

THE LINK BETWEEN CAPITAL STRUCTURE AND BANKING SECTOR PERFORMANCE IN AN EMERGING ECONOMY

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Abstract

South African banks are small compared to the international standards and this necessitates them to remain efficient and competitive at both national and international levels. Such competitiveness shelter them from global competitors wishing to enter into the South African market. Putting in mind the critical role played by banks in the economic development of every country, managers in the banking industry should ensure they make sound financial decisions in order to remain profitable and competitive amidst challenges of the debt-equity choice. This study seeks to determine the influence of capital structure on profitability of banks listed at the Johannesburg stock exchange (JSE) using the random effect regression model. Empirical studies that studies the impact of capital structure on profitability of the banking sector in emerging markets and Africa are very scant. The few empirical studies that focused on the banking sector are yet to focus on African and to agree on the relationship between capital structure and profitability. It is against these reasons that the current study chose to investigate how profitability of South African banks is affected by their capital structure. The study found out that capital structure is a key determinant of profitability of banks in South Africa. As such, the study recommends that optimal capital policies need to be pursued if banks are to not only increase profitability but ensure long term stability and sound performance.

Keywords: Capital structure, Profitability, Johannesburg Stock Exchange, South Africa

1. INTRODUCTION

Businesses operate with a major objective of maximizing profit so that they can survive in the financial competitive environment. Finance is a key determinant in the establishment of new businesses as good financial control enables the business to grow, expand, invest and to be innovative. Expansion increases the possibilities of a business to invest in assets that helps it to generate profits. However, before a firm could invest in assets it has to decide its source as either to use debt or equity, or a combination of the two sources. This combination or proportion of debt and equity to finance a firm is referred to as capital structure (Manurung et al Nuzula, 2014).

Raheman et al (2007) noted that, because of the different ways of making financial decisions, there is lack of a standardized capital structure that could be used by all firms. Basing on capital structure perspective, a firm with higher debts compared to its equity is assumed to have greater risks while that with higher equity compared to the debts is said to have profitability (Shubita & Alsawalhah, 2012). On the other hand, Mohammadzadeha, Rahimia & Rahimib (2013) described profitability as the potential of a firm to generate profits hence, it is a relative measure of the earning capacity of the firm. They noted that, profitability explains the state of profits of business whether they are constant, improving or deteriorating.

In finance and business management, capital is classified into two categories namely equity and debt capital. Each of these two categories has its advantages and disadvantages basing on which a meaningful capital structure could be established in relation to risks or rewards payoff of the stakeholders. Raheman et al. (2007) observed that equity capital relates to the money put up and owned by the owners of the business also called the shareholders. They observed that equity capital could be raised through contribution to capital during the inception of the business for the purposes of acquiring shares, stock or ownership in the firm. They further noted that equity capital may also rise from retained earnings whereby members decide not to withdraw the profits from the business with a purpose of strengthening the balance sheet so that the business can grow and expand. On the other hand, debt capital refers to borrowed money from other financial institutions like; banks, credit unions, finance companies, and credit card companies for the operation of the business (Shubita & Alsawalhah, 2012).

According to the Johannesburg Stock Exchange annual report of 2013 (JSE, 2013), JSE is the only South Africa's licensed full service securities exchange and has close to four hundred (400) listed companies. The report noted that that the JSE plays a big role in the country's economic landscape as it connects buyers and sellers in various markets that include but not limited to: equities, financial

derivatives, commodity derivatives, currency derivatives and interest rate instruments. The report further observed that in terms of soundness of the JSE listed banks, South Africa (SA) was number three by 2010 and for provision and availing of financial services, they ranked number two by 2010 - 2013. The report signifies that, it is paramount that for these high standards to remain high so as to strengthen the country's ability to compete for a share of foreign investment flows. Based on this understanding, it is appropriate to conduct research of the influence of capital structure on profitability of these banks.

