



Thin Capitalisation and Firms' Financial Performance: Evidence from Selected Multinational and Non-Multinational Firms in Nigeria

Ifeoma Osamor¹

Abstract: Absence of thin capitalisation rules in Nigeria and the exploitation of such by multinational and non-multi-national firms is an issue important to shareholders and other stakeholders. Thereby, necessitating the examination of the effects of thin capitalisation on return on invested capital of both multinational and non-multinational firms. Secondary data was obtained from the annual reports of the firms from 2006 to 2020. Thin capitalisation was proxy with debt-to-equity ratio, firms' financial performance was proxy with return on invested capital, while tax burden and firms' size were used as control variables. Data was analysed using descriptive statistic, unit root test, co-integration and panel data regression. The findings of this study concluded that thin capitalisation had effects on firms' financial performance in both multinational and non-multinational firm in Nigeria. Hence, it was recommended that Nigeria government should introduce thin capitalisation rules and other forms of tax avoidance strategies need to be properly checked from both multinational and non-multinational firms to ensure that effective tax rate is paid.

Keywords: Thin capitalisation; debt-to-equity ratio; return on invested capital; multinational firms; non-multinational firms

JEL Classification: G32; G38; H26

1. Introduction

The choice of finance of firms depends on the level of debt and equity employed. The usage of debt and equity helps to determine the financial status and capacity of the firm through capital mix structure. Firms adopt financial strategy which is a component of functional strategy to link company's corporate and business strategy for long term period decision making (Živělova, 2014). Thin capitalisation is a financial strategy that involves the ability of firms to use more debt in financing

¹ Department of Accounting, Faculty of Management Sciences, Lagos State University, Lagos, Nigeria, Address: Lasu Main Rd, Ojo 102101, Lagos, Nigeria, Corresponding author: ifyposamor@gmail.com.

business operations than equity in order to derive tax reduction benefit. Thin capitalisation explains the situation whereby firm's finance source is based on high debt level than equity. Firms are encouraged to source funds from related parties (parent companies) in other countries due to advantages derived such as debt usage incentive, lower tax rates benefit on debt from other countries compared to their country with high tax rate. These factors bring about debt biasness and debt shifting which contributed to tax avoidance issue in the country. The use of debt as a source of finance gives much benefit than equity utilization considering the incorporation of corporate income tax. The debt bias brings advantage to firms in measurements and treatment of cost of equity and debt cost because element of debt cost and interest are deductible in corporate income tax while no deduction of cost of equity and dividend in corporate income tax.

According to Webber (as cited in Akabom & Ejabu, 2018) thin capitalisation was viewed as the tactic adopted by multinational companies for usage of direct foreign investment in their capital structure. Thin capitalisation brings about tax avoidance practice that affects the level of income tax that accrued to the government. From the perspective of firm's finance strategy, thin capitalisation is a financial technique that multinational companies adopt to avoid tax on their investment portfolio abroad. The major objective of using foreign loan is to reduce or avoid the effect of tax returns on their subsidiaries; this is one of the strategies engaged by multinational companies to take advantage of the Nigeria tax system which does not have a thin capitalisation rule that can limit the extent of debt in the capital structure of companies. Thin capitalisation that is not well managed can have adverse effect on firms' performance and government's tax revenue and that is why some countries put in place a thin capitalisation rules (e.g. Austria, Belgium, France, etc.).

Neely, Gregory and Platts (as cited in Ebrahim., Abdullah & Faudziah, 2016) defined performance as measurement that brings about efficiency and effectiveness. The information of a firm's performance in the financial statement is important for investors to make economic decision.

Studies on thin capitalisation focused on international laws in countries and corporate governance (Arie, 2017; Akabom & Ejabu, 2018), while some are on thin capitalisation rules (Jatmiko & Husodo, 2018; Merlo, Riedel & Wamser, 2020), but none has focused on countries without thin capitalisation rules such as Nigeria and the effect of the absence on those rules on firms' invested capital or financial performance. Also, researches had not considered the interest of investors in the study of thin capitalisation, thereby, creating another gap which this study intends to fill by using return on invested capital (ROIC) as proxy for dependent variable, while independent variable is proxy as debt-to-equity ratio (DER); then, tax burden (TB) and firms' size (FS) are control variables. Therefore, the study considered the effects

of debt to equity financing on return on capital invested of multinational and non-multinational companies.

