International Journal of Intellectual Discourse (IJID)
ISSN: 2636-4832 Volume 7, Issue 1. March, 2024

Factors influencing credit access to small scale enterprises in the wake of Covid-19 pandemic in Nigeria

Ibrahim Inuwa Balarabe

Department of Economics, Faculty of Social and Management Sciences, Nigeria Police Academy Wudil, Nigeria.

Email: ibinuwa@gmail.com

Abstract
Credit is an important tool that improves economic activities and it is essential to support and enhance its accessibility to SEs. This study examines the factors that determine credit access as well as improving the life quality of SEs in the wake of COVID-19 pandemic. Using survey data collected from 366 SEs in Kano metropolis from September to December 2020, both logit and ordered logit models are applied in the analysis using a stratified sampling technique. The result of logit regression in the first analysis reveals that both age and assets are positive and significant in determining credit access while the remaining variables are positive except education. In the second analysis, the result of ordered logit model shows that collateral, credit source, gender and interest are statistically significant in improving the quality life of SEs. The study recommends that policies and programs should be designed to reduce collateral requirement and disabuse misconception about women in credit lending. It should reduce the percentage of interest rate charged on credit loan to enhance credit market participation, thus improving SEs' life quality after the pandemic in Nigeria.

Keywords: Covid-19 pandemic, Credit access, Life quality improvement

1. Introduction

Nigeria witnessed the first case of corona virus pandemic (Covid-19) on the 27th February 2020 from an Italian citizen in Lagos state. Since then, the number of people tested positive with the disease had steadily increased. On the 17th of March, 2020, 3 cases were confirmed and later Abuja and Ogun state with 22 confirmed cases. On the 30th of March, 2020, it was increased to 131 confirmed cases including Lagos, Abuja, Bauchi and Enugu by the Nigeria Centre for Disease Control (NCDC). Subsequently, the disease spread to 36 states of Nigeria including the FCT, Abuja (NCDC, 2020). To protect the public from contacting the disease government restricted movement of people within, into and out of the country that prohibited gathering in places of worship, banned the conduct of business, closure of all schools, trace contacts, cinemas, and other activities. Hence, measures were put in place to further curb the spread of the disease because it was highly contagious and it spread rapidly among people in the community. In the end, government implemented a social distancing, stay at home measure, closure of institutions and public facilities, invested in healthcare facilities and eventually restrictions on mobility and finally lockdown of the entire country (Hale et al., 2020).

The small scale enterprises (SEs) present large number of economic activities in Nigeria and they face difficulty with regard to credit access from capital markets. Credit access from formal and informal sources is determined by a number of factors from

both lender and borrower sides. Hence it is very difficult to know which firm has the ability to repay loan. Mostly SE business owners have few assets which can be used for collateral to secure loans. Despite these challenges, the SEs in developed countries have access to formal loan from banks. A study by Woodruff & Zenteno *(*2001) confirms that more than half of sampled small businesses that have fewer than five employees in United States have access to bank loans. Therefore about 47 percent of small firms in the US enjoy bank loans which correspond to 50 percent in Japan, 47 percent in South Korea, 39 percent in France, 27 percent in Germany and 15 percent in India. Therefore, the formal credit access is comparatively lower among small businesses in the developing countries. This study examines the impact of COVID-19 pandemic on the SEs' credit access in Nigeria. After the introduction, section 2 is literature review section 3 is the methodology, section 4 is results and discussions and finally section 5 presents conclusion and recommendations of the paper.

2. Literature review

Some studies applied probit/logit model to study small business owners' access to microcredit in Nigeria such as Umoh (2006). Zeller (1994) in Madagascar and Aga & Reilly (2011) in Ethiopia also used probit analysis in their studies. Okurut (2006) used Heckman probit model to correct for bias of sample selection in his study of microcredit participation among poor blacks in South Africa. Similarly, two-stage choice selection model was employed to study credit participation in rural Vietnam by Nguyan (2007). The same model was used by Mpuga (2004) in Uganda, Diagne & Zeller (2001) in Malawi, Duta & Magableh (2006) in Jordan, Daniel et al (2013) in Kenya & Bendig et al (2009) in Ghana. The studies above identified different number of geographic, demographic and socio-economic factors to study credit access and participation. Moreover, studies on credit demand used different empirical and analytical approaches. Studies that used empirical approaches to study credit demand and based their empirical models on behavioral assumptions from economic theory include (Magri, 2002; Fabbi & Padula, 2004; Mpuga; 2004) and their empirical specifications were based on pragmatic assumptions. Fabbi & Padula (2004) applied constrained utility maximization as their theoretical framework to introduce minimum repayment requirements by testing for the influence of judicial system efficiency on the credit demand.