However, despite of the critical role played by banks for economic growth, investigation into their optimal capital structure determinants and the role it plays on profitability is still limited (Gatsi & Akoto, 2010). As researchers (Delcours, 2007; Goyal, 2013; De Bandt et al., 2014) argued that, this lack of clarity on optimal capital structure determinants and consensus on the universal model applicable to the real business world does not only affect banks but also the national economy. Such has also been worsened by the numerous theories of capital structure and literature that give varying determinants of capital structure influence on profitability (Shubita & Alsawalhah, 2012). Whilst there are plenty of studies that focused on the impact of capital structure on profitability, those particular to South African banks listed on JSE are scarce. Such has caused lack of clarity whether capital structure has influence on profitability of banks listed on JSE. It is against this background that the current study sought to determine the impact of capital structure on profitability for banks listed on the Johannesburg Stock Exchange (JSE), South Africa for five years ranging from 2010 to 2014.

The rest of the study is structured as follows: Section 2 discusses literature review. Section 3 explains the methodology that was used, show and interpret the results. Section 4 concludes the study whilst section 5 list the references that were used in the study.

2. REVIEW OF RELATED LITERATURE

This section discusses the literature on the influence of capital structure on profitability. In particular, it reviews the previous work, theories and debates on capital structure and profitability, particularly in the context of South Africa and gives the contribution this study makes in bridging the identified gaps in the literature.

Raheman et al. (2007) noted that various theories that explain the capital structure of firms have been suggested and developed. These theories have led to numerous studies on capital structure and its influence to profitability. However, recent studies such as (Shubita & Alsawalhah, 2012; Goyal, 2013; Chisti et al., 2013) show that the variation of these theories just increases the criticality of the influence of capital structure on profitability. They asserted that, this comes as a result of lack of consensus among financial management researchers about the optimal capital structure, hence necessitating the need for further research to determine the relationship between capital structure and profitability.

Capital structure could be looked at as a basis of how an organization or firm finances its assets that may include a combination of various sources like senior debt, mezzanine debt and equity (Mohammadzadeha et al., 2013). Depending on its structure, an organization may solicit business finances from various sources that may include drawing funds from other business entities to make its capital structure sounder. From this perspective, capital structure could be looked at as the interlink between these different financing sources as they appear on the organization's balance sheet (Shubita & Alsawalhah, 2012). It is essential to note that the relationship between capital structure and profitability is core in the improvement of the profitability of a firm that leads to its sustainability survivability (Chisti, Ali, & Sangmi, 2013).

Chisti et al. (2013) argued that of the different capital investment an organization may decide to opt for when starting a business, the capital structure decision is regarded and should be treated as the most vital. Their study further noted that such a decision greatly and directly influences the organization's profitability. Goyal (2013) noted that it is more advantageous for a firm to leverage on debt than equity capital as debt capital is easier to raise and cheaper than equity capital since financing companies pick only the lowest credit risk companies and further secure their loan with assets. Their study further noted that the financing companies do not take up ownership interest in the firm that has borrowed money hence giving the stakeholders a chance of remaining the overall controller of business without being answerable to the financiers. However, it is also important to note that the strength of the equity capital is its protection of the firm from loan interest payments that could assist the business to cope with competitiveness and also increases the margin of safety (Manurung et al., 2014). Moreover, when stakeholders raise equity capital, they are liable to share the risks, allow smooth transition of business and become committed to the firm up to when they decide to exit.

Profitability is defined as earnings before interest and taxes, divided by assets or capital of an organization (Utary & Setyadi, 2014). It could generally be looked at as the ability of an organization to make a profit after costs and all business overheads have been set off. According to Velnampy & Niresh (2012), an organization's profit could be seen as what is left of the generated revenue after all related expenses incurred in the process of getting the revenue have been deducted.

Apart from the non-profit service oriented organizations, all businesses operate with an aim of maximizing profits hence managers ensure that this aim is achieved. Based on this understanding, several studies have been conducted to address the concept of capital structure, profitability and the influence of capital structure on profitability (Mohammadzadeha et al., 2013). Much of today's research on capital structure have been prompted by earlier research of Modigliani and Miller (1963) correction paper on corporate income taxes and the cost of capital which they published to rectify the impression they had created that financing has no material effect on the firm's value. Their earlier study had developed a theory known as the

Modigliani and Miller theory also known as the MM theory.

