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ADOPTION OF INTERNATIONAL FINANCIAL REPORTING STANDARD, CAPITAL STRUCTURE AND PROFITABILITY OF LISTED FIRMS IN NIGERIA

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Abstract

The extant literature on the relationship between capital structure and profitability of listed firms when their financial statement is prepared as per Nigerian Accounting Standard revealed that a relationship exists between capital structure and profitability of listed firms. Listed firms in Nigeria were mandated to adopt International Financial Reporting Standard (hereafter referred to as IFRS) since the year 2012. Since the year 2012, it is not fully known if the adoption of IFRS affects the relationship between capital structure and profitability of listed firms or it is still the same before the adoption of IFRS. This is a gap which this research study intended to address. This study used multiple regression analysis to find out whether the same relationship exists between capital structure and profitability of listed firms in Nigeria or not when listed firms prepare their financial statement as per IFRS from the adoption of IFRS in 2012 to 2015. This research limits its analysis to the use of data taken from the selected firms' financial statement for the period under study. This finding shows that the relationship between capital structure and profitability of the firm is the same both before and after the adoption of IFRS. It means adoption of IFRS does not influence the relationship between capital structure and profitability of the firm significantly.

Keywords: **Capital Structure; Profitability; Nigerian Accounting Standard; IFRS**

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INTRODUCTION

Capital structure of a firm is a combination of debt and equity as well as all other sources of finance such as retained earnings etc. available to the firm [1]. An optimal capital structure is usually defined as one that will minimize a firm's cost of capital, while maximizing shareholder's wealth [2]. This is an indication that capital structures have a direct influence on profitability and the firm's value. According to finance theory, the capital structure do affects firm's cost of capital and consequently profitability [2].

The debate of optimal capital structure has been the focal point of the finance literature for previous several decades. Nevertheless, there no consensus as to the how capital structure impact on firms' profitability. Modigliani and Mill [3] show debt capital as part of the firm' capital structure can be used to increase firm value. Corporate tax benefit of using debt capital is that it is a pretax factor. By comparing this benefit with the relevant cost of running a firm through series of researches led development of the trade-off theory [2]. The trade-off theory of capital structure refers to the idea that a company chooses how much debt finance and how much equity finance to use by balancing the costs and benefits.

Though creation of shareholder wealth or maximization of the firm' value is the foremost goal of financial management. It has been argued that this goal can be achieved by minimizing the weighted average cost of capital [2]. Most researches that examined relationship between capital structure and firm's profitability have been done before the adoption of IFRS. There is dearth in literature on study that examines the relationship between capital structures and profitability of listed firms in Nigeria. Now that listed firms in Nigeria has mandatorily adopted use of IFRS. This study offered to fill this gap in the literature.

REVIEW OF LITERATURE

Many capital structure theories as arise from series of controversy in this research area of finance. Modigliani and Miller [4] concluded that an optimal capital structure exists when the tax savings derived from using debt capital is used to counterbalance the risks of going bankrupt [1]. They assert that returns made from using only equity would be lesser than returns a firm would be generate from mixed capital after the optimal capital structure is reached and from this point a firm would be able to maximize returns to its Shareholders. They went further to encourage firms to use only debt capital to finance their operation because of the tax deductions on interest payment.

Brigham and Gapenski [5] consider Modigliani-Miller (MM) model from practice point of view and concluded that theoretically the Modigliani-Miller (MM) model validity is intact but in practice bankruptcy is at a cost which is directly proportional to the firm' level of debt. Consequently, bankruptcy costs increase as the level of the firm' debt level

increases. They opined that tax sheltering benefits generated from an increase in the firm' debt level must be equal to the bankruptcy costs in order to get an optimal capital structure. Another contribution to the capital structure decision from the agency theory perspective was made by Berle and Means [6]. An agency relationship exists where one party (the agent) is delegated to make decisions on behalf of the other party (the principal) or work for the other party (principal). Causes of agency problems include information asymmetry between the principal and the agent. When there is conflict interest between both parties in decision making, agency theory argued that the agent would take advantage of the information in their care of which the principal is unaware (information asymmetry) and opt for the decision that would satisfy their own self-interest even at the detriment of the principal' interest.