However, number of studies that adopted simple descriptive statistical approaches like cross-tabulation, test of differences between means and analyses of variance (ANOVA) to study credit market participation include (Atieno, 2001; Shah et al., 2008). Others that used Randomized Controlled Trials (RCT) for price and maturity elasticity of consumer credit demand as well as evaluating the impact of microfinance program or effect of new product and policy (Karlan & Zinman, 2009; Gine & Karlan, 2009). Common models used for credit demand analysis are choice models. Different versions of choice models have been used based on the dependent variable under study e.g. binary and multinomial logit/probit models, etc. for example, when the response variable is measured as continuous amount credit borrowed, version of truncated distribution models are used. Studies that have used combinations of the models mentioned above to analyse determinants of credit demand and amount of credit borrowed e.g. Shah et al. (2008) used logit model (binary and multinomial) to analyse determinants of credit participation in Pakistan. Li (2010) used the models to study microcredit in rural household in China. Duman (2009)

applied it to study small enterprises in Turkey. Messah & Wangi (2011) studied determinants of choice between sources of finance in Kenya. Others include Sekyi et al. (2014) in Ghana, Okurut (2006) in South Africa & Mpuga (2004) in Uganda. Moreover, Hung & Huong (2022) conducted a study in the post COVID-19 period to identify the impact of the pandemic on the informal labors' credit access using both binary logit model and multinomial logit model (MLM) in Vietnam. Their findings shows that credit is important in improving living standards for informal labors and their life quality in the time of COVID-19.

Although, many studies have applied linear regression model e.g. binomial logit regression, probit model, logit model, multinomial logit model to examine the factors that influence credit access to farmers, households and other labors. But none of those studies did examine credit access with emphasis on the COVID-19 pandemic using logit and ordered logit model. Therefore, this study employed both logit regression and ordered logit regression models to further examine the impact of COVID-19 pandemic on SEs' credit access in Nigeria.

3. Methodology

3.1 Data

Data used in this study were taken from the data of the survey research conducted in Kano metropolis from September to December, 2020 (Balarabe, 2020). That was the post-COVID period after government put some measures in place to help curb the spread of the disease as well as policies to cushion difficulties caused by the pandemic. The sample was selected using a stratified sampling technique to present the entire state. The data used in this study contained adequate information regarding the demography of the respondents such as age, gender, collateral, etc. thus, a sample size of 366 SEs was selected for this study.

3.2 Method

A logit model was used in the first analysis to find whether or not SEs applied for credit. The study that used this type of model is that of Aga & Reilly (2011). In addition, an ordered logit model was used in the second analysis to examine the impact of credit access to improve life quality of SEs after the COVID-19 pandemic. Question on the improvement in life quality of SEs was taken from a multiple-choice question: "has your life quality improved after you access credit?" Three possible responses were obtained and scored 1= much of improvement, 2 = slight improvement and 3 = no improvement. The response outcome was categorized into three groups indicating the probability of being in a given group. The model is presented below:

$$P_{ij}\left(Y = \frac{c}{X_i}\right) = F\,(X_i\beta) \text{ ---------- I}$$

Where; Y is the outcome response for dependent variables (credit access/life quality); F is the standard logistic cumulative link function; X is the set of predictor variables. In the second model, one of the categories is set to zero and coefficients are interpreted with respect to that category called the reference or base category (Cameron & Trivedi 2005). Model specification here follows that of Balarabe (2018). Hence, the empirical specification of equation I above is presented below:

$$Y_i = a_0 + a_i X_i + \varepsilon_i \text{ ---------- II}$$

Table 1 presents the definition and measurements of variables used in the models for credit access and quality of life. The variables describe the demography and socioeconomic characteristics of SEs that enable them to access credit as well as improving their quality of life.