The MM theory has given birth to many other theories and studies on capital structure that came up as a result of disproving it. In the effort to disprove the MM theory, Myers (2001) conducted a research in which he examined two other theories of the 'Optimal theory' and the 'Trade-off theory'. His findings established that none of the three theories gives a concrete financing strategy. Thus he referred to them as conditional theories that need to work with other factors in order to meet the business needs and thus recommended further research in the direction of determining the influence of outside financing that is to say debt vs equity.

Recent research advanced the concept of capital structure in Myers (2001) direction of recommendations. Raheman et al. (2007) conducted a study to establish the effect of capital structure on profitability of 94 non-financial firms that were listed on Islamabad Stock Exchange in the years 1999 to 2004. Their quantitative analysis findings indicated that capital structure has significant effect on the profitability and that more equity leads to more profits. More so, their findings indicated long term debts are not good for business as they lead to less profitability. However, their study only looked at one stock exchange firm in one district in Pakistani firms this could limit generalization of their results to apply in the South African perspective.

Chen et al (2009) conducted a study to test and verify the relationships among capital structure, operational risk and profitability taking a case study of life an insurance industry in Taiwan. Like other previous researchers such as (Myers, 2001; Raheman et al., 2007), their study wanted to verify whether Modigliani & Miller (1963) assumptions that had led to the belief that capital structure of a firm is irrelevant to its value assuming perfect markets and zero transaction costs were relevant. Their findings established that higher debt financing of a firm is tentative to increases the probability of bankruptcy. They also established that, there is a need for market equilibrium where debt increase is balanced by profitability and thereby recommended that firm managers should decrease or diversify their investment to protect profits and prevent losses.

Khalid (2011) carried out research on financial reforms and dynamics of capital structure choice in which he integrated financial reforms and corporate finance in a dynamic setup. The study analyzed factors of capital structure choice in a Stock Exchange of Pakistan for 10 year range period from 1988-2008. By using the Arellano-Bond Dynamic Panel-Data Estimation technique, his study established that firms shifted from debt to equity market once the financial constraints were eased out. The study also established that because of high costs, firms avoid borrowing for fear of debt financing if there is a possibility of having equity market.

Velnampy & Niresh (2012) investigated the relationship between capital structure and profitability by taking ten listed Srilanka banks in a period of eight (8) years. Their descriptive and inferential study also sought to establish whether there is significance between the capital structure decision of a bank and other non-financial firms.

They found out that several other factors do exist that affect firms' profitability. Such factors they noted could include but not limited to; organizational size, ownership status, operating expense, decision making in relation to costs, organizational assets and liabilities.

Other similar empirical studies done by (Shubita & Alsawalhah, 2012; Goyal, 2013; Chisti et al., 2013) concluded that capital structure had a more prominent role in terms of influencing profitability of firms. Their studies recommended that research on the influence of capital structure profitability should be extended to firms that belong to different sectors of the economy. Many of these studies have been conducted in the developed countries yet little has been done to investigate these factors in the perspective of developing countries.

Velnampy & Niresh (2012) argued that since different businesses are started for various reasons, organizations find several ways of raising and rearranging the sources of its capital structure. They put it that, due to these variations the relationship between capital structure and profitability has attracted and gained considerable attention in the business finance domain and literature. Mohammadzadeh et al. (2013) observed that due to latent company-specific factors that may include but not limited to the probability of bankruptcy, profitability, quality and structure of assets, the relationship between an organization's capital structure and its profitability vary from one organization to another. Additionally Utary and Setyadi (2014) further emphasized that these variations of the influence of capital structure on profitability are the ones responsible for the lack of a common understanding on this discussion hence causing continued lack of consensus.

Modigliani & Miller (1963) had earlier on observed that the lack of a common understanding of what should constitute capital structure lead to different several theories that conflict against each other. From their perspective, a lot of intervening factors such as taxes and interest plays a critical role when dealing with capital structure. Modigliani and Miller suggested that increasing an organization's utilization of a debt in the capital structure has an impact on the risk for equity providers and hence the cost of equity capital.