2. Literature Review

2.1. Conceptual Review

2.1.1. Thin Capitalisation

The Organization of Economic Cooperation and Development (OECD) defined thin capitalisation as a situation in which a company is financed through a relatively high level of debt compared to equity. Blouin, Huizinga, Laeven and Nicodeme (2014) considered thin capitalisation as a tax planning strategy that is used by companies to structure their capital composition in such a way that will enhance the usage of more debt than equity through evaluation of country fiscal policy. According to Webber (as cited in Akabom & Ejabu, 2018), thin capitalisation can be defined as the tactic adopted by multinational companies for usage of direct foreign investment in their capital structure. Highly geared or leveraged firms are referred to as thinly capitalized companies. The view of OECD on the position of deductible of interest payable from a company's income in deriving the taxable profit is a valid opinion that higher debt utilization will reduce taxable profit. The general rule of thin capitalisation is to determine the maximum amount of debt that an organization can have in its capital structure.

2.1.2. Corporate Performance

Corporate performance refers to the operating efficiency and performance of the company during a certain period of operation. (Guangguo, et. al., as cited in Ouyang, 2020). Measurement of firm's performance is a continuous process and it is paramount for companies that want to survive for a long period to consider the profit level in all activities. From the economist perspective, profit is the amount derived or gained from operating activities. The view of the financial analyst is that the major aim of business activities of firms is to maximize profit and minimize cost. Hence, the bases for measurement of performance can be financial and non-financial performance measurement. Most financial performance measurement proxies are profitability, asset operation level and debt repayment ability while non-financial performance measurement are customers' satisfaction, product differences, customers' loyalty, brand preference (Robert, Dia & Zhang, 2016).

2.1.3. Multinational Companies and Non-Multinational Companies

A multinational company (MNC) can be defined as an enterprise that engages in foreign direct investments (FDI) and which owns or, to a certain extent, controls value-added activities in several countries (Dunning & Lundan, 2008). Multinational corporation (MNC) is also viewed as a business entity with one or more foreign

affiliates in which the parent company holds at least a 10 percent ownership stake (Foley, Hines & Wessel, 2021). Multinational companies entail the activities or operation of firms that are located in various countries through foreign direct investment. The idea of multinational companies operating in various countries has benefits in aspects of competitive advantage, cost leadership, market growth and tax benefit advantage. The activities of multinational company (MNC) vary in various countries through subsidiary and joint venture, as well as engage in foreign direct investments (FDI). Non-Multinational companies are firms that do not possess the attributes of multinational companies. The non-multinational companies' operations or activities are within the countries in which they are incorporated or registered.

2.2. Theoretical Review

2.2.1. Static Trade-off Theory

Static trade-off theory was propounded Modigliani and Miller in 1963 which stated that firms' debt payments are tax-deductible because the risk involved are less by considering debt over equity. It simply means sourcing finance through debt is cheaper compared to source of finance through equity. Kyereboah-Coleman (2007) explained Modigliani and Miller model that firms' capital structure is a determinant factor to firms' market value and cash flow. It was further explained that the firms' profit value increases through the use of more debt. The theory further considers the ratio of increase in both debt and profitability as a gain which is an advantage to the firm and interest induced tax shield; it simply suggested the use of debt as substitute to equity. According to Voulgaris, Asteriou and Agiomirgianakis (2000), the leverage benefit of profitability of firms are based on cash inflow improvement and the interest in which tax deductible are charged. The theory revealed that at a point when there is balance in the present value of costs of bankruptcy, firm's borrowing policy will result to marginal value of tax advantage. Hence, it is advantageous for firms to adopt thin capitalisation by usage of more debt in financing projects and investment than equity because it reduces tax liability.