The prime responsibility of managers (agent) is to manage the firm in a manner that it generates returns to shareholders in so doing increasing the firm' profitability and cash flows [7]. Nevertheless, Jensen and Ruback [8] as well as Jensen and Meckling [9] opined that managers (agent) in their nature as a rational actors, risk-unenthusiastic and self-centered at all times try to exercise less effort (moral hazards) and project higher skills and abilities than they, in reality, possess (adverse selection) do not at all times run the firm to maximize returns to shareholders.

Consequently in making decision managers in their selfish interest are likely to opt for unprofitable investment that will generate losses for the shareholders [10]. Investments with positive net present value are likely less to be considered by the manager in favor of decision that would satisfy their personal interest using the firm' free cash flow. In order to put pressure on managers to invest funds in investments that will increase the profitability of the firm. Pinegar and Wilbricht [11] opined that debt capital can be increased to a level whereby if the manager invest in unprofitable investment and unable to paid debt holders due interest on their money, it is possible for the debt holder to force the company to liquidate and the managers will lose their job or at minimum lose their rights to decision making.

The perspective of agency theory to the relationship capital structure and firms' profitability is managers are better monitored through debt capital level as it will force managers to invest profitable investment to protect their job or at minimum lose their rights to decision making. Hence leverage firms are better because higher the leverage level the lower agency costs expected [12]. Managers' ineffectiveness and inefficiency would be minimized and profitability of the firm will be improved [2,13-17].

Empirical extant literature in line with agency theory perspective include Zeitun and Tian [18], Long and Maltiz [19], Wald [20], Majumdar and Chhibber [21], Friend and Lang [22], Kester [23] as well as Rao, M-Yahyaee and Syed [24]. Rao, M-Yahyaee and Syed [24], found negative relationship between debt capital and firm' profitability. Majumdar and Chhibber [21] as well as Zeitun and Tian [18], also found negative relationship between debt capital and profitability of the firm. Nevertheless, positive relationship is found between debt capital and the profitability of the firm by Wald [20] as well as Long and Maltiz [19]. Most of these researches have been done before the adoption of IFRS. There is dearth in literature on study that examines the relationship between capital

structures and profitability of listed firms in Nigeria. Now that listed firms in Nigeria has mandatorily adopted use of IFRS. This study offered to fill this gap in the literature.

The Adoption of IFRS has been introduced to harmonize the presentation of accounting information globally [25,26]. Accounting standards' standard-setters and regulators envision that adoption of IFRS will guarantee a high degree of transparency and comparability of financial statements for quality financial reporting [10]. The Nigerian government responded to standard-setters and regulators proposition by mandating listed firms to prepare their financial report in accordance with IFRS effectively for 2012. Since the year 2012, it is not fully known if the adoption of IFRS affects the relationship between capital structure and profitability of listed firms or it is still the same before the adoption of IFRS. This is a gap which this research study intended to address.

The effect of adoption of IFRS on financial ratios in Nigeria was examined by Ibiame et al. [27] via gray comparability index and found that financial ratio and adoption of IFRS correlated negatively. Ishaya and Abduljeetlee [28] examined the relationship between Capital Structure and Profitability in Nigeria and found negative relationship between debt ratio and profitability ratio. In India Khalid, Khursheed and Mouh-I-Din [29] used listed firms to examine impact of capital structure on profitably and found negative relationship exists between debt to equity ratio and profitably ratio. They found also positive relationship exists between debt to assets ratio and profitably ratio [30-34].

OBJECTIVES OF THE STUDY

The specific objectives of the study are to:

1. Examine the relationship between capital structure and return on investment in Nigerian listed firms.
2. Investigate the relationship between capital structure and return on capital employed in Nigerian listed firms.
3. Evaluate the relationship between capital structure and Operating profit in Nigerian listed firms.
4. Ascertain the relationship between capital structure and net profit in Nigerian listed firms.

Hypothesis Development

The following hypothesis has been formulated to determine the relationship between capital structure and firm's profitability based on the adoption IFRS in preparation financial statement.

H₀: There is no significant relationship between capital structure and return on investment in Nigerian listed firms.