Raheman et al. (2007) alluded that various theories to explain the capital structure of firms have been suggested and developed. Utary & Setyadi (2014) added that these theories have led to numerous studies on capital structure and its influence on profitability. However, recent studies such as (Shubita & Alsawalhah, 2012; Goyal, 2013) show that the variation of these theories just increases the criticality of the influence of capital structure on profitability. They asserted that this comes as result of lack of consensus among financial management researchers about the optimal capital structure whereas Mohammadzadeh et al. (2013) attribute the lack of consensus to failure to identify the factors that should be considered when addressing capita structure.

The concept of the theories of combining financial resources was first initiated by Weston (1955) and his idea gave birth to the first capital structure theory by Modigliani & Miller (1958) that

suggested that too much capital decrease banks' value. However, Modigliani & Miller (1963) modified the capital structure theory to include the proposition of borrowing. They argued that since borrowing comes with taxes and interest, tax benefit caused through borrowing, renders borrowing to be an important element of financial supplement due to the fact that it leads to an increase in the company value. Later researchers Myers (2001) contrasted the Modigliani & Miller theory by coming out with two theories of Static Trade-off Theory and Pecking Order Theory on the capital structure. In the tradeoff theory, Myers (2001) predicted moderate borrowing by tax-paying organizations. On the other hand, in the pecking order theory it is assumed that an organization borrow, rather than issuing equity, when internal cash flow is not sufficient to fund capital expenditures. Goyal (2013) noted these divergent theories may influence the impact of capital structure on profitability challenges in financial institutions.

Mohammadzadeha et al. (2013) noted that in a business decision making, capital structure decision is vital and paramount for all aspects of capital investment decisions. Chisti et al. (2013) added that since profitability is influenced by business decisions, managers need to be informed of the how and, what capital structure decisions to make in the business process. They noted that several options exist but to determine which option to take needs to know all factors that influence a particular scenario. Shubita & Alsawalhah (2012) also indicated that as much as debt in the capital structure may be considered less costly than equity each has advantages and disadvantages.

Literature has shown that there are a number of studies that have been conducted to establish the relationship between capital structure and profitability of an organization. However, as Shubita and Alsawalhah (2012) noted, there is still lack of consensus whether these two concepts really influence one another and if so, the extent to which they do influence and impact on each other need to be clarified to help firms to map their competitiveness and sustainability strategies.

The discussed theories in this study indicate that this lack of consensus and the divergent of the theories is another major area of concern especially with financial institutions like banks that depends heavily on borrowing. The discussed literature also indicated that the confusion may be resulting from the lack of predetermined factors that could be considered when deciding on a list of determinants of capital structure. This implies that more research is needed to establish this relationship in varied business environment especially in the banking sector.

3. METHODOLOGY

The research methodology should therefore focuses on the research process and the kind of tools and procedures to be used in the study including the literature and document analysis, survey methods, data collection and sampling as well as the analysis of both secondary and primary data collected for the study (Salkind, 2012; Saunders, Lewis & Thornhill, 2009). The main aim of this section is to outline the methodological approach adopted by this

study so as to achieve the set objectives intended to solve the research problem. The flow of this section is as follows: It begins with the discussion of the research approach, followed by sampling, data sources and collection methods, then main variables of this study, regression analysis and lastly the discussion and implication to theory and practice.

3.1. Research Approach

Creswell (2009) alluded that during research philosophical ideas should be used together with broad approaches and implemented with specific procedures by combining research strategies with methods that applicable to theory and practice. He presented three basic approaches that could be used in research namely, qualitative, quantitative and mixed methods. The study by Creswell (2009) further noted that the choice of a research approach should be well aligned with the paradigm that is being followed by the study. De Vaus (2001) refers to a research design as the overall strategy that a researcher follows to integrate different components of the research in a clear and understandable way. The current study followed the quantitative research approach. More so, the study uses secondary data to analyze the relationship between short-term debt, long-term debt as well as total debt and total assets and profitability in relation to theory and practice of capital structure. It is against this backdrop that the current study used the regression analysis to achieve the objectives of the study. The quantitative approach was also deemed appropriate for this study since the study followed a positivism paradigm.

