

Relationship between Capital Structure and Firm Performance: An Analysis of Tech Mahindra Company

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ABSTRACT

This study desired to determine if a significant relationship existed between capital structure and financial performance in Tech Mahindra operating in the IT sector which is listed on the Bombay Stock Exchange (BSE), over a period of 3 years (2016-2018). Panel data Regression was the basis of this analysis. The indicators of capital structure were short-term debt, long-term debt; total equity and total debt, while Return on Equity (ROE) and Return on Assets (ROA) were the performance yardsticks. Various studies that had been conducted earlier mentioned that tax, asset tangibility, risk, inflation and liquidity determined the capital structure of Indian companies. It was to be noted that if these factors were found to have a significant influence on the financing decisions of the company, an analysis of these factors were drawn and the company's performance were studied. The result after analysis signified that Indian companies performed better when their main focus was on equity and not on debt. It had however been observed that the company did not use its assets optimally and did not have adequate funds to undertake profitable investments. It was a fact that when the tax rates went up along with the inflation, companies relieved their assets in order to cut down its costs. Even though companies possessed this behavior, they had the risk-taking ability which meant that the companies opted for debt even when business risks were high and there were financial constraints.

Keywords: Financial performance, Equity, Leverage, capital structure.

INTRODUCTION:

To ascertain and implement an optimal capital structure, it is important that the management takes an effective financial decision. It has to be done by the management as an optimal capital structure shall pave a path for maximized firm value. Firms however have different types of debt structure, while it is a constant effort made by managers as they work to attain the best capital structure.

Modigliani and Miller (1958) recommended that in a capital market which is perfect, the value of the firm does not get affected by the strategies. But it was later claimed that the value of the organization can be increased by restructuring the debt-equity composition as the companies can avail tax benefits of debt. MM (1958) claimed that under very constraining assumptions of perfect capital markets, tax free economy, investors' homogenous expectations, with no transaction costs, capital structure is inapposite in ascertaining the value of the firm. It is predictable that the shareholders would prefer to purchase the shares that are undervalued and sell the overvalued shares to generate profitable income. There are the arbitrage options exercised by the shareholders until the prices are equal.

In the practical world, these assumptions do not work. There exists an effective capital structure, as suggested by the literature. However, no particular methodology exists which could assure that an optimal debt level has been attained. Hence there are various financial concepts that support in determining if the proposed financing mix would impact the value of the organization.

This study desires to investigate the association between the financing mixes: comprising Total Debt Ratio (TD), Long Term Debt (LTD) and Short Term Debt (STD); and firm performance; including Return on Equity (ROE), Return on Assets (ROA) and Tobin's Q pertaining to the period 2016-2018 in Tech Mahindra listed on the Bombay Stock Exchange using a pooling panel data procedure. The findings of the study signified that the capital structure is positively and significantly associated with company performance which was measured using Tobin's Q, while a negative relationship was between ROA and capital structure. Moreover, there is no significant relationship between capital structure and ROE. Altogether, the study provides evidence which indicates firm performance is positively or even negatively related to capital structure.

The paper has been divided into the following sections: reviewing theoretical and empirical evidence with respect to firm performance and capital structure, research methodology and the empirical results of the analysis shall lead a path for drawing conclusions from the found results.

REVIEW OF LITERATURE:

Firm's performance is influenced by different factors; capital structure being one of them. In the past there have been several studies which try and explore any negative, positive, or no relation between the capital structure and performance of the firm which have resulted in different responses.

Hasan et al. (2014) examined Bangladesh, the effect of capital structure on the firm performance. A research pertained to 36 companies of Bangladesh Dhaka Stock Exchange for the period from 2007 to 2012. The company's performance was measured using four variables: ROE, EPS, Tobin's Q and ROA. Capital structure was measured using long term debt, short-term debt and total debt ratio. The research deployed pooling data panel regression model to determine the impact of debt-equity mix on the firm's performance. The findings indicated that EPS had a positive association with short-term debt and negative association with long-term debt. There was a significant association between capital structure and ROA. Similarly, there was no relationship between firm performance and capital structure when Tobin's Q and ROE were taken as variables. Therefore, it was said by the researchers in confirmation with the Pecking Order theory that the capital structure had no effect on the firm's performance.

Vitor and Badu (2013) studied the impact of capital structure on the listed