H₀: There is no significant relationship between capital structure and return on capital employed in Nigerian listed firms.

H₀: There is no significant relationship between capital structure and operating profit in Nigerian listed firms.

H₀: There is no significant relationship between capital structure and net profit in Nigerian listed firms.

METHODOLOGY AND HYPOTHESIS

Sample Selection

All listed companies Nigerian stock exchange constituted the population for this study. Listed firms are used for this study because, by law, such firms are required to file their annual report with the Corporate Affairs Commission (CAC) and within the time interval chosen for this study, all the listed firms must have adopted IFRS mandatorily. The total number of two hundred and nineteen (219) companies is listed on the Nigerian Stock Exchange (NSE) between the years 2012 to 2015. A minimum of 50% of listed firms on the selected countries stock exchange from period 2012 to 2015 which is chosen time interval of the study were taken from each country after fulfilling the conditions given below:

- (i) The company must be listed on the Stock Exchange in the selected country.
- (ii) It must not be a firm in the financial sector which may be subject to special regulation that may not affect other firms.
- (iii) The company' annual report from 2012 to 2015 must be available and obtainable and consist of financial statement variables in the regression model.

50% of the total population of listed firms is consistent with the minimum sample size as suggested by either the conventional sample size table proposed by Krejcie and Morgan, Egbide or the modern online sample size calculator by Raosoft, Inc.

Data Source

This research limit its analysis to the use of secondary data taken from the selected companies' financial statements. Pearson correlation analysis was used to examine the degree and strength of relationship between the dependent and independent variables; the regression analysis on the other hand was used in analyzing the nature of the relationship between the independent variable on the dependent variable. The dependent and independent variables are as given below (Tables 1 and 2):

Independent Variables

Table 1: Capital structure ratio.

1	Debt to Equity	D/E
2	Debt to Assets	D/A
3	Capital gearing	CG

Dependent Variables

Table 2: Profitability ratio.

1	Return on Investment	ROI
2	Return on Capital Employed	ROCE
3	Operating Profit Ratio	OPR
4	Net Profit Margin Ratio	NPMR

Model Specification

1. $ROI = \alpha + \beta_1(D/E) + \beta_2(D/A) + \beta_3(CG) + e$ (4)
2. $ROCE = \alpha + \beta_1(D/E) + \beta_2(D/A) + \beta_3(CG) + e$ (3)
3. $OPR = \alpha + \beta_1(D/E) + \beta_2(D/A) + \beta_3(CG) + e$ (2)
4. $NPMR = \alpha + \beta_1(D/E) + \beta_2(D/A) + \beta_3(CG) + e$ (1)

ANALYSIS AND DISCUSSION OF FINDINGS

Table 3: Capital structure and return on investment ratio.

R-squared	0.9218123
Adjusted R-squared	0.9205243
Standard Error	0.0867153
Observation	440

Analysis in the above regression Table 3 results, R Square value is 0.922 and the Adjusted R Square is 0.921. Consequently 92% portion of Return on Investment Ratio can be defined by the capital structure ratios and other 8% may be some other factors.

Table 4: ANOVA result on capital structure and return on investment ratio.

ANOVA	df	SS	MS	F	Significant F*
Regression	3	90043.8582	577.204219	2.7846	0.118
Residual	437	0.319396167	0.017744231		
Total	440	90044.1776			

On the other hand ANOVA Table 4 show that the calculated F value is 2.7846 which is higher than the tabulated F value (0.118) at 5% level of significance.

So here we reject the null hypothesis and can conclude that there is a relationship between Capital structure and Return on Investment Ratio when Companies prepare their financial statement as per IFRS.

Table 5: Capital structure and return on capital employed.

R-squared	0.8218123
Adjusted R-squared	0.6205243
Standard Error	0.0725653
Observation	440

Analysis in the above regression Table 5 results, R Square value is 0.922 and the Adjusted R Square is 0.821. Consequently 62% portion of Return on Capital Employed can be defined by the capital structure ratios and other 38% may be some other factors.

Table 6: ANOVA result on capital structure and return on capital employed.

