International Journal of Finance and Banking Research
2023; 8(6): 136-142
http://www.sciencepublishinggroup.com/j/ijfbr
doi: 10.11648/j.ijfbr.20220806.11
ISSN: 2472-226X (Print); ISSN: 2472-2278 (Online)

Strategic Management of Risk by Multinational Banks in Sub Saharan Africa

Kibs Boaz Muhanguzi

Department of Finance and Accounting, College of Economics and Management, Kampala International University, Kansanga, Uganda

Email address:
kibsmu@gmail.com

To cite this article:
Kibs Boaz Muhanguzi. Strategic Management of Risk by Multinational Banks in Sub Saharan Africa. *International Journal of Finance and Banking Research*. Vol. 8, No. 6, 2023, pp. 136-142. doi: 10.11648/j.ijfbr.20220806.11

Received: November 6, 2022; **Accepted**: November 21, 2022; **Published**: January 13, 2023

Abstract: In their search for profit maximization, multinational enterprises should adopt strategies that neutralize country risk effects. This paper seeks to establish whether country risk affects profitability of multinational banks in sub-Saharan Africa, and whether strategic decisions regarding 'where to go' for investment in terms of geographic diversification, and the 'source of capital' in terms of debt or equity financing, help mitigate country risk effects. Using panel data (2006-2020) of multinational banks in sub-Saharan Africa, and a two-step Systems Generalized Method of Moments (S-GMM) estimation technique, results find both short run and long run negative effect of country risk on profitability. Augmenting country risk with the two corporate strategy constructs, results show: first, a positive long run hedging effect of geographic diversification on country risk implying that increased geographic diversification strategy maximizes the bank's long run profits irrespective of the level of country risk confronted. Second, on the source of funds strategy, augmenting country risk with equity financing raises profitability of banks than debt financing. This is so probably because equity finances hedge banks from risks from nationalization and expropriation. For multinational banks to guard from country risk, their geographic expansion should be financed using equity funds than debt.

Keywords: Strategic Management, Multinational Banks, Corporate Strategy, Country Risk, Geographic Diversification, Debt and Equity Financing

1. Introduction

The spread of multinational enterprises in differing environments is motivated by many factors including search for higher returns, expansion for strategic reasons, and need for diversification [24]. Operating in diverse environments comes with many opportunities like high returns and conglomeration, and challenges. Though there are higher expected returns from investment in a new country, expansion into new territories is often associated with additional risks [27]. How banks deal with these risks depends greatly on her strategic corporate decisions more so regarding 'where to go for investment' and 'source of the required capital'.

On 'where to go for investment', risk-averse firms invest where the risk is low, while risk-loving enterprises confront risky environments with anticipation of reaping higher returns [1]. The challenge however is that over time, country risk may change in either direction to the extent that for example, for the risk averse investors, the once low risk environment is now highly risky making them wish to close down. This mandates firms to make shrewd strategies with a foresight of stability in one environment irrespective of the changes in the level of country risk.

About 'source of the required capital', decisions regarding whether to go for debt or equity are often contingent on the relative cost of debt versus equity, availability of funds in credit markets, and existing debt obligations by a firm [26]. Within corporate finance management, though cost of debt is often lower than that of equity, adequate funds may not be available in credit markets. Besides, though offering stock in an international financial market costs multinationals more than acquiring debt [12], equity financing has a special way of minimizing country risk that may arise from possible nationalization. This noted, to be able to make profits, an investigation should be done on best practices regarding how multinational banks should strategically manage country risk with respect to 'where to go for investment', and sources of

funds. The relationship between strategy and profits gives incentives to firms to carry out business in a sustainable way. An inefficient strategy may raise costs and lower revenues as efficient strategy decrease costs and increase revenue [19].

Sub-Saharan Africa as a region is diverse economically, politically and institutionally. This diversity to some extent potentially imposes diverse risks to multinational investors. Since independence, the spread of multinational banks in Africa has risen mainly due to privatization, and globalization that has led to fast integration of economies. Meanwhile, multinational bank's profitability has been exceptionally high [11].