Table 3.1 Definition and Measurement of Variables

Variables	Measurement
Dependent variables	
credit access	1 if access, 2 if otherwise
quality of life	1 = much improvement, 2 = slight improvement, 3 = no improvement
Explanatory variables	
Age	Respondent's age number of years
Education	1 if formal, 2 if otherwise
Gender	1 if male, 2 if otherwise
Marriage	1 if married, 2 if otherwise
Enterprise	1 if agriculture, 2 if otherwise
Experience	Number of years spent in the business
Location	1 if live in urban, 2 if otherwise
Profit	1 gain profit, 2 if otherwise
Assets	1 if having assets, 2 if otherwise
Collateral	1 if get loan with collateral, 2 if otherwise
credit source	1= banks, 2= associations, 3=friends & family
insolvency risk	1 if solvent, 2 if otherwise
repayment default	1 if default, 2 if otherwise
Interest	Interest rate charged in %

Source: Researcher's Compilation, 2024

4. Results and Discussions

4.1 Determinants of Credit access for Small Scale Enterprises

From column (1) in Table 4.1 below, age and assets variables were found to be positive and statistically significant at 10% and 1% levels respectively. This means that one year increase in the age increases the probability to apply for credit so also having more of asset property. From column (2) of the table, the marginal effect shows that both age and assets have a significant positive effect in determining credit access by 0.06% and 4% respectively. All other variables were found to be positive but statistically insignificant in determining credit access.

Table 4.1 Determinants of Credit Access to Small Scale Enterprises

	(1)	(2)
VARIABLES	**Logit estimate**	**M/effects of Logit**
Age	0.0300*	0.00560*
	(0.0166)	(0.00305)
Education	-0.00978	-0.00182
	(0.0968)	(0.0181)
Gender	0.502	0.0936
	(0.342)	(0.0631)
marriage	0.222	0.0413
	(0.331)	(0.0617)
enterprise	0.134	0.0249
	(0.142)	(0.0264)
experience	0.0238	0.00443

	(0.0250)	(0.00464)
location	0.150	0.0279
	(0.176)	(0.0327)
profit	-0.478	-0.0891
	(0.577)	(0.107)
assets	2.166***	4.0207***
	(8.2807)	(1.4907)
constant	-3.131***	
	(0.915)	
observations	366	366

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Source: Researcher's Computation using STATA software version 13.0

4.2 Diagnostic Estimation Tests

Table 4.2 presents results of some estimation diagnostic tests. First is the linktest for model specification error with p-value (0.986) meaning _hatsquare is not statistically significant, indicating that the model is correctly specified. It is followed by the multicollinearity test which was carried out using VIF and TOL values. All the values of variables under VIF are less than 10.0 and that of TOL are greater than 0.1, showing that there is no presence of multicollinearity among the predictor variables in the model (Pregibon, 1981). Finally, a brant test was conducted for ordered logit in which the chi-square is (68.19) and chi-square is (0.000) implying that the parallel regression assumption has not been violated meaning that the current model is relevant in explaining the relationship between the dependent variable and explanatory variables.

Table 4.2 Diagnostic Estimation Tests for Ordered Logistic Regression

Test	**Measure**
Linktest	p-value
_hat	0.000
_hatsquare	0.986
Multicolliarity Test	
Variable	**Tolerance**
collateral	0.718
credit source	0.967
insolvency risk	0.728
gender	0.938
repymnt default	0.984
Interest	0.993
Variance Inflation Factor (VIF)	
collateral	1.39
credit source	1.03
insolvency risk	1.37
gender	1.07
repymnt default	1.02
Interest	1.01
Brant Test	**Chi-square**
Parallel Regression Assumption	68.19

Source: Researcher's Computation using STATA software version 13.0

4.3 Impact of Credit Access on the Quality of Life Improvement

Table 4.3 presents the results of ordered logit model on quality improvement of the life of SEs. To identify the impact of COVID-19 pandemic on credit access for SEs, collateral, credit source, gender, insolvency risk, repayment default and interest are considered in this analysis which involved 366 observations. One of the assumptions of ordered logistic regression is that relationship between outcomes in each group is the same. It is assumed that coefficients that describe relationship between first, second and third categories of the response variable are the same and also between one category and the next. This is referred to as parallel regression assumption which means that the relationship between all groups is the same.

Table 4.3 Impacts of Credit Access on the Quality Life Improvement

		Marginal Effects of Credit Access		
	(1)	(2)	(3)	(4)
VARIABLES	Ologit estimates	Much improvement	Slight improvement	No improvement
Collateral	0.0471***	0.00278***	0.00336***	0.00244***
	(0.0124)	(0.000716)	(0.000875)	(0.000833)
credit source	0.615*	0.0364*	0.0439*	0.0319*
	(0.320)	(0.0189)	(0.0248)	(0.0163)
inslvncy risk	0.0636	0.00376	0.00455	0.00330
	(0.142)	(0.00846)	(0.0102)	(0.00741)
gender	-0.951***	-0.0562***	-0.0679***	-0.0493***
	(0.312)	(0.0186)	(0.0227)	(0.0189)
repymnt default	0.0444	0.00263	0.00317	0.00230
	(0.145)	(0.00866)	(0.0104)	(0.00737)
interest	-0.743**	-0.0439**	-0.0531**	-0.0385**
	(0.317)	(0.0197)	(0.0236)	(0.0159)
constant cut1	1.167			
	(0.827)			
constant cut2	2.079**			
	(0.835)			
constant cut3	3.308***			
	(0.855)			
Observations	366	366	366	366