2.2.2. Pecking Order Theory

Danaldson in 1961 propounded the pecking-order theory which explained the capital structure of firms in terms of choice of choosing sources of finance. It categorically stated that a firm's last resort to raise funds should be through internal financing. Myers and Majluf in 1984 modified the theory by explaining that internal financing should be the first preference in choosing firm's source of finance and the duty of the manager is to comply with the hierarchical decision of source of finance. Pecking order theory assertion is based on utilization of debt in a situation where there is constrain in retained earnings. Thus, the last resort in the situation of inadequate retained earnings is to raise fund through external equity capital. Hovakimian (2006)

revealed that equity issuance timing is not the basis or yardstick for capital structure (debt-to-equity) significant impact; thus, there is need for firms to use financing mix of debt and equity.

2.2.3. Irrelevance Theory of Capital Structure

Irrelevance theory of capital structure was propounded by Modigliani and Miller in 1958 which states that company's market value is determined by the future earning present value and its assets. The theory revealed the theorem of a firm's sources of finance irrelevant through borrowing, profit re-investment in business and shares stock issuance for growth and performance. The theory further explained the benefits and costs of debt financing for company's value and its impact in reducing firm's cost. Myers (2001) viewed that using less debt will improve the growth prospects of company in a situation of under-investment. From the perspective of thin capitalisation, Modigliani and Miller irrelevance theory created adverse opinion of thin capitalisation which encourages the usage of debt in order to reduce tax effect and increase profitability.

2.3. Empirical Review

Ramadan (2013) investigated the debt-performance of 77 Jordanian industrial companies over the period between 2000 and 2011. Six models were tested using unbalanced pooled cross-sectional time series regression method and the results showed that debt structure have a negative and significant relationship with ROA. Shieh, Ou and Wang (2014) examined the impact of anti-thin capitalisation rules on capital structure in Taiwan Stock Exchange from 2006–2012. Using 2006–2012 sample data, the study discovered that enterprise's total debt-to-equity ratios significantly decreases after the enactment of the anti-thin capitalisation rules, and provisions preventing capital weakening have policy effectiveness.

Nugroho and Suryarini (2018) studied the determinant of thin capitalisation in multinational companies in Indonesia for 2014-2016. purposive sampling was used to select 40 companies, while Ordinal Least Square (OLS) was used as the analytical technique. The results showed that multinationalism, tax haven utilization, tax uncertainty and firm size have a significant positive effect on thin capitalisation. In a similar work of Jatmiko and Husodo (2018), the impact of thin capitalisation on capital structure was examined for 2010 to 2017. Panel data regression was used for analysis and the results of the study showed that thin capitalisation rule reduces the use of debt in the capital structure; also, the enactment of this rule increases the use of related party debt in the capital structure. Akabom and Ejabu (2018) evaluated the effects of thin capitalisation and international law on performance of multinational companies in Nigeria for 2012-2016. Samples were drawn from 17 multinational companies quoted on the Nigerian stock exchange, while multiple regressions

analysis was adopted. Their findings indicated that thin capitalisation is revenue stripping techniques but it affects performance of multinational companies in Nigeria.

Merlo, Riedel & Wamser (2020) examined the impact of thin-capitalisation rules on the location of multinational firms' foreign affiliates. Using information on nearly all new foreign investments of German MNCs, the study provides a number of new and interesting insights on how thin capitalisation rules affect the decision of where to locate foreign entities. It was found out that stricter thin capitalisation rules were found to negatively affect location choices of MNCs. In a recent work by Mooij and Liu (2021), the study considered at what cost is the real effects of thin capitalisation rules. panel data on multinational companies in 34 countries during 2006-2014 was explored. The study estimated that the size of adverse investment effect can be large; dependent on the statutory corporate tax rate and the tightness of the safe-haven ratio. Also, it discovered that negative investment effects are more pronounced for highly-levered firms for which thin capitalisation rules are more likely to be binding.