Managers are expected to make strategic resource allocation decisions with due consideration of the effects their decisions are going to have on overall performance. According to strategic management's coalignment theory, 'if a firm is able to identify the opportunities that exist within an environment, and goes ahead to invest in strategies that take advantage of these opportunities; if this firm channel her resources to ventures that promise highest returns, the overall performance of this firm in terms is going to be high [28]. This points to a question of how multinational banks should manage country risk to reap high profits. Corporate strategic decision regarding where to diversify to, and using what source of funds, forms a strategic management challenge for all firms including multinational banks in Sub-Saharan Africa.

Some empirical studies find a negative relationship between risk and return on assets [20, 15]. According to Portfolio theory, diversification minimizes risk, and maximizes returns [23]. High level of geographic diversification is found to reduce risks [25, 4]. Multinational enterprises often have a comparatively lower debt ratios than domestic firms because of risks associated with having operations in many countries [21]. Though some empirical studies find a negative relationship between long term debt and ROA [22, 10, 26], other studies find a positive relationship [3, 14, 35]. Because the effect of debt financing on profitability of firms is ambiguous, corporate strategic management of the source of capital for investment becomes crucial. This noted, how then does strategy align with country risk to ensure reasonable profitability by multinational enterprises? This inquiry ventures into the best ways multinational banks should strategically manage risk.

2. Methodology

To establish a corporate strategy that multinational banks in sub-Saharan should adopt to hedge country risk's effect on profitability, investigation collected panel data (2006-2020) from sampled 146 cross-sectional multinational banks spread across sub-Sahara Africa leading to 2190 observations (T=15, N=146). Panel estimation is done using dynamic System GMM (S-GMM) estimation technique to capture the long run variable relationships.

2.1. Variable Measurement

Multinational bank profitability was measured using return on assets (ROA) as previously used by [20]. Country risk was measured using the ICRG risk indices [9] where the range 0-49.50 shows very high risk, 50-59.5 shows high risk, 60-69.5 for moderate risk, 70-84.5 for low risk and 85-100 for very low risk. Two corporate strategy constructs are used: first, 'where to go' and second, 'source of capital'. 'Where to go' is conceptualized using geographic diversification, and is measured by the number of countries a bank has branches. While, 'source of capital' is conceptualized as either debt financing or equity financing [22,3]. Debt financing is measured by the percentage of a bank's capital raised from debt. Equity financing is measured using the percentage of a firm's capital raised from equity [26]. Bank size and economy size are the two control variables used in the analysis. Bank size is measured by the log of total bank assets. While, economy size is measured by the logarithm of income per capita [34].

2.2. Data Source

Key data on multinational banks' financial statements was sourced from the World Bank's bank-scope database. This provided data on annual total assets, ROA, debt and equity ratios over the study period. Country risk data was obtained from the ICRG's database. For geographic diversification, individual bank's websites were used. Data for the country's GDP per capita was obtained from IMF World Economic Outlook.

2.3. Modeling Corporate Strategic Management of Risk by Multinational Banks

Multinational banks increase their geographic footprint in search for profits. To achieve this, key strategies are adopted amidst country risk levels. In the model objective function, equation 1 says that the profits made by a bank (π) is a function of corporate strategy ($CoStrat$) given the level of country risk ($CoRisk$), which is simplified in equation 2 for elementary analysis assuming that the right-hand side variables are all determinants of profits with and e the random error term

$$\pi = f\ (CoRisk, CoStrat) \tag{1}$$

$$\pi = \beta_1 CoRisk + \beta_2 CoStrat + e \tag{2}$$

From equation 2, introduce dynamic panel data idea [36] previously used [8] as shown in equation 3.

$$\pi_{ist} = \gamma\pi_{ist-1} + \beta_1 CoRisk_{ist} + \beta_2 CoStrat_{ist} + \beta_3 logPC\_Income_{ist} + \beta_4 logBank\_Assets_{ist} + vi + eit \tag{3}$$

Equation 3 just shows how each of the variables affects profitability. The phrase π_{ist} captures profitability for bank i in country s at time t, with its one period lag on the right-hand side as one of the explanatory variables. The coefficient γ helps to capture the speed of adjustment to equilibrium. The vi and eit are the typical fixed effects decomposition of

the error term.