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Source: Researcher's Computation using STATA software version 13.0

Having a collateral property is found to be positive and statistically significant at 1% level in affecting the SE's quality of life to improve by 0.3% and to slightly improve by 0.4% and show no improvement by 0.2% respectively. This result agrees with Pham & Tran (2020), Hung & Huong (2022) who also found collateral to be significant in improving life quality in Vietnam. In addition, credit source is statistically significant at 10% level to bring about much improvement to SE's quality of life by 3.6% and to bring slight improvement by 4.4% and no improvement by 3.2% as the result reveals. This concurs with the findings of Pham &

Tran (2020) who found credit source to positively improve the quality of informal labors in Vietnam.

Gender is negative and statistically significant at 1% level in improving the male-owned SE's quality of life. This means that being a male-owner of small business enterprise increases the probability of life quality to improve by 5.6% and to slightly improve the life by 6.8% with no sign of improvement by 4.9%. This agrees with the findings of Balarabe (2018), Hung & Huong (2022).

Similarly, interest rate is negative but statistically significant at 5% level. The negative sign means that the amount of interest charged is high thus deteriorating the life quality of SE by 4.4%, though it slightly improves the life quality by 5.3% and shows no improvement by 3.9%. This finding also goes in line with finding of Hung & Huong (2022).

However, risk of insolvency and default of loan repayment are found positive and statistically insignificant in improving the life quality in the study. Though this contradicts the finding of Balarabe (2018) who found the variable to be positive and statistically significant in determining credit access.

The cut-points shown at the bottom of the output indicate where the latent variable is cut to make the three credit groups that are observed in our data, excluding the zero group. It is important to note that this latent variable is continuous and are generally not used in the interpretation of the results. Due to the parallel regression assumption, the same increase is found between 1 and 2 category of apply and the combined categories of 2 and 3 apply.

In summary, the study findings showed that SEs who advance in age and have asset properties apply for more credit. Other variables in the model are found positive and statistically insignificant in determining credit access. However, education level of SE does not determine his credit access as the variable has a negative sign indicating that lending institutions are biased in lending to borrowers with low education level. With regards to credit access in improving quality of life, having a collateral improves the quality life of SE in the wake of COVID-19 pandemic. The result further indicates that life quality of improves when SE has access to one of the credit sources. Similarly, gender of SE borrower improves his life quality as lenders prefer lending to men. The percentage of interest charged on credit tends to improve the life quality if the rate is low. Besides, from the study, two of the factors in the model; risk of insolvency and repayment default are statistically insignificant in improving the life quality of SE as the result show.

5. Conclusion and Recommendations

It can be concluded from the results of this study that SEs do not have enough credit access. The credit lending is in favour of those SEs who own collateral and other asset properties. It also favors male-owned enterprises over their women counterpart as female-owned enterprises have slight or no improvement in their life quality. Generally, the percentage of interest rate charged also tends to cause slight or no improvement in the life quality of SEs.

Based on the findings above, the following recommendations are made.

1. Collateral requirements for the acquisition of credit loan should be drastically reduced to ensure credit widening for more people to get access to credit.
2. With regard to gender influence in credit lending, government and stakeholders need to come out with a policy package that will help disabuse all misconceptions about women borrowers regarding what the lenders offer and who can access what is being offered. This will help

to strengthen and facilitate factors and mitigate that of the militating ones so as to improve credit access to all and sundry. Concerning, both formal and informal lending sources should be integrated to help resolve issues and challenges facing SEs in the credit market to facilitate lending.

3. Finally, government should make a policy to halt or reduce rate of interest charged on credit so as to ensure wide financial inclusion of small businesses since they are the most vulnerable when it comes to borrowing from formal institutions. Thus, government should formulate policies and programs to bring about effective solutions to enhance credit accessibility leading to the improvement of life quality to overcome difficulties caused by the COVID-19 pandemic to SEs.