3. Research Methods

The research design adopted for this study was ex-post facto research design to determine the variables relationship. Judgmental sampling technique was used to select five listed multinational and non-multinational firms from Nigerian manufacturing sector. Secondary sources of data were adopted and data were obtained from available annual reports of the selected firms and their Registrars spanning from 2010 to 2020. Dependent variable was proxy with return on invested capital; the independent variables were Debt Ratio and Equity Ratio, while Tax burden and Firms size were used as control variables. Econometric process such as descriptive statistics, panel unit roots Test, co-integration and panel data regression were adopted to estimate the parameters which showed the effects of the statistical observations of the dependent and independent variables related with a linear function under the standard assumptions.

3.1. Model Specification

The model for the study is stated below:

$$\ln ROIC_{it} = \beta_0 + \beta_1 \ln DER + \beta_3 \ln TB_{it} + \beta_4 \ln FS_{it} + \mu_{it}$$

Where $\ln ROIC$ is log of return on invested capital; $\ln DER$ is log of debt-to-equity ratio; $\ln TB$ is log of tax burden; $\ln FS$ is log of firms' size; β_0 is intercept coefficient; $\beta_1 - \beta_4$ are partial regression coefficient of variables; μ is error term; i is the number of individual firms which is ten (10) and t are the years covered.

4. Results and Findings

4.1. Descriptive Statistics

The results for the multinational firms as depicted on Table 1 showed ROIC was negatively skewed and data were symmetrical in nature with a value of -0.0089. Jarque-Bera statistic of 0.1630 with $p > 0.05$ revealed that data were normally distributed and acceptance of the null hypothesis of normality. Debt-to-equity ratio, tax burden and firms' size series with skewness of 9.3061, 3.3318 and 2.0515 respectively showed that all the variables were positively skewed and asymmetric in nature because the values are ≤ 0 . The Jarque-Bera statistic of 28230.42, 750.0700 and 148.3342 for debt-to-equity ratio, tax burden and firm's size respectively with $p < 0.05$ also showed that the independent variable and control variables were not normally distributed.

Non-multinational firms ROIC was positively skewed with a value of 6.4535 and it indicated that the data were symmetrical in nature. Jarque-Bera statistic of 11695.99 with $p < 0.05$ indicated that the null hypothesis of normality was rejected which means that the data were not normally distributed. Tax burden and firms' size series with skewness of 1.8948 and 1.7258 respectively suggested that the variables were positively skewed and asymmetric in nature because the values are ≤ 0 , while debt-to-equity ratio was -9.3277 which showed that it was negatively skewed and symmetrical in nature. the Jarque-Bera statistic of 11695.99, 28403.45, 78.2223 and 75.3179 for debt-to-equity ratio, tax burden and firm's size respectively with $p < 0.05$ also showed that the variables were not normally distributed.

Table 1. Descriptive Statistics of Variables

MULTINATIONAL FIRMS				
	ROIC	DER	TB	FS
Mean	0.0713	9.3572	3084356	77695417
Median	0.0676	1.5349	1991407	62466662
Maximum	0.3035	696.3355	25440711	2.87E+1
Minimum	-0.1768	-17.0704	0.0000	19215152
Std. Dev.	0.1002	73.2831	4197804	54721355
Skewness	-0.0089	9.3061	3.3318	2.0515
Kurtosis	2.7923	87.7449	15.4746	7.7667
Jarque-Bera	0.1630	28230.42	750.0700	148.3342
Probability	0.9217	0.0000	0.0000	0.0000
Observations	90	90	90	90
NON-MULTINATIONAL FIRMS				
	ROIC	TB	TC	FS
Mean	0.0672	-24.3547	3396187.	1.86E+1
Median	0.0668	0.8552	1304447.	571661
Maximum	4.3347	3.7063	191599	1.09E+1