3.2. Data Sources and Collection

Secondary data ranging from 2010 to 2014 was collected from the JSE Market data portal and supplemented by that from the Financial and Business Information Service company database. Several forms of market data is available such as; Equities, Indices, Equity and Commodity Derivatives, Currencies and Interest Rate Derivatives, Bonds, International Securities Identification Number (ISIN), Historical, Market Announcements and credit information. These sources of data were chosen because of their credibility and less costly because they are publicly available. Judgmental sampling was used to select two banks listed at the JSE based on the following reasons: (1) they were consistently the largest in terms of balance sheet, (2) most performing during the period under study and (3) availability of complete data during the period under study.

From the secondary data collected, datasets were extracted on financial data based on statements of financial position and statements of comprehensive income (income statements) of the two banks. From this dataset, the variables used for the analysis included profitability and leverage ratios and reported according to the International Financial Reporting Standards (IFRS). The leverage ratios used include:

- Short-term debt to the total assets;
- Long-term debt to total assets; and
- Total debt to total assets

- The firm size and sales growth were included as control variables.

3.3. Main Variables Used in the Study

Two dependent variables, Return on Assets (ROA) and Return on Equity (ROE) are mostly considered to as profitability variables (business revenue) for various studies (Bokhari & Khan, 2013; Mohammadzadeh et al., 2013). In the studies of establishing the relationship of capital structure on profitability, some researchers used ROA as the dependent variable (Abor, 2005; Singh, 2013; Habib, Khan, & Wazir, 2016) and others use ROE (Shubita & Alsawalhah, 2012; Velnampy & Nireesh, 2012) whereas some use both ROA and ROE expressed with two different regression models (Bokhari & Khan, 2013; Mohammadzadeh et al., 2013). In such situations leverage ratios are used as independent variables.

a) Return on Asset (ROA): indicates the ability of a firm generate profits against its total assets (Habib et al., 2016). It is represented as (ROA = Net income/Total assets)

b) Short-term Debt to Total Assets (STDA): it is the firm's portion of assets that are financed with debt payable within a year (Shubita & Alsawalhah, 2012). It is represented as (STDA =short term debt/Total assets)

c) Long-term Debt to Total Assets (LTDA): Shows the percentage of assets financed with debt which is payable after more than one year. It includes bonds and long-term loans (Shubita & Alsawalhah, 2012; Habib et al., 2016). It is represented as (LTDA = Long-term debt/Total assets)

d) Total Debt to Total Assets (TDA): Total debt is the mix of short-term liabilities and long-term liabilities sometimes presented as "Total Liabilities" in the Balance sheet (Bokhari & Khan, 2013; Habib et al., 2016). It is represented as (TDA = Total debt/Total Assets)

e) Size: is a control variable is computed as a Natural Logarithm of firm's sales, lagged one year

period (Shubita & Alsawalhah, 2012).

f) Sales Growth (SG): control variable that indicates a change in sales from one year to another. It is calculated as current year's sales minus previous year's sales divided by previous year's sales. (SG = (Current year sales - Previous year sales)/Previous year sales).

The random effect regression model as expressed by Abor (2005) was based on to express the relationship between the dependent and the independent variables. Taking return on assets (ROA) as the dependent variable and the leverage ratios as the independent ones, the following regression models were derived and used for data analysis (Bokhari & Khan, 2013; Mohammadzadeh et al., 2013; Singh, 2013; Habib et al., 2016).

$$ROA_{it} = \beta_0 + \beta_1 STDA_{it} + \beta_2 SIZE_{it} + \beta_3 SG_{it} + \epsilon_1 \quad (1)$$

$$ROA_{it} = \alpha_0 + \alpha_1 LTDA_{it} + \alpha_2 SIZE_{it} + \alpha_3 SG_{it} + \epsilon_2 \quad (2)$$

$$ROA_{it} = \mu_0 + \mu_1 TDA_{it} + \mu_2 SIZE_{it} + \mu_3 SG_{it} + \epsilon_3 \quad (3)$$

