2020) carried out a study on COVID-19 global fear index and the predictability of commodity price returns. In the study, the global fear index (GFI) for the COVID-19 pandemic was subjected to empirical analysis by examining its predictive power in the likelihood of price returns of commodity during the pandemic. All the territories and regions of countries in the globe were considered in construction of the index. The results disclosed an indication of a positive relationship between the global fear index and commodity price returns. This result confirms that commodity returns upsurges as COVID-19 related fear rises.

Udmale et al. (2020) carried out a study on global food security in the context of COVID-19: A scenario based exploratory analysis. The study recognised the foremost players in the world food equilibrium and probable implications of COVID-19 on the cereal supply in the globe and Sustainable Development Goal (SDG) - 2 (zero hunger). The study showed that four developing countries from Asia, fifteen from Africa, six from Oceania and ten from Latin America are the key countries that are prone to changes in food supply shocks. The study came to the conclusion that the present COVID-19 pandemic may probably cause temporary food insecurity across such susceptible countries. In addition, the pandemic's impact may lengthen as a joint effect on food security and upturn poverty, slowdown the economy and impede food access and supply, beyond 2020.

All Continent reported cases of coronavirus. In Africa, Egypt was the first to confirmed covid-19 case on 14 of February, 2020. China is the leading commercial partner for African countries and this accounted for the fast importation of the disease fast spread. Joint external evaluation and SPAR metrics were both designed to quantify every country's functional capability, without accounting for any indirect factors that might compromise the control of developing plagues, like environmental, demographic, political conditions and socioeconomic. Also infectious disease account factors for these and inform epidemic risk index, developed by the EU joint research centre in partnership with World Health Organization to report different effect combined of every country's widespread transmission risk, vulnerability, infrastructure, capacity and coping. Egypt, Algeria, and South Africa were the countries at highest importation risk from China, with moderate to high SPAR capacity scores (87, 76, and 62, respectively) and IDVI (53, 49, and 69, respectively (UNDP 2020). Hitherto, there is no treatment option or vaccine for this viral disease that arose suddenly. In general, with this information, there is no effective treatment to treat coronavirus (COVID-19) infection. SARS-CoV and MERS-CoV particles are being tested for coronavirus in vitro and human based trials (Giordano et al 2020)

The surge of the coronavirus pandemic has been aggravated by the spike of the second wave, delta variants and Omicron mutation which continued unabated with high fatality and severity. This calls for concern to all and sundry. Hence, the researcher delve into the subject matter to examine microfinance performance during the pandemic for possible outcome and policy recommendations.

3 METHODOLOGY

3.1 Theoretical Framework and Model Specification

This study adopted the Risk and Uncertainty Bearing Theory of Profit considering the risk implications of the COVID 19 pandemic on Microfinance performance. We assess MFI performance with respect to financial efficiency by utilizing Autoregressive distributed lags (ARDL) technique on the available data. These data were disaggregated into monthly frequency on E-Views. From profit theory in finance, profitability index is measured by the contribution of input variables of deposits, credits and rate of interest or cost of capital (Basharat, Hudon & Nawaz., 2015). These variables are also influenced by inflationary pressures. Hence, the model specified by this study is given by:

MFIPS = F(MFIDS, MFILS, MFILINTR, INFL) ….. (1)

Where, MFIPS = Microfinance banks/Institutions Profit

MFIDS = Microfinance banks/Institutions Deposits

MFILS = Microfinance banks/Institutions Loans

MFILINTR = Microfinance banks/Institutions Lending interest rate

INFL = Inflation

In its basic form, an ARDL regression model is specify thus:

$$\Delta y_t = \alpha_0 + \beta_i y_{t-1} + \lambda_k \sum_{k=1}^{k} \Delta SR_{k,t-1} + \sigma_k \sum_{k=1}^{k} LR_{k,t-1} + \mu_t \qquad (2)$$

Where: Δ denotes first difference of variable, μ_t is a random "disturbance" term, y_i is the dependent variable, while *SR* is the short-run dynamics of explanatory variables, *LR* is the long-run dynamics of the explanatory variables. $\beta, \lambda \, and \, \sigma$ are the parameters to be estimated; α_0 is the constant parameter (Bahmani-Oskooee. & Fariditavana. 2016)

From equation (2), the ARDL equation for this study is thus:

$$\Delta MFIPS_t = \alpha_0 + \beta_i MFIPS_{t-1} + \lambda_k \sum_{k=1}^{k} \Delta SR_{k,t-1} + \sigma_k \sum_{k=1}^{k} LR_{k,t-1} + \mu_t \quad \ldots\ldots\ldots \quad (3)$$