Because country risk is expected to have a negative effect on profits, it is expected that a good corporate strategic plan will minimize this negative effect. Therefore, estimable equation 4 shows corporate strategy augmenting country risk.

$$\pi_{ist} = \gamma\pi_{ist-1} + \beta_1 CoRisk\_CoStrat_{ist} + \beta_2 logPC\_Income_{ist} + \beta_3 logBank\_Assets_{ist} + vi + eit \quad (4)$$

Equation 4, when regressed helps to show whether the β_1 coefficient has reduced, increased, or remained constant after augmenting risk with strategy, visa vie the β_1 coefficient in equation 3.

2.4. Estimation Strategy

Since the empirical model in equation 4 is dynamic, GMM estimation technique [8] is used due to the following reasons: first, to allow the study of dynamics of adjustment within the bank's industry [6]; second, to control for dynamic panel bias[5] since the number of observations is far more than the time span (N>T); third, to address endogeneity problem by use of the instrument variable due to the presence of the lagged dependent variable; and four, the estimation technique best identifies both the short-run and long-run effects of corporate strategic decision made to control country risk. Both the first Difference Generalized Method of Moments (D-GMM) and System Generalized Method of Moments (S-GMM) are estimated for robustness of results [17]. Stata12 syntax *xtdpdsys* command is used to get S-GMM estimates. Stata xtabond2 *'collapse'* option is used to keep the number of instrumental variables lower than the number of observations [31]. A two-step GMM estimates are used to produce asymptotically efficient results.

2.5. Panel Diagnostic Tests

Key diagnostic tests are essential when S-GMM estimator is applied on panel data. Mention panel root test, cointegration test, endogeneity test, serial correlation test, and test for cross sectional dependence.

Panel root test aims at testing for stationarity, by investigating whether the panel time series are stationary or not [36]. When the number of observations (N) is greater than the time (T) span then, adopt Im, Pesaran and Shin (IPS) test [18] otherwise, the Levin-Lin-Chu test is used. The IPS test helps in determining whether there is a great variation in the study variables overtime. When there is a great variation in the values over time, differencing is done to normalize them [5,6]. When the series are found not stationery, then, cointegration tests are done. The null hypothesis in IPS unit root test is that all the series included have unit root. They are non-stationary, against the alternative that some of the series included in the panel are stationary. Rejection of the null implies that there are some series which are stationary, and are converging to their means over time. IPS is the average of the augmented Dicky fuller test statistics that follow a normal distribution. If all the variables are integrated of the same order, and for example, the variables are all stationary at first differences; then, run a cointegration test.

Cointegration test helps test for long run stability, by checking whether there is presence, or not, of panel relationship in the long run. Cointegration tests help identify scenarios where two or more non-stationary time series are integrated together in a way that they cannot deviate from equilibrium in the long term. The tests are used to identify the degree of sensitivity of two variables to the same average price over a specified period of time. We use four test statistics for this purpose; the panel rho-statistic, the ADF statistic, the group rho-statistic, and the group ADF statistic. The number of tests that rejects the null, about the presence of cointegration, dictates the conclusion to be made [29].

This involves testing presence of one or more endogenous variables in the model. In panel data estimations, it is common to find some factors on the right-hand side dependent on each other, and across time horizons resulting into non-orthogonality between regressors and the error term; a cause for producing non-efficient, inconsistent, and biased results. Dynamic panel estimation technique with a lagged dependent variable increases chances of having many non-exogenous variables in the model, leading to endogeneity problems during estimation. To deal with this problem, traditionally, differencing is done (one-stet, two steps) to produce efficient and consistent estimates [2]. This study adopts a two-step S-GMM for this cause.

However, technically, solving endogeneity problem requires introduction of a number of instruments [13], and testing whether these instrumental variables are valid or not [31, 13]. Testing for presence of endogeneity involves a test whether the introduced instruments satisfy the orthogonality conditions. Testing for validity of instruments involves use of Sargan p-value [31] through Stata *xtbond2* statistical command. For validity of instruments to hold, rule of the thumb is that, all the introduced instruments are exogenous and the Sargan p-value should be greater than 0.25 percent [31]. The Sargan-Hansen J-statistic (difference-in-Sargan test) is used for testing over-identifying restrictions in a model [32] The null hypothesis is that all the additional instruments are exogenous. For this test to be applicable, the number of instruments must be more than endogenous regressors.