Where β_0, α_0, μ_0 = intercept of the regression models

β, α, μ = coefficients for independent variables

i = Bank

t = Time 1.....5 years

$\epsilon_1, \epsilon_2, \epsilon_3$ = Error terms

3.4. Regression Analysis

Regression analysis measures the relationship between the dependent variable against one or multiple independent variables (Pallant, 2010). The independent construct's contribution to the overall prediction of the model is significant if and only if its critical ratio (t-value) is greater or equal to ± 1.96 (Robila, 2006). Table 1 demonstrates the model summary while Table 2 illustrates the results of regression analysis for this study.

Table 1. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.876 ^a	0.767	0.702	0.23842

a. Predictors: (Constant), STANDLT, DEBIT, EQUITYPOLICY, EQUITY, COMPANYSIZE, TPCS

Results demonstrated in Table 1 indicate that R-square (0.767) which implies that the overall predication of the model is 76.7%. Statistically this implies that the constructs that were selected for this study contribute significantly to the influence of

capital structure on profitability. Table 2 demonstrates how each construct independently contribute to the influence of capital structure on profitability.

Table 2. Regression analysis

Model	Unstandardized coefficients		Standardized coefficients	t	sig	Collinearity statistics	
	B	Standard error	Beta			Tolerance	VIF
Constant	5.469	0.568		9.628	0.000		
TPCS	0.878	0.105	0.545	8.367	0.000	0.213	4.694
DEBIT	-0.046	0.023	-0.179	-1.999	0.050	0.451	2.217
EQUITY	0.482	0.085	0.450	5.671	0.004	0.271	3.690
DEBITPOLIC	0.281	0.088	0.324	3.197	0.032	0.237	4.219
EQUITYPOLIC	-0.256	0.055	-0.390	-4.605	0.023	0.331	3.021
COMPANYSIZ	0.452	0.161	0.222	2.807	0.039	0.467	2.141
STANDLT	-0.379	0.074	-0.442	-5.118	0.011	0.252	3.968

Results in Table 2 demonstrated that all constructs have significant contribution to the prediction of the model with theory and practice of capital structure (TPCS) having the biggest contribution 54.5% (R - Square = 0.545) and $p=0.000$ significant at 0.05. Other constructs like equity, short-term and long-term debt, equity policy, debit policy also had higher contributions of 45%, 44.2%, 39.0% and 32.4% respectively all significant at 0.05. Much as the contributions of company size and debt were significant at 0.05, their level of contribution 22.2% and 17.9% respectively is lower compared to other constructs.

Results presented in Table 2 indicate that the theory and practice of capital structure plays an important role in the influence of capital structure on profitability. The regression analysis results are also in agreement with the findings of other researchers such as (Servaes & Tufano, 2006; Oppong-Boakye et al, 2013) who suggested that, firms can only understand the importance of capital structure and how to apply it effectively if and only they can understand under what circumstances it does not matter. This is only implied when they understand the theory and practice of capital structure. Results of this study are also in agreement with Modigliani and Miller (1963) who suggested that the theory such as Trade off Theory and Pecking Order Theory drives the firm in conjunction with the practice and are important elements in determining the capital structure that in the end determines the firm's performance and profitability.

Equity was found to be significant and highly contributing construct to the influence of capital structure profitability. This study's findings are in agreement with many of the previous researchers (Velnampy & Niresh, 2012; Mohammadzadeha et al, 2013; Shubita & Alsawalhah, 2012) who argued that good acquisition of equity by a firm improves its capital structure, reduces its risks and increases its profitability. More so, this also agrees with what Myers (2001) noted that managers and decision makers are forced to use internal financing since equity reduces the firm's risks and improves the capital structure that in end increases the profitability.