Minimum	-0.8882	-2267.658	0.0000	0.0000
Std. Dev.	0.5073	239.1245	4996009.	2.47E+1
Skewness	6.4535	-9.3277	1.8948	1.7258
Kurtosis	57.3356	88.0073	5.5493	5.8585
Jarque-Bera	11695.99	28403.45	78.2223	75.3179
Probability	0.0000	0.0000	0.0000	0.0000
Observations	90	90	90	90

Source: Researcher's computation (2022)

4.2. Panel Unit Root Test

Table 2 showed the stationarity of data adopting Levin, Lin and Chu; Im, Pesaran and Shin; ADF-Fisher chi-square and PP-Fisher Chi-square. The results of Multinational firms showed that DER, TB and FS were stationary at level with $p=0.00<0.05$; therefore, the null hypothesis was rejected, while ROIC with $p>0.05$ showed that the dependent variable was not stationary at level but at first difference with $p<0.05$ which revealed acceptance of the null hypothesis at I(1); thus, the variables were stationary at I(1).

The non-multinational firms showed that all the independent and control variables were not stationary at level but at first difference, only the dependent variable (ROIC) that was stationary at level. Hence, there is need to carry out panel co-integration test.

Table 2. Panel Unit Root Test

MULTINATIONAL FIRMS				
Variables	Levin Lin & Chu: p-value	Im, Pesaran and Shin: p-value	ADF-Fisher chi-square: p-value	PP-Fisher Chi-square: p-value
@ Level				
ROIC	0.5713	0.7346	0.6514	0.6961
DER	0.0000***	0.0000***	0.5901	0.0218***
TB	0.0169***	0.0319***	0.0298***	0.0249***
FS	0.0454***	0.1771	0.2549	0.0504***
@ 1st Diff				
ROIC	0.0000***	0.0000***	0.0001***	0.0000***
DER	-	-	-	-
TB	-	-	-	-
FS	-	-	-	-
***, ** level of significance at 1% and 5% respectively				
NON-MULTINATIONAL FIRMS				
Variables	Levin Lin & Chu: p-value	Im, Pesaran and Shin: p-value	ADF-Fisher chi-square: p-value	PP-Fisher Chi-square: p-value
@ Level				

ROIC	0.0878***	0.1911	0.0378***	0.0324***
DER	1.0000	0.1029	0.0643	0.0002***
TB	0.4906	0.3976	0.2057	0.2277
FS	0.8664	0.8259	0.5626	0.5398
@1st Diff				
ROIC	-	-	-	-
DER	1.0000***	0.0000***	0.0001***	0.0000***
TB	0.0000***	0.0000***	0.0001***	0.0000***
FS	0.5898	0.0103***	0.0043***	0.0076***
***, ** level of significance at 1% and 5% respectively				

Source: Researcher's computation (2022)

4.3. Panel Co-Integration Test

Table 3 showed the co-integration results of Pedroni residual panel co-integration, Johansen Fisher panel and Kao Residual co-integration under the assumption of linear deterministic of 5% significant level. Multinational and Non-Multinational Firms Pedroni residual co-integration test revealed non-existence of co-integration among the variables, that is, no long-run relationship, while Johansen Fisher panel and Kao Residual co-integration tests results showed the existence of co-integration between ROIC, DER, TB and FS. Hence, between the variables, there is existence of a long-run relationship.

Table 3. Panel Co-Integration Test

MULTINATIONAL FIRMS								
Pedroni Residual Co-integration Test								
Series	Panel v-statistic		Panel rho-statistic		Panel pp-statistic		Panel-ADF statistics	
	Statistic	Prob.	Statistic	Prob.	Statistic	Prob.	Statistic	Prob.
ROIC, DER, TB FS	-0.4117	0.6597	0.2519	0.5995	-1.2726	0.1016	1.2329	0.8912
Series	Group rho-Statistics		Group PP-Statistics		Group ADF-Statistics			
	Statistic	Prob.	Statistic	Prob.	Statistic	Prob.		
ROIC, DER, TB FS	1.4558	0.9273	0.2206	0.5873	0.7249	0.7658		
Null Hypothesis: No co-integration, Trend assumption: No deterministic trend, Automatic lag length selection based on SIC with a max lag of 2								
Johansen Fisher Panel Co-integration Test								
Series	No of CE(s)	Fisher-Stat* (From trace test)	Prob.	Fisher-Stat*(From max-eigen test)	Prob.			