The ARDL representation of the macroeconomic relationship between the selected variables can be constructed from equation (3) as:

$$\Delta MGIPS_t = \alpha_0 + \beta_1 MFIPS_{t-1} + \lambda_1 MFIDS_{t-1} + \lambda_2 MFILS_{t-1} + \lambda_3 MFILINTR_{t-1} + \lambda_4 INFL_{t-1} + \delta_1 \sum MFIDS_{t-1} + \delta_2 \sum MFILS_{t-1} + \delta_3 \sum MFILINTR_{t-1} + \delta_4 \sum INFL_{t-1} + + ECM_{t-1} + \mu_t \quad \ldots \quad (4)$$

Auto Regressive Distributed Lags (ARDL) Technique was employed because it generates consistent estimates of long- run coefficients that are asymptotically normal, regardless of whether the variables are purely I(0), purely I(1) or mutually co-integrated (Pesaran et al.,2001).

3.2 Data Sources

The data for the study was obtained from Microfinance institutions in Nigeria and the Central bank of Nigeria. The data range of the study range from January, 2019 to June, 2021 using monthly time

series data (30 Observations). The choice of these variables was entrenched on the availability of data and also the researchers interacted with operators and regulators of microfinance institutions for effective coverage in this work.

4 RESULTS AND DISCUSSION OF FINDINGS

This section presents and interprets the ARDL estimation results on the economic impact of coronavirus on microfinance following preliminary tests using descriptive statistics, group stationarity tests and bounds tests.

Descriptive Statistics

Table 1 below provides the descriptive statistics of the variables used for the analysis in order to reveal some underlying features. The table shows that the average monthly lending interest rate is 4.028 with maximum and minimum values of 4.87 and 3.12 respectively from the available data. However, from the field study the MFIs do not have standardized lending rate or thresh hold limit like the commercial banks regulated by the Central bank guideline. The average monthly loan is N186.3962 million naira. The maximum and minimum values of the variable suggest that there is a wide gap during the period under study, perhaps due to the rising non-performing credits caused by the economic downturn from the coronavirus pandemic. This is confirmed by the high standard deviation value of 42.045 which indicate that many of the values are highly dispersed from the mean.

Table 1: Descriptive Statistics

	MFIPS	MFIDS	MFILS	MFILINTR	INFL
Mean	85.60276	57.29414	186.3962	4.028276	17.16345
Median	90.13000	39.53000	186.0100	3.900000	12.56000
Maximum	107.7200	99.63000	263.9400	4.870000	72.84000
Minimum	49.41000	16.81000	108.1100	3.120000	5.390000
Std. Dev.	18.48897	32.71270	42.04530	0.501982	15.39443
Skewness	-0.712621	0.375249	0.020794	0.254182	2.493199
Kurtosis	2.295593	1.331914	2.808694	2.129878	8.455657
Jarque-Bera	3.054065	4.042791	0.046312	1.227118	66.00926
Probability	0.217179	0.132470	0.977110	0.541420	0.000000
Sum	2482.480	1661.530	5405.490	116.8200	497.7400
Sum Sq. Dev.	9571.581	29963.39	49498.59	7.055614	6635.675

Source: Authors compilation from E-views 9 (2021)

Group Unit Root Test

In this section, we check for the group unit root (stationarity) properties of the variables. To do this, we apply the group unit root tests methods of Levin, Lin & Chu (LLC), Im, Pesaran & Shin (IPS), by Pesaran and Shin (2001). The summary of the tests is presented in table 2 below.

Table 2: Summary of Group unit root tests

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-1.61234	0.0534	5	147
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-1.55307	0.0502	5	147
ADF - Fisher Chi-square	20.5614	0.0244	5	147
PP - Fisher Chi-square	20.0552	0.0287	5	147

** Probabilities for Fisher tests are computed using an asymptotic Chi
-square distribution. All other tests assume asymptotic normality.
Source: Authors compilation from E-views

The stationarity tests reveal that the variables are integrated at order one (that is, after first differencing).and at levels which justify the use of ARDL technique of analysis. ARDL Technique is employed because it generates consistent estimates of long- run coefficients that are asymptotically normal, regardless of whether the variables are purely I(0), purely I(1) or mutually co-integrated (Pesaran et al.,2001)

Co-integration Test

Table 3: Co-integration Rank Test (Trace)