References

Abramovitz, M. (2001). Everyone is still on welfare: The role of redistribution in social policy. Social Work, 46(4), 297-308.

Aga, G. & Reilly, B. (2011). Access to credit and informality among micro and small enterprises in Ethiopia. International Review of Applied Economics. 25(3), 313–329.

Ahmed, H. G., Alhassan, S. M., & Alshammari, F. D. (2017). Social welfare scheme; a neglected component of public health care services in Nigeria. MOJ Public Health, 5(3), 101-104.

Akanni, L. O. & Gabriel, S. C. (2020). The implication of Covid'19 on the Nigerian Economy. Centre for the Study of Economies in Africa.

Albulescu, C. T. (2020). Coronavirus and Oil Price Crash. SSRN Discussion Paper Series.

Alhassan, E. A., Hoedoafia, M. A., & Braimah, I. (2016). The Effects of Microcredit on Profitability and the Challenges on Women Owned SMEs: Evidence from Northern Ghana. Journal of Entrepreneurship and Business Innovation, 3(1), 29.

Andersen, J. G. (2012). Welfare states and welfare state theory. Center for Comparative Welfare Studies, Working Paper.

Arrow, K. J., Sen, A., & Suzumura, K. (Eds.). (2010). Handbook of social choice and welfare (Vol. 2). Elsevier.

Atiero, R. (2001). Formal and informal institutions lending policies and access to credit by small scale enterprises in Kenya: An empirical assessment. The African Research Consortium.

Atkeson, A. (2020). What will be the economic impact of covid-19 in the US? Rough estimates of disease scenarios. National Bureau of Economic Research, Working Paper 26867 Balarabe, I. I. (2020). Empirical Assessment of Socioeconomic Impact of Covid-19 Pandemic on Nigerian Households. Book-chapter on 'COVID-19: The New Economics for Economies, 2020'. Ch.22, pp. 234-242.

Balarabe, I. I. (2018). Effects of demographic and socioeconomic

factors on credit demand by small scale enterprises in Kano state, Nigeria. Sahel Analyst: Journal of Management Sciences 16(6), 40 - 54.

Balarabe, I. I. (2018). Informal sector labour employment in Nigeria: A socio-economic analysis from the demand and supply perspectives. Dutse Journal of Economics and Development Studies (DUJEDS) 6(2), 170-179.

Bending, M., Giesbert, L. & Steiner, S. (2009). Savings, credit and insurance: household demand for formal financial services in rural Ghana. GIGA. Working paper No.94/2009.

Cameron, A. C. & Trivedi, P. K. (2005). Microeconometrics: Methods and Applications. New York: Cambridge University Press.

Daniel. K., Job, K. & Ithinji, K. (2013). Social capital dimension and other determinants influencing household participation in microcredit groups in Uasin Gishu County, Kenya. Developing Countries Studies, 3(3), 213–221.

Diagne, A., & Zeller, M. (2001). Access to credit and its impact on welfare in Malawi. Research Report of the International Food Policy Research Institute, (116), 1–143.

Dolgoff, R., Feldstein, D., & Skolnik, L. (1980). Understanding social welfare (p. 91). New York, NY: Harper & Row.

Dolnicar, S. & Zare, S. (2020). Coronavirus and AIRBNB – Disrupting the Disruptor." SocArXiv. March 18. doi:10.31235/osf.io/t9n6q.

Duman, A. (2009). Determinants of access to credit in microenterprises of turkey, Izmir. Izmir University.

Dutta, D. & Magableh, I. (2006). A socioeconomic study if borrowing process: the case of micro entrepreneurs in Jordan. Applied Economics, 38(14), 1627–1640.

Ewalt, J. A. G., & Jennings Jr, E. T. (2014). The Great Recession and social welfare spending in the American States. International Review of Public Administration, 19(3), 308-323.

Fabbi, D. & Padula, M. (2004). Does poor legal enforcement make household credit constraint? Journal of Banking and Finance, 28(10), 2369–2397.

Fleurbaey, M., & Maniquet, F. (2011). A theory of fairness and social welfare (Vol. 48). Cambridge University Press.

Garett, A. T. (2007). Economic Effects of the 1918 Influenza Pandemic Implications for a Modern- day Pandemic. Federal Reserve System.

Gine, X. & Karlan, D. S. (2009). Group versus individual liability: Long term evidence form Philippines microcredit lending groups.