ANOVA	df	SS	MS	F	Significant F*
Regression	3	0.0858244	427.204219	1.7846	0.2134
Residual	437	0.0000319	0.016544231		
Total	440	0.0858563			

On the other hand ANOVA Table 6 show that the calculated F value is 1.7846 which is higher than the tabulated F value (0.2134) at 5% level of significance. So here we reject the null hypothesis and can conclude that there is a relationship between Return on Capital Employed when Companies prepare their financial statement as per IFRS.

Table 7: Capital structure and operating profit.

R-squared	0.681823
Adjusted R-squared	0.670523
Standard Error	0.0067452
Observation	440

Analysis in the above regression Table 7 results, R Square value is 0.681 and the Adjusted R Square is 0.670. Consequently 67% portion of Operating profit can be defined by the capital structure ratios and other 33% may be some other factors.

Table 8: ANOVA Result on capital structure and operating profits.

ANOVA	df	SS	MS	F	Significant F*
Regression	3	0.0658244	221.532622	2.1155	0.1236
Residual	437	0.0000243	0.012244267		
Total	440	0.0658487			

On the other hand ANOVA Table 8 show that the calculated F value is 2.1155 which is higher than the tabulated F value (0.1236) at 5% level of significance. So here we reject the null hypothesis and can conclude that there is a relationship between operating profits when Companies prepare their financial statement as per IFRS.

Table 9: Capital structure and net profit margin ratio.

R-squared	0.561423
Adjusted R-squared	0.550543
Standard Error	0.0287157
Observation	440

Analysis in the above regression Table 9 results, R Square value is 0.561 and the Adjusted R Square is 0.550. Consequently 55% portion of Operating profit can be defined by the capital structure ratios and other 45% may be some other factors.

Table 10: ANOVA result on capital structure and operating profits.

ANOVA	df	SS	MS	F	Significant F*
Regression	3	0.0658244	121.204219	1.0121	0.0245
Residual	437	0.0000243	0.038244231		
Total	440	0.0658487			

On the other hand ANOVA Table 10 show that the calculated F value is 1.0121 which is higher than the tabulated F value (0.0245) at 5% level of significance. So here we reject the null hypothesis and can conclude that there is a relationship between operating profits when Companies prepare their financial statement as per IFRS.

Disagreement and Support from the Literatures

The result of this study is supported by Moazam, Mahdi, Shafiq and Naseem [29] which concluded that there is a significant relationship between capital structure and firm’ profitability. The result is not in line with Khalid, Khursheed and Mouh-I-Din [28] that concluded Debt to Equity ratio was negatively associated with firm’ profitability ratio.

CONCLUSION

Based on the empirical findings given above; it was observed that there is relationship between capital structure and profitability of the firm after the adoption of IFRS in the preparation of the firm’ financial statements. This finding shows that the relationship between capital structure and profitability of the firm is the same both before and after the adoption of IFRS. It means adoption of IFRS does not influence the relationship between capital structure and profitability of the firm significantly.

REFERENCES

1. Margaritis D, Psillaki M (2007) Capital structure and firm efficiency. Journal of Business Finance and Accounting 34: 1447-1469.
2. Uwalomwa U, Uadiale OM (2012) An empirical examination of the relationship