3. Results

3.1. Descriptive Findings

From a sample of 2910 observations from 146 cross sectional units of multinational banks over 15-year time span, on average, multinational banks make 26.2 percent return on assets with a standard deviation of 0.162. The mean for country risk (0.598) with a standard deviation of 0.271 shows that multinational banks in Sub-Saharan Africa operate in high-risk environment [9]. On average, banks have operations in 19 countries with a standard deviation of 15.009. They raise 64 percent of their capital from debt with a standard deviation of 0.081, and 43 percent from equity,

with a standard deviation of 0.006. On average, the log of bank assets is 8.14, with a standard deviation of 2.13 while the log of per capita income is 4.39 with a standard deviation of 1.82.

Various panel diagnostic tests were carried out. Because N>T, the IPS test was used to test variable's long run stationary. Results show that all the variable series are integrated of order one-I(1) after their first differencing, despite of their non-stationary state in levels. This non-stationarity was followed by cointegration test to determine whether the variables have a stable and long-run relationship. The cointegration test results showed presence of stable and long run relationship and concur with [29]. Further, testing for presence of endogenous variables [2], results depicted presence of endogenous variables which is solved by introducing instrumental variables in terms of lags both in levels and time.

3.2. Country Risk, Corporate Strategy and Profitability of Multinational Banks in Sub-Saharan Africa

Though results from both the two-step Differenced Generalized Method of Moments (D-GMM) and a System Generalized Method of Moments (S-GMM) are presented in Table 1, only results for S-GMM are used in analysis. This is because S-GMM is stronger than D-GMM and are more robust and efficient. However, both estimators are used with intention of controlling for possible serial correlation, and heterogeneity in the idiosyncratic error terms [2].

For the lagged dependent variable, the coefficient $\gamma = 0.0242$ I s closer to zero than one, implying a high speed of adjustment to long run equilibrium [33]. This further points to long run competitive nature of the banking industry in this region. This finding is similar to that previously found in the same region [33].

For country risk the estimated coefficient is negative at 0.1281 implying that a rise in 'country risk level reduces profitability of multinational banks by 12.8 percent. For corporate strategy, the coefficient for geographic diversification is 0.2038 suggesting a rise in bank profitability due to increased spread into other regions. This result indicates that a corporate decision to more operations in other countries, raises her long run profits by over 23 percent. This positive relationship between geographic diversification and long run profitability supports the recent observed high trend in the spread of multinational banks in the region [11, 30]. For debt financing, the coefficient is negative (0.0151) and is statistically significant implying that the bank's strategy to raise capital using a debt reduces long run profitability by 1.5 percentage points. This negative long run relationship between debt and returns on assets reminds investors about the importance of borrowing only in the short run. This argument is also found in studies [10, 26]. For equity financing strategy, the coefficient 0.1184 is positively related to profitability (ROA) and is statistically significant implying that multinational banks' strategy to use equity finances for their long run investments yields positive returns on assets. Since the values for the control variables: bank size and country size are in logarithm form, the coefficients are best interpreted as elasticities. Other factors held constant, as bank's assets expand, elastic response emerges in a sense that profitability more than expand. Likewise, as economy size (GDP per capita) expands, inelastic response is observed with respect to profitability. This could be explained probably by high bank competition in bigger economies.

Table 1. *Effect of country risk and corporate strategy on bank profitability.*

Dependent variable ROA	**Two-step D-GMM**		**Two-step S-GMM**	
	coefficient	**s.e**	**coefficient**	**s.e**
ROA $_{t-1}$	0.0322***	0.0333	0.0120***	0.0411
Country risk	-0.0924*	0.4335	-0.1281***	0.0011
Geog_Diversf	0.2310*	0.3210	0.2038**	0.0924
Debt	-0.5437*	0.0382	-0.0151*	0.0412
Equity	0.0432*	0.0041	0.1184**	0.0121
Bank Assets	0.20110**	0.1151	0.2120**	0.0153
Country size	0.0111**	0.0133	0.0421*	0.0031
Constant	1.2312*	0.0121	1.2842**	0.0429
Number of banks	146		126	
Observations	2190		2190	
Number of instruments=j	23		21	
AR (1) p	0.1302		0.0312	
AR (2) p	0.1335		0.5589	
Hansen p>ch2	0.6313		0.5393	
Diff-in-Hansen test P (GMM)	-		0.5282	
Diff-in-Hansen test P (iv)	0.3442		0.6119	

Asterisks *, **, *** indicate that the coefficient or statistic is statistically significant at 10, 5 and 1 percent significant level respectively.