ROIC, DER, TB FS	At most 2	38.73	0.0001***	29.64	0.0032***
Trend assumption: No deterministic trend. *Probabilities are computed using asymptotic chi-square distribution					
***, 5% level of significance					
Kao Residual Cointegration Test					
ADF (t-Statistic) -2.1820					
Prob. 0.0146***					

Source: Researcher's computation (2022)

NON-MULTINATIONAL FIRMS								
Pedroni Residual Co-integration Test								
Series	Panel v-statistic		Panel rho-statistic		Panel pp-statistic		Panel-ADF statistics	
	Statistic	Prob.	Statistic	Prob.	Statistic	Prob.	Statistic	Prob.
ROIC, DER, TB, FS	26.0105	0.0000***	-2.7851	0.0027**	0.7730	0.7802	2.8176	0.9976
Series	Group rho-Statistics		Group PP-Statistics		Group ADF-Statistics			
	Statistic	Prob.	Statistic	Prob.	Statistic	Prob.		
ROIC, DER, TB, FS	0.8917	0.8137	-0.3370	0.3681	0.7509	0.7736		
Null Hypothesis: No co-integration, Trend assumption: No deterministic trend, Automatic lag length selection based on SIC with a max lag of 2								
Johansen Fisher Panel Co-integration Test								
Series	No of CE(s)	Fisher-Stat* (From trace test)	Prob.	Fisher-Stat* (From max-eigen test)	Prob.			
ROIC, DR, TB, TC, FS	At most 2	27.28	0.0024***	27.94	0.0018***			
Trend assumption: No deterministic trend. *Probabilities are computed using asymptotic chi-square distribution								
***, 5% level of significance								
Kao Residual Cointegration Test								
ADF (t-Statistic) 1.3132								
Prob. 0.0946***								

Source: Researcher's computation (2022)

4.4. Test of Hypotheses

4.4.1. Effects of Debt-to-Equity Financing on Firm's Return on Invested Capital in Nigeria

The panel regression analysis on Table 4 revealed the results of the effects of debt-to-equity financing on firms' return on invested capital. From the multinational firms' perspective, the coefficient of DER ($\beta_1 = 0.2602$) indicated that for every 1% increase in DER, ROIC increased by 26%. The coefficient of determination ($R^2 = 0.6623$) showed that changes in ROIC can be explained by 66.23% variations in thin capitalisation variables (debt-to-equity). The probability of F-statistic of $43.7989 > 2.88$ with $p = 0.0000 < 0.05$ showed an overall statistically significant of the function for better fit to the data which indicated that with the inclusion of the controlled variables (TB and FS) to thin capitalisation (Debt-to-Equity), there exist a joint effect on firms' return on invested capital. Individual effects of DER with $p = 0.0110 < 0.05$ was statistically significant; thus, the null hypothesis was rejected. Therefore, thin capitalisation (debt-to-equity ratio) had effects on firms' return on invested capital in multinational firms in Nigeria.

For the non-multinational firms, the coefficient of DER ($\beta_1 = -0.2365$) showed that for every 1% increase in DER, ROIC decreased by 23.6%. By implication, non-multinational firms' debt-to-equity ratio had a negative effect on return on capital invested. Coefficient of determination ($R^2 = 0.6278$) showed that changes in ROIC can be explained by 62.78% variations in the thin capitalisation (debt-to-equity). The F-statistic is $36.5426 > 2.88$ with $p = 0.0000 < 0.05$ showed the overall statistically significant of the function for better fit to the data which indicated that with the inclusion of the controlled variables (TB and FS) to thin capitalisation (Debt-to-Equity), there exist a joint effect on firms' return on invested capital in non-multinational firms. The individual effects of DER with $p = 0.0523 \leq 0.05$ was statistically significant; thus, the null hypothesis was rejected. Therefore, thin capitalisation (debt-to-equity) had effects on firms' return on invested capital in non-multinational firms in Nigeria.