- between capital structure and the financial performance of firms in Nigeria. *Euro Economica*, pp: 57-65.
3. Modigliani F, Miller M (1963) Corporate income taxes and the cost of capital: a correction. *American Economic Review* 53: 433-443.
 4. Modigliani F, Miller M (1958) The cost of capital, corporate finance and the theory of investment. *American Economic Review* 48: 261-297.
 5. Brigham E, Gapenski L (1996) *Financial Management. Strategic Management Journal* 17: 713-728.
 6. Berle AA, Means GC (1932) *The modern corporation and private property*. Macmillan, New York.
 7. Elliot B, Elliot J (2002) *Financial Accounting and Reporting*. Prentice Hall/ Financial Times, London.
 8. Jensen M, Ruback R (1983) The market for corporate control: the scientific evidence. *Journal of Financial Economics* 11: 5-50.
 9. Jensen M, Meckling W (1976) Theory of the firm: managerial behavior, agency costs. *Journal of on line Education*, pp: 1-8.
 10. Otekunrin AO (2017) Adoption of international financial accounting standards, culture and earnings management: a cross-country study. Covenant University, Nigeria.
 11. Pinegar M, Wilbricht L (1989) What managers think of capital structure theory: a survey. *Financial Management*, pp: 82-91.
 12. Boodhoo R (2009) Capital structure and ownership structure: a review of literature. *The Journal of on line Education*, pp: 1-8.
 13. Akintoye IR (2008) Effect of capital structure on firms' performance: the Nigerian experience. *European Journal of Economics, Finance and Administrative Sciences* 10: 233-243.
 14. Jensen M (1986) Takeovers: their causes and consequences. *Journal of Economic Perspectives* 2: 21-48.
 15. Jensen M (1986) Agency cost of free cash flow, corporate finance and takeovers. *American Economic Review Papers and Proceedings* 76: 323-329.
 16. Aghion P, Dewatripont M, Rey P (1999) Competition, financial discipline and growth. *Review of Economic Studies* 66: 825-852.
 17. Kochhar R (1996) Explaining firm capital structure: the role of agency theory vs transaction cost economics. *Strategic Management Journal* 17: 713-728.
 18. Zeitun R, Tian GG (2007) Capital structure and firm performance: evidence from Jordan. *Australia Accounting Business and Finance Journal* 1: 148-168.
 19. Long MS, Malitz IB (1985) The investment-financing nexus: Some empirical evidence. *Midland Corporate Finance Journal* 3, 53-59.
 20. Wald J (1999) How firm characteristics affect capital structure: an international comparison. *The Journal of Financial Research* 22: 161-187.
 21. Majumdar SK, Chhibber P (1999) Capital structure and performance: evidence from a transition economy on an aspect of corporate governance. *Public Choice*, pp: 287-305.
 22. Friend I, Lang L (1988) An empirical test of the impact of managerial self-interest on corporate capital structure. *Journal of Finance* 43: 271-281.
 23. Kester WC (1986) Capital and ownership structure: a comparison of United States and Japanese manufacturing corporations. *Financial Management* 15: 5-

- 16.
24. Rao NV, Al-Yahyaee KHM, Syed LAM (2007) Capital structure and financial performance: evidence from Oman. *Indian Journal of Economics and Business*, pp: 1-23.
25. lyoha FO (2014) Searching for a pathway to priming accountants for ethical compliance with international financial reporting standards: the core value paradigm. *Research Journal of Finance and Accounting* 5: 92-101.
26. Rathke AAT, Santana VF, Lourenço IMEC, Dalmacio FZ (2016) International financial reporting standards and earnings management in Latin America. *RAC, Rio de Janeiro* 20: 368-388.
27. Ibiameke NA, Briggs A, Patricia B (2014) Financial Ratios Effect of International Financial Reporting Standards (IFRS) Adoption in Nigeria. *International Journal of Business and Management Invention*, pp: 50-59.
28. Ishaya LC, Abduljeetlee BO (2014) Capital structure and profitability of Nigerian quoted firms: the agency cost. *American International Journal of Social Science*.
29. Khalid A, Khursheed A, Mouh-I-Din S (2013) Impact of capital structure on profitability of listed companies (evidence from India). *The Usv Annals of Economics and Public Administration Indian*.
30. Moazam MM, Mahdi SG, Shafiq MM, Naseem MA (2011) The impact of capital structure and its impact on profitability: a study tobacco industry of Pakistan. *Franklin Business and Law Journal* 2: 129.
31. Jensen M (1989) Eclipse of public corporation. *Harvard Business Review* 67: 61-74.
32. Jensen M, Meckling W (1976) Theory of the firm: managerial behaviour, agency costs, and ownership structure. *Journal of Financial Economics*, pp: 305-360.
33. Jensen MC (1986) Agency cost of free cash flow, corporate finance and takeovers. *American Economic Review, Papers and Proceedings* 76: 323-329.
34. Malitz L (1986) The Investment Financing Nexus: Some Empirical Evidence, *Midland. Corporate Finance Journal* 3: 140-169.