Hypothesized		**Trace**	**0.05**	
No. of CE(s)	**Eigenvalue**	**Statistic**	**Critical Value**	**Prob.****
None *	0.751372	110.1983	68.71889	0.0000
At most 1 *	0.569386	60.09357	46.55613	0.0024
At most 2	0.399685	29.76201	28.99707	0.0525
At most 3	0.192626	11.39118	14.89471	0.1886
At most 4*	0.097380	3.688341	3.641466	0.0548
Trace test indicates 3 cointegrating eqn(s) at the 0.05 level				
'* denotes rejection of the hypothesis at the 0.05 level'				
'**MacKinnon-Haug-Michelis (1999) p-values'				
Co-integration Rank Test (Maximum Eigenvalue)				
Hypothesized		**Max-Eigen**	**0.05**	
No. of CE(s)	**Eigenvalue**	**Statistic**	**Critical Value**	**Prob.****
None *	0.751372	50.10471	32.77687	0.0003
At most 1 *	0.569386	30.33156	28.28434	0.0216
At most 2	0.399685	18.37083	22.33162	0.1166
At most 3	0.192626	7.702837	13.76460	0.4097
At most 4*	0.097380	3.688341	3.641456	0.0548
Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level				
'* denotes rejection of the hypothesis at the 0.05 level'				
'**MacKinnon-Haug-Michelis (1999) p-values'				

Source: Authors compilation from E-views 9 (2021)

The results show that both trace test and Max-Eigen value test indicated that there are at least three co-integrating vector in the model as shown in table 3. This implies there is a long run relationship among the variables.

Bounds Test

The result from the Auto-regressive distributed lag bounds test suggests the existence of a long run co-integrating relationship among the variables used in the model. This decision is reached by observing that the null hypothesis of no co-integrating equation is rejected since the values of F-statistics is higher than their respective critical upper bound values at the levels of significance as shown in Table 4 below.

Table 4: Bounds Test Results

Test Statistic	Value	k
F-statistic	5.866877	4
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.45	3.52
5%	2.86	4.01
2.5%	3.25	4.49
1%	3.74	5.06

Source: Authors compilation from E-views 9 (2021)

The ARDL Results

Table 5: Results of ARDL Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
MFIPS(-1)	0.322745	0.140567	2.296022	0.0423
MFIDS	0.110040	0.057417	1.916508	0.0816
MFILS	0.280671	0.183909	1.526142	0.1552
MFILS(-1)	-0.136102	0.146256	-0.930576	0.3720
MFILS(-2)	-0.094054	0.136376	-0.689665	0.5047
MFILS(-3)	0.305457	0.103610	2.948138	0.0133
MFILINTR	-8.056477	5.094475	-1.581414	0.1421
MFILINTR(-1)	-6.929027	5.106500	-1.356903	0.2020
INFL	0.119144	0.070302	1.694755	0.1182
INFL(-1)	-0.089979	0.155581	-0.578342	0.5747
INFL(-2)	-0.192815	0.123972	-1.555306	0.1482
C	51.70427	18.21015	2.839310	0.0161
R-squared	0.984381	Mean dependent var		87.60261
Adjusted R-squared	0.968763	S.D. dependent var		14.03542

S.E. of regression	2.480629	Akaike info criterion	4.960780
Sum squared resid	67.68870	Schwarz criterion	5.553212
Log likelihood	-45.04897	Hannan-Quinn criter.	5.109775
F-statistic	63.02618	Durbin-Watson stat	2.215112
Prob(F-statistic)	0.000000		

*Note: p-values and any subsequent tests do not account for model selection.

Source: Authors compilation from E-views 9 (2021)

Table 6: Long Run Results

Cointegrating Form

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(MFIDS)	0.110040	0.057417	1.916508	0.0816
D(MFILS)	0.280671	0.183909	1.526142	0.1552
D(MFILS(-1))	0.094054	0.136376	0.689665	0.5047
D(MFILS(-2))	-0.305457	0.103610	-2.948138	0.0133
D(MFILINTR)	-8.056477	5.094475	-1.581414	0.1421
D(INFL)	0.119144	0.070302	1.694755	0.1182
D(INFL(-1))	0.192815	0.123972	1.555306	0.1482
CointEq(-1)	-0.677255	0.140567	-4.818018	0.0005

Cointeq = MFIPS - (0.1625*MFIDS + 0.5256*MFILS - 22.1268*MFILINTR
-0.2416*INFL + 76.3439)

Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MFIDS	0.162479	0.079026	2.056010	0.0643
MFILS	0.525610	0.117688	4.466117	0.0010
MFILINTR	-22.126832	10.389968	-2.129634	0.0566
INFL	-0.241637	0.213839	-1.129994	0.2825
C	76.343888	24.736698	3.086260	0.0104

Source: Authors Computation Using E-views 9 (2021)

The above results from tables 5 and 6 showed the existence of a long run relationship between MFIPS and all the regressors. MFILINTR and INFL however showed negative effect on MFIPS. Microfinance deposits captured by MFIDS and loans captured by MFILS(-2) are shown to positively contribute to MFIPS on the short-run and Judging by the values of the t-statistic of the explanatory variables of the model and their corresponding probabilities, it can be inferred that these variables are statistically significant determinant of MFIPS in the model at 10 percent level of significance. On the long run, microfinance lending interest rate and inflation negatively

impacted on the MFI performance during the pandemic while deposits and loans have positive significant impact on MFI performance during the period under review