Hale Thomas, Noam Angrist, Beatriz Kira, Anna Petherick, Toby Phillips and Samuel Webster. Variation in Government Responses to COVID-19. Version 6.0. Blavatnik School of Government Working Paper. May 25, 2020. Available: www.bsg.ox.ac.uk/covidtracker.

Hung Van, Vu & Huong, Ho. (2022). Analysis of Factors Influencing Credit Access of Vietnamese Informal Labors in the Time of COVID-19 Pandemic.

Jordà, O., Singh, S. R. & Taylor, A. M. (2020). Longer-Run Economic Consequences of Pandemics. Federal Reserve Bank of San Francisco, Working Paper Series: 2020-09.

Karlan, D.S. & Zinman, J. (2009). Expanding credit access: Using Randomize Supply decision to estimate the impacts. London: oxford university press.

KPMG (2020). Covid-19: A Business Impact Series Economic Impact & Pandemic Planning, Issue 1.

Li, X. (2010). An empirical analysis of microcredit in china rural households. Journal of Asian Economics, 22(3), 235–246.

Luenberger, D. G. (1996). Welfare from a benefit viewpoint. Economic Theory, 7(3), 445-462.

Magri, S. (2002). Italian household's debt: Determinants of demand and supply.

Messah, D. B. & Wangi, P. N. (2011). Factors that influence the demand for credit among small scale investors: A case study of Meru Central District, Kenya. Research Journal of Finance and Accounting, 2(3), 2222–2847.

Mkandawire, M. & Duan, X. (2016). Factors Influencing Credit Demand among Household Non-Agriculture Enterprises in Malawi. Open Journal of Business and Management, 4(2), 312–321.

Mpuga, P. (2004). Demand for credit in rural Uganda: who cares for the peasants? Paper presented at the conference on growth poverty and human development in Africa. Unpublished Report, university of Oxford, UK.

Nguyan, C. H. (2007). Determinants of credit participation and its impact on household consumption: Evidence from rural Vietnam.

Nigeria Centre for Disease Control (NCDC) (April 9, 2020). COVID-19 case update.

https://twitter.com/NCDCgov/ (accessed 18th August, 2020).

Okurut, F. N. (2006). Access to credit by poor in South Africa: Evidence form household data 1005 and 2000 (Working paper, 13/06).

Ozili, Peterson (2020). Covid-19 pandemic and economic crisis: The Nigerian experience and structural causes. Unpublished research paper.

Pham, B., Anh, H, & Tran C. T. (2020). Factors affecting formal credit access of rice farmers in Nga-Nam town, Soc-Trang province. Journal of Scientific Research and Economic Development 8: 2020.

Pregibon, D. (1981). Logistic regression diagnostics. The Annals of Statistics.

Sebu, J. (2013). Farm household's access to credit: Who needs and who gets? Evidence from

Malawi. University of Kent.

Sekyi, S., Nkegbe, P. K. & Kunnibe, N. (2014). Participation in the market by small scale enterprises in Ghana: Evidence for Wa Municipality. Journal of Business Management, 8(9), 292–299.

Shah, S. K., Bukhari, A.T., Hashim, A.A. & Anwar, S. (2008). Determinants of credit program participation and socioeconomic characteristics of beneficiaries: Evidence form Sargode. The Pakistan Development REVIEW, 47(4), 947–959.

Tabachnik, B. G. & Fidell, S. L. (2007). Discriminants analysis. Using multivariate statistics. Boston: Person Education Inc.

Takahashi. H. & Kazuo, Y. (2020). When Japanese stock market meets covid-19: Impact of ownership, trading, ESG, and liquidity channels. Discussion Paper Series.

Tonin, C., Dieci, P., Ricover, A., Foresi, S. & Handson, D. (1998). Financial services for small enterprises in Namibia.

Umoh, G. S. (2006). Empirical investigation of access to microfinance in an emerging economy. Journal of African Business, 7(1–2), 89–117.

Vos R., Martiin, W. & Laborde, D. (2020). How much will global poverty increase because of COVID-19?

World Bank (2020). COVID-19 (Coronavirus) Drives Sub-Saharan Africa, Toward First recession in 25 Years.

World meters; Coronavirus Update (Live). https://www.worldometers.info/ coronavirus/8/2020. (Accessed 17 August, 2020).

Woodruff, C. & Zenteno, R. (2001). Remittances and Microenterprises in Mexico. Retrieved At: https://papers.ssrn.com/sol3/papers.cfm

Zeller, M. (1994). Determinants of credit rationing: A study of informal lenders and formal credit groups in Madagascar. World Development, 22(12), 1895–1907.