The argument of equity being an important element in firms endeavor to increase profitability is an argument that justifies why the debit construct contributed lower whereas debt policy and equity policy contributes higher to the prediction of the influence of capital structure on profitability. Velnampy & Niresh (2012) and Shubita & Alsawalhah (2012) agreed that it is important for a firm to leverage on equity as the increase in the level of debt finance increases the interest payments thus resulting in a decline in profitability. This also explains why the debt, the equity policy and the short-term and long-term debt were found to be negatively contributing to the overall prediction of the model. Results of this study are also in agreement with what Abor (2005) observed that there is a positive relationship between short-term debt to total assets and profitability and between total debt to total assets and profitability in firms. Long term debt causes a negative influence as exhibited in this study in Table 2.

4. CONCLUSION

The study investigated the role capital structure plays in influencing profitability of South African banks listed at the Johannesburg Stock Exchange (JSE) using the random effect regression model. The study was necessitated by three reasons: (1) The lack of consensus on the subject matter in the literature, (2) the lack of such studies that focused on banks that were listed at the stock exchange especially in emerging markets and Africa.

This study contributed theoretically on the awareness of the influence of capital structure on profitability. More so, the study's results could be used by banks to determine how their capital structure influences their profitability in order for them to know those areas that need to be strengthened for competitiveness. This study presented the results on the influence of capital structure on profitability in which constructs playing major role in this relationship were tested. Results indicated that the theory and practice of capital structure is essential whereas the debt of firm has a low but negative influence on the influence of capital structure on profitability.

Overall, the study found out capital structure plays a pivotal role in influencing profitability in the banking sector in South Africa. More specifically, higher equity and low debt levels were found to have a significant positive impact on profitability whilst higher debt and low equity levels were found to have had a pulling down effect on profitability of the banking sector in South Africa. It is against this background that the current study recommends that banks must aim to finance their projects using equity rather than debt. Strategies such as listing at the stock exchange, rights issues and unbundling which increases more equity capital inflow should be pursued if banks are to ensure profitability and sound performance in the long run.

REFERENCES:

1. Abor, J. (2005). The effect of capital structure on profitability: An empirical analysis of listed firms in Ghana. *The Journal of Risk Finance*, Vol. 6, No. 5 pp. 438-445.
2. Bokhari, H. W. and Khan, M. A. (2013). The impact of capital structure on firms Performance (A case of non-financial sector of Pakistan). *European Journal of Business and Management*, Vol. 5, No. 31, pp.111-137.
3. Chen J. S., Chen M. C. Liao, W. J & Chen, T.H. (2009). "Influence of capital structure and operational risk on profitability of life insurance industry in Taiwan", *Journal of Modelling in Management*, Vol. 4 No.1, pp. 7 - 18
4. Chisti, K. A., Ali, K. & Sangmi, M. (2013). Impact of Capital Structure on Profitability of Listed Companies (Evidence from India). *The USV Annals of Economics and Public Administration* Vol.13, No. 17, pp.183-191
5. Creswell, J.W. (2003). *Research design: Qualitative, quantitative and mixed methods approaches*. (2nd Ed). London: Sage.
6. Creswell, J.W. (2009). *Research design: Qualitative, quantitative and mixed methods approaches*. (3rd Ed). London: Sage.
7. De Bandt, O., Camara, B., Pessarossi, P and Rose, M. (2014). Does the capital structure affect banks' profitability? Pre- and post- financial crisis