Source: Author's regressions

Table 1 results for serial correlation show significant p-value for AR (1) and insignificant p-value for AR (2) confirming the absence of serial correlation hereby suggesting that the two-step S-GMM estimates are more consistent than the results in the D-GMM. The p-vale results for the difference-Hansen J-statistic in Table 1 generally

imply that all the introduced instruments satisfy orthogonality conditions, and are all valid in group. Therefore, the test for over-identification restriction validates the instruments used in all the specifications. Also, notice that, the number of instruments, denoted as j in Table 1, is much lower than the number of multinational banks (cross sectional units) in the sample used. That is j< 126. Hence the basic condition to keep the results reliable is met [7]. Since the results from Arellano-Bond test for zero autocorrelation in first-differenced errors, the Hansen test of over-identifying restrictions, and the difference-in-Hansen tests of exogeneity of instrument subsets suggest that the underlying assumptions are not violated because their p-values are very high; we conclude that the estimated results are reliable, efficient, and the model has been well specified.

3.3. Corporate Strategic Decisions to Manage Country Risk

Results here in Table 2 are from augmenting country risk with the various corporate strategies (geographic diversification, and debt and equity financing). Strategic management theory suggests that diversification is like insurance to a firm's risks [16] through the notion of 'not putting all eggs in one basket'. Two panels are created in Table 2. The first panel shows results when country risk is augmented with corporate strategy, while the second panel shows results when country risk and corporate strategy constructs are modelled independently.

Key observations need to be made: first, augmenting country risk with geographic diversification raises multinational bank's profits by 1.1 percent. Yet, without an augmenting function, country risk reduces bank profits by 12.8 percent. This points to the importance of geographic diversification towards hedging country risk effects on profitability of multinational banks. Interacting geographic diversification with country risk has changed the negative effect of country risk into positive. Second, augmenting country risk with debt leaves the overall net effect on profitability negative at -0.0014. yet, both country risk and debt financing are independently posting a negative effect at -0.1281 and -0.0041 respectively. This implies that with debt financing, country risk remains negatively affecting long run profits of multinational banks. Third, when country risk is augmented with equity financing, the net effect is positive. The coefficient 0.2381 suggests a 23.8 percent increment in bank profits if multinational banks resort to using equity financing in the long run, no matter the arising country risk. This points to a need for using equity financing than debt financing when multinational banks are investing in their international movements, given diverse country risk levels.

Table 2. *GMM estimates for Geographic diversification and Risk on profitability.*

Dependent variable ROA	**Augmented model Two-step S-GMM**		**Non-augmented model Two-step S-GMM**	
	coefficient	**s.e**	**coefficient**	**s.e**
Lag1_ROA	0.0124***	0.0237	0.1325**	0.104
CoRisk_GeoDiversi	0.0115**	0.0310	-	-
CoRisk_Debt	-0.0014**	0.0523	-	-
CoRisk_Equity	0.2381***	0.0005	-	-
Country risk	-	-	-0.1281***	0.0011
Goeg_Diversification	-	-	0.2038**	0.0924
Debt financing	-	-	-0.0151*	0.0412
Equity financing	-	-	0.1184**	0.0121
Bank Assets (log)	0.20110**	0.1151	0.1940**	0.0153
Country size (log)	0.0111**	0.0133	0.1421*	0.0031
Constant	1.2312*	0.0121	1.0842**	0.0101
Number of banks	146		146	
Observations	2190		2190	
Number of instruments=j			24	
AR(1)p			0.0133	
AR(2)p			0.6511	
Hansen p>ch2			*0.5718*	
Diff-in-Hansen testP (GMM)			0.5232	
Diff-in-Hansen testP (iv)			0.5993	
Asterisks *, **, *** indicate that the coefficient or statistic is statistically significant at 10, 5 and 1 percent significant level respectively.				