Table 4. Panel Least Square on Thin Capitalisation and Firms' Financial Performance

MULTINATIONAL FIRMS				NON-MULTINATIONAL FIRMS		
Variables	Coefficient	T-Stat.	Prob.	Coefficient	T-Stat.	Prob.
ROIC	-1.4307	-0.6389	0.5251	-2.0640	-2.5458	0.0133
DER	0.2602	2.6154	0.0110	-0.2365	-1.9772	0.0523
TB	0.7576	10.5047	0.0000	0.5124	8.3385	0.0000
FS	-0.6727	-4.3388	0.0000	-0.4360	-8.8516	0.0000
	F-statistic=43.7989; (Prob= 0.0000); $R^2 = 0.6623$.			F-statistic= 36.5426; (Prob= 0.0000); $R^2 = 0.6278$.		

Source: Researcher's computation (2022)

4.5. Discussion of Findings

The findings of the study revealed that thin capitalisation has influence on firms' return on invested capital in Nigeria in both multinational and non-multinational firms. The debt-to-equity relates to the ratio of debt financing employed by these firms compared to their equity financing. Multinational firms enjoy tax shift burden due to the strategy of shifting investments to countries that have tax haven as this could be seen in the results of the findings. Considering Nigeria which is a country without thin capitalisation rule (TCRs), most of these multinational would have taken advantage of the absence of TCRs to reduce their income tax and as well invest in countries with tax haven. This finding is in line with the works of Akabom and Ejabu (2018) who discovered that thin capitalisation has effects on performance. Also, it supports the study of Merlo, Riedel and Wamser, (2020) that stricter TCRs are found to negatively affect location choices of MNCs as seen in the positive effects on ROIC since MNCs in Nigeria without TCRs application enjoy the location of their businesses. The study contradicted the work of Mooij and Liu (2021) who discovered that a negative investment effects are more pronounced for highly-levered firms for which thin capitalisation rules are more likely to be binding.

Non-multinationals firms also take advantage of the absence of TCRs in Nigeria to reduce income tax, but they don't have the privilege of moving their investments to countries with tax haven, which cost them the opportunity to enjoy tax shift burden. Considering the findings of the study, it is obvious that the individual effects of the non-multinationals ($p=0.0523$) showed an effect on ROIC, but the result is equal to the 0.05 level which can be assumed that a slight change in the excess of debt to equity, the advantage of thin capitalisation strategy would not have been noticed in the non-multinationals firms.

5. Conclusion and Recommendations

Nigeria, being a country without TCRs makes thin capitalisation strategy more beneficial to multinational firms than non-multinational firms because it reduces the effect of tax burden through the usage of more debt than equity in their capital structure and through tax haven. The interest deductibility rules which was introduced in the Finance Act, 2019 limited interest deductibility to 30%, while the remaining can be carried forward for up to five (5) years. This new law will serve as an alternative to TCRs in order to reduce the amount of interest that can be charged against a company's profit in a particular period. Most firms faced challenge in application and implementation of suitable strategy that will increase their shareholders' wealth, as well as performance. Hence, the study critically examined the effects of thin capitalisation on firms' return on invested capital and therefore

concluded that thin capitalisation had effects on return on invested capital in multinational and non-multinational firms.

Consequently, the study recommended the following:

- i. Nigeria government should introduce thin capitalisation rules, a policy that will regulate the maximum amount of debt that can be introduced in the capital structure.
- ii. Non-multinational firms need to develop cutting-edge financing strategy for proper financial mix to achieve better shareholders' satisfaction and improve performance.
- iii. Implementation of the limit of interest deductibility on the Finance Act, 2019 should be well monitored in multinational firms to ensure total compliance.
- iv. Other forms of tax avoidance strategies need to be properly checked from both multinational and non-multinational firms to ensure that effective tax rate is paid.