The result also shows that R^2 in this model and its adjusted counterpart is about 98.43% and 96.88 percent respectively. This means that about 97 percent of the variations in MFIPS are explained by variations in the explanatory variables. This implies that the unexplained variation in the model is just about 3 percent. The value of the F-statistic which is a measure of the significance of R^2 for the model is reasonably high at about 63.026, and also statistically significant even at the 1 percent level. Based on this, we therefore accept the hypothesis that all slope coefficients in the model are simultaneously significantly different from zero and as such the overall model is significant in explaining the changes in microfinance performance (MFIPS) over the sample period. Finally, the Durbin-Watson statistic of about 2.2 is sufficiently close enough to the value of 2 for us to conclude that serial correlation is absent from the model.

Discussion, Policy Implications and Emerging Issues

Most empirical studies are carried out to provide policy implications to policy makers. Thus for this study, the result obtained from the ARDL long run test was used as a guard. The result showed that the coefficients of microfinance lending interest rate and inflation have adverse effect on MFI performance. This invariably affects microfinance efficiency in Nigeria. However, from the field study the MFIs do not have standardized lending rate or thresh hold limit like the commercial banks regulated by the Central bank guideline. The rates vary from one MFI to another leading to unhealthy competition and this calls for concern.

MFI performance was also impacted by deposit and loans during the pandemic. During the pandemic lockdowns, the loans portfolio increased significantly arising from high non-performing status and these had to be provided for under the prudential guideline. Similarly, many businesses went under during the pandemic and the resultant effects were unserviceable debts and reduction in deposits as well as deterioration in liquidity ratios. Again, due to the lockdowns, marketing faced challenges while operational activities were hampered. Thus, for microfinance survival in the new-normal, proactive attention and measures should be focussed on new ways of doing business like e-marketing, internet and mobile banking, zoom and teams meeting, emails, WhatsApp and video conferencing as options.

The outcome of the study showed that coronavirus exhibited negative and substantial impact on microfinance performance and variables like deposits, loans, interest rate, and inflation. The government, operators and promoters of microfinance should embark on massive investments in microfinance to reinvigorate and re-engineer the sector to achieve the desired result for meaning contribution to economic growth.

5 CONCLUSION AND POLICY RECOMMENDATIONS

Summary and Conclusion

This study examined the performance of microfinance in a challenging environment with x-ray on emerging issues. The study assessed MFI performance with respect to financial efficiency by utilizing Autoregressive distributed lags (ARDL) to analyse profitability index measured by the contribution of input variables of deposits, loans, inflation and rate of interest or cost of capital. The following statistical and econometric tests were applied: stationarity test, co integration test, and ARDL bounds test. Results of this study indicate as follow.

(i) On the long run, deposits and loans have positive significant impact on MFI performance during the period under review.

(ii) Microfinance lending interest rate and inflation negatively impacted on the MFI performance during the pandemic.

(iii) During the period, the loans portfolio increased significantly arising from high non-performing status and these had to be provided for under the prudential guideline..

(iv) Many businesses went under during the pandemic and the resultant effects were unserviceable loans and reduction in deposits as well as deterioration in liquidity ratios. Again, due to the lockdowns, marketing faced challenges while operational activities were hampered.

Recommendations

The following recommendations are made from this study:

1. Interest Rate negatively impacted on MFI performance. However, from the field study the MFIs do not have standardized lending rate or thresh hold limit like the commercial banks regulated by the Central bank guideline. The rates vary from one MFI to another and this calls for concern. The study recommends that the Central bank enforced the policy regulation on thresh hold limit on microfinance lending rate to ensure stability and healthy competition among microfinance banks/institutions
2. Deposits and loans have positive significant impact on MFI performance during the period under review but many businesses went under during the pandemic and the resultant effects were unserviceable loans and reduction in deposits as well as deterioration in liquidity ratios The study also recommends that the government carry out massive bail out on microfinance and productive investments in the economy to cushion the effect of unprecedented shock due to the pandemic.
3. The challenging environment occasioned by Covid-19 pandemic posed challenges to microfinance marketing while operational activities were hampered. Thus, for microfinance survival in the new-normal, the study recommends that proactive attention and measures should be focussed on new ways of doing business like e-marketing, electronic fund transfer, internet, online and mobile banking, zoom and teams meeting, emails, WhatsApp and video conferencing as options for survival and improve performance.
4. Finally, to ensure stability and stimulate growth in turbulence operating environment imposed by the pandemic, the central bank should strictly implement the proposed capital base restructuring for microfinance banks as per national status five billion naira only, state status one billion naira only, unit tier 1 two hundred thousand naira only and unit tier 11 fifty million naira only.

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