Source: Author's regressions

In Table 2, the number of instruments j, is much lower than the number of multinational banks N in both D-GMM and S-GMM models thereby fulfilling the basic condition to keep the results reliable [16]. Also, the results from Arellano-Bond test for zero autocorrelation in first-differenced errors, the Hansen test of over-identifying restrictions, and the difference-in-Hansen tests of exogeneity of instrument subsets suggest that the underlying assumptions are not violated because their p-values are very high. This leads to a conclusion that the estimated results are efficient, robust and reliable, and the model is well specified.

4. Conclusions

Within the geographical scope of Sub-Saharan Africa, this paper aimed at investigating key strategies for country risk management by multinational banks if they are to keep making

profits. First, the paper examined whether country risk and the corporate strategy constructs (geographical diversification, debt and equity financing) affect profitability of multinational banks. Results show country risk negatively affecting profitability. Save for debt financing, results find other strategies positively affecting profitability. Second, on what strategies to manage country risk, in the long run, multinational banks should not fear opening new branches in new territories. Therefore, both the 'where to go for investment' and 'source of capital' are key strategic management questions requiring planning and proper decision making by multinational banks. The paper recommends that as long as equity finance strategy is used for investment, firms should not fear country risk in diverse economies.

References

[1] Busse, M. & C. Hefeker (2007). Political risk, institutions and foreign direct investment. European Journal of Political Economy, 23 (2), 397-415.

[2] Arellano, M. and Bover, O. (1995) Another Look at the Instrumental Variable Estimation of Error-Component Models. Journal of Econometrics, 68, 29-52. http://dx.doi.org/10.1016/0304-4076(94)01642-D

[3] Aniefor S. J & E. A. Onatuyeh (2019). Effect of Debt Financing on the Corporate Performance: A Study of Listed Consumer Goods firms in Nigeria. International Journal of Academic Accounting, Finance & Management Research (IJAAFMR) ISSN: 2000-008X Vol. 3 Issue 5, May – 2019, Pages: 26-34.

[4] Arasa, R. & P. K'Obonyo (2012). The Relationship between Strategic Planning and Firm Performance. *International Journal of Humanities and Social Science Vol. 2 No. 22 [Special Issue – November 2012]*.

[5] Baltagi, B. H. (2008). Econometric Analysis of Panel Data. 4th ed. Chichester, UK: John Wiley & Sons.

[6] Baum, F. C (2006). Instrumental variables and GMM: Estimation and testing. The Stata Journal (2006) 3, Number 1, pp. 15–41.

[7] Blundell, R & S. Bond (2000). Generalized Method of Moments Estimation with persistent panel data: an application to production functions. Econometric Reviews 19 (3), 321-340.

[8] Bucevska. V & B. H Misheva (2017). The determinants of profitability in the banking industry: Empirical research on selected Balkan countries, Eastern European Economics, 55: 2, 146-167, DOI: 10.1080/00128775.2016.1260473. https://doi.org/10.1080/00128775.2016.1260473

[9] Coplin, W. D. & K, M, O'Leary (1994). The Handbook of Country and Political Risk Analysis, Political Risk Services, ISBN 1 85271 302 X.

[10] Dioha U. C & A. Kamaluga (2019). Effect of Debt Financing on Profitability of Listed Agricultural Companies in Nigeria. The international Journal Research Publications. Research Journal of Economics and Business studies. ISSN 2251 1555.

[11] Global finance (2017). Safest bank awards, Africa, 2017. NEW YORK, September 6, 2017.

[12] Goyal, A. M. (2013). Impact of capital structure on performance of listed public sector banks in India. *International Journal of Business and Management Invention, 2* (10), 35–43.

[13] Hansen, L (1982). Large sample properties of generalized method of moments estimators. Econometrica 50 (3): 1029–1054.

[14] Harelimana, B. J (2017). Effect of Debt Financing on Business Performance: A Comparative Study between I&M Bank and Bank of Kigali, Rwanda. Global Journal of Management and Business Research: C. Finance. Volume 17 Issue 2 Version 1.0 Year 2017.

[15] Hayakawa K, Kimura F & H. H. Lee (2011). How does country risk matter for MNEs? IDE. Discussion Paper No. 281. Institute of Development Economics, JETRO, Japan.