References

- Akabom, I. A. & Ejabu, F.E. (2018). Effects of thin capitalisation and international law on performance of multinational companies in Nigeria. *Journal of Accounting and Financial Management*, 4(2), pp. 47–58.
- Arie, P. (2017). Does corporate governance reduce thin capitalisation practice? The case of Indonesian manufacturing firms. *Review of Integrative Business and Economics Research*, 6(4), pp. 276–284.
- Blouin, J.; Huizinga, H.; Laeven, L. & Nicodème, G. (2014). Thin capitalization rules and multinational firm capital structure. *International Monetary Fund Working Paper*. <https://www.imf.org/external/pubs/ft/wp/2014/wp1412.pdf>.
- Dunning, J.H. & Lundan, S.M. (2008). *Multinational enterprises and the global economy* (2nd Ed.), Cheltenham: Edward Elgar Publishing.
- Ebrahim, M.A.; Abdullah, K.A. & Faudziah, H.F. (2016). The measurements of firm performance's dimensions. *Asian Journal of Finance & Accounting*, 6(1), pp. 23–25.
- Foley, C. F.; Hines, J. R. & Wessel, D. (2021). *Multinational corporations in the 21st century economy*. https://www.brookings.edu/wp-content/uploads/2021/04/GG_Ch1_Summary.pdf.
- Hovakimian, A. (2006). Are observed capital structures determined by equity market timing? *Journal of Financial and Quantitative Analysis*, 41(1), pp. 221–243.
- Jatmiko, V. B. & Husodo, Z. A. (2018). The impact for thin capitalisation rule on capital structure. *Proceedings of the 12th International Conference on Business and Management Research*, pp. 87–92. DOI:10.2991/icbmr-18.2019.15.
- Kyereboah, Coleman, A. (2007). Corporate governance and firm performance in Africa: A dynamic panel data analysis. *International conference on corporate governance in emerging markets*. Sabanci University, Istanbul, Turkey.
- Merlo, V.; Riedel, N. & Wamser, G. (2020). *The impact of thin-capitalisation rules on the location of multinational firms' foreign affiliates*. *Review of International Economics*, 28(1), pp. 35–61.

- Mooij, R. & Liu, L. (2021). At a cost: The real effects of thin capitalisation rules. *International Monetary Fund Working Paper*. Retrieved from <https://doi.org/10.5089/9781513568553.001>.
- Myers, S. C. (2001) Capital Structure. *The Journal of Economic Perspectives*, 15, pp. 81–102.
- Neely, A.; Gregory, M. & Platts, K. (2005). Performance measurement system design: A literature review and research agenda. *International Journal of Operations & Production Management*, 25(12), pp. 1128–1263.
- Nugroho, A. & Suryarini, T. (2018). Determinant of thin capitalisation in multinational companies in Indonesia. *Journal of Accounting and Strategic Finance*, 1(02), pp. 91–100.
- OECD (n.d.). *Thin capitalisation legislation: A background paper for country tax administrations*. https://www.oecd.org/ctp/tax-global/5.%20thin_capitalization_background.pdf.
- Ouyang, C. (2020). Review based on corporate performance. *Open Journal of Social Sciences Literature*, 8, pp. 616–631.
- Ramadan, I. Z. (2013). Debt-performance relation: Evidence from Jordan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3(1), pp. 323–331.
- Robert, B.M.; Dia, Z.L. & Zhang, W.N. (2016). Management Team Incentive: Dispersion and Firm Performance. *Accounting Review*, 91, pp. 21-45.
- Shieh, W.; Ou, J. & Wang, J. (2014). The impact of anti-thin capitalisation rules on capital structure in Taiwan. *International Journal of Economics and Finance*, 6(11), pp. 142 – 159.
- Voulgaris, F.; Asteriou, D. & Agiomirgianakis, G. (2000). Financial development and financial structure of industrial SMEs: The case of Greece. *European Research Studies*, 3(3–4), pp. 95–109.
- Živělová, I. (2014). *Financial Management*, (2nd Ed.). Brno: Mendel University in Brno.