- evidence from significant banks in France. Direction des Études - SGACPR, pp. 1-49
8. Delcours, N. (2007). The determinants of capital structure in transitional economies. *International Review of Economics and Finance*, 2007:16.
 9. De Vaus, D. A. (2001). *Research Design in Social Research*. London: Sage
 10. Gatsi, J. G. and Akoto, R. K. (2010). Capital Structure and Profitability in Ghanaian Banks. Available at SSRN: <http://ssrn.com/abstract=1618952>, Accessed: 9th October 2014.
 11. Goyal, A.M. 2013. Impact of Capital Structure on Performance of Listed Public Sector Banks in India. *International Journal of Business and Management Innovation*, Vol. 2, No. 10, pp. 35-43
 12. Habib, H. J. Khan, F and Wazir, M. I (2016). Impact of Debt on Profitability of Firms; Evidence from Non-Financial Sector of Pakistan. *City University Research Journal*, Vol. 6, No. 1, pp. 70-80
 13. Johannesburg Stock Exchange (JSE), 2013. Integrated Annual Report. Available at: http://www.jsereporting.co.za/ar2013/download_pdf/jse_ar2013.pdf, accessed: 15th August 2014
 14. Khalid, S. (2011). Financial Reforms and Dynamics of Capital Structure Choice: A Case of Publicly Listed Firms of Pakistan. *Journal of Management Research*, Vol. 3, No. 1, pp. 1-16
 15. Manurung, S. D, Suhadak & Nuzula, N. F. (2014). The Influence of Capital Structure on Profitability and Firm Value: A Study on Food and Beverage Companies listed in Indonesia Stock Exchange 2010-2012 period. *Jurnal Administrasi Bisnis (JAB)*, Vol. 7 No. 2, pp. 2-8.
 16. Modigliani, F., and Miller, M. H. (1963). Corporate Income Taxes and The Cost of Capital: A Correction. *The American Economic Review*, Vol. 53, No. 3, pp. 433-443
 17. Mohammadzadeha, M., Rahimia, F. & Rahimib, F. (2013). The Effect of Capital Structure on the Profitability of Pharmaceutical Companies The Case of Iran. *Iranian Journal of Pharmaceutical Research*, Vol. 12 , No. 3, pp.573-577
 18. Myers, S. C. (2001). Capital Structure. *Journal of Economic Perspectives*. Vol. 15, pp. 81-102.
 19. Oppong-Boakye, P. K, Appiah, K. O, and Afolabi, J.K. (2013), Determinants of Capital Structure: Evidence from Ghanaian Firms. *Research Journal of Finance and Accounting*, Vol. 4, No. 4, pp. 44-53.
 20. Pallant, J. (2010). *SPSS Survival Manual: A Step By Step Guide to Data Analysis Using SPSS for Windows*. New York: McGraw-Hill.
 21. Raheman, A., B. Zulfiqar, and Mustafa. (2007). "Capital Structure and Profitability: A Case of Islamabad Stock Exchange". *International Review of Business Research Papers*, Vol.3, No. 5, pp.347-61.
 22. Robila, M. 2006. Economic pressure and social exclusion in Europe. *The Social Science Journal*, Vol. 43, pp. 85- 97.
 23. Salkind, N. J. (2012). *Exploring Research* (8th Ed.) Upper Saddle River, NJ: Prentice Hall
 24. Saunders, M., Lewis, P. & Thornhill, A. (2009). *Research methods for business students* (5th Ed.) London: Pearson education
 25. Servaes, H. and Tufano, P. (2006). *The Theory and Practice of Corporate Capital Structure*, Corporate Financial Policies and Practices Series, Deutsche Bank
 26. Singh, G. (2013). Interrelationship between capital structure and profitability with special reference to manufacturing industry in India. *International Journal of Management and Social Sciences Research (IJMSSR)*, Vol. 2, No. 8, pp. 55-61
 27. Shubita, M. F., and Alsawalhah, J. M. 2012. The Relationship between Capital Structure and Profitability. *International Journal of Business and Social Science*, Vol. 3, No. 16, pp. 104-112.
 28. Utary, A. R and Setyadi, D. (2014). An Empirical Analysis of Relationships between Capital Structure, Market Power, Profitability and Expenditure, *European Journal of Business and Management*, Vol.6, No.36, pp. 132-141
 29. Velnampy, T., and Niresh, J. A. (2012). The Relationship between Capital Structure & Profitability. *Global Journal of Management and Business Research*, Vol. 12, Issue 13, pp. 66-74.
 30. Weston, J. F. (1955), *Toward Theories of Financial Policy*. *The Journal of Finance*, Vol. 10, No. 2, pp. 130-143.