[16] Hisey, K., & R. Caves (1985). Diversification strategy and choice of country: Diversifying acquisitions abroad by U.S. multinationals, 1978–1980. *Journal of International Business Studies*, 16: 51-64.

[17] Hurlin, C. (2018). Dynamic panel data models. School of Economics and Management - University of Geneva, Université of Orléans, April 2018.

[18] Im, K. S, Pesaran H. M., & Y. Shin (2003). 'Testing for Unit Roots in Heterogeneous Panels', Journal of Econometrics 115 (1): 53–74.

[19] Khainie G. (2018). Impact of Internationalization on firm performance in Botswana. BIDPA Working Paper 58. Botswana Institute for Development Policy Analysis.

[20] Kohlscheen E, Murcia, A & J. Contreras (2018). Determinants of bank profitability in emerging markets. Monetary and economic department. Bank for International Settlement Working Papers No. 686.

[21] Lindner, T., Klein, F., & S. Schmidt (2018). The effect of internationalization on firm capital structure: a meta-analysis and exploration of institutional contingencies. Int. Bus. Rev. 6, 1238–1249.

[22] Mamaro, L. & T. Legotlo (2020). The Impact of Debt Financing on Financial Performance: Evidence from Retail Firms Listed on the JSE. Journal of Accounting and Management. ISSN: 2284-9459 JAM Vol. 10. No. 3 (2020).

[23] Markowitz, H. (1952). Portfolio selection. The Journal of Finance 7: 77–91.

[24] Mathieu, P., Pani, M., Chen, S. & R. Maino (2019). Drivers of cross-border banking in sub-Saharan Africa. IMF Working Paper WP/19/146. Washington, DC: IMF.

[25] Mulwa M. J & D. Kosgei (2016). Commercial Bank Diversification and Financial Performance: The Moderating Role of Risk. *Journal of Finance and Investment Analysis, vol. 5, no. 2, 2016, 31-52 ISSN: 2241-0998 (print version), 2241-0996 (online) Scienpress Ltd, 2016.*

[26] Nassar, N. (2016). The Impact of Capital Structure on Financial Performance of the Firms: Evidence from Borsa Istanbul. Journal of Business & Financial Affairs, 5, 173. doi: 10.4172/167-0234.1000173.

[27] Oetzel, J & J. Miklian (2017). Multinational enterprises, risk management and the business and economics of peace. Multinational Business Review, Vol. 25 No. 4, PP. 270-286. https://doi.org/10.1108/MBR-09-2017-0064.

[28] Olsen, D. M & J. J. West (2008). Strategic Management in the Hospitality Industry (3rd Edition). https://bookandpdf.com

[29] Pedroni P. (1995). “Endogenous Growth, Human Capital, and Cointegration for Multi-Country Panels,” working paper, Indiana University.

[30] Pelletier, A (2016). “Financial Performance of Foreign Banks in Developing Countries: Evidence from Sub-Saharan African Banking Markets”. Making Finance Work for Africa. Working Paper Series. Issue 3. July 2016.

[31] Roodman, D. (2009): “How to do xtabond2: an introduction to difference and system GMM in Stata,” Stata Journal, 9, 86–136.

[32] Sargan, J. D. (1958). "The Estimation of Economic Relationships Using Instrumental Variables". *Econometrica*. 26 (3): 393–415. *doi*: *10.2307/1907619*. *JSTOR 1907619*.

[33] Sarpong-Kumankoma E, Abor J, Aboagye Q. Q. A, & M. Amidu (2018). "Freedom, competition and bank profitability in Sub-Saharan Africa", Journal of Financial Regulation and Compliance, Vol. 26 Issue: 4, pp. 462-481, 2018. https://doi.org/10.1108/JFRC-12-2017-0107

[34] Shahidul I & S. Nishiyama (2015). The Determinants of Bank Profitability: Dynamic Panel Evidence from South Asian countries. Data Science and Service Research Discussion Paper No. 44. Graduate School of Economic and Management Tohoku University 27-1 Kawauchi, Aobaku Sendai 980-8576, Japan.

[35] Singh B & M. Singh (2016). Impact of Capital Structure on Firm's Profitability: A Study of selected listed Cement Companies in India. Pacific Business Review International. Volume 8, Issue 7, January 2016.

[36] Green, W. (2009): Econometric analysis, 7th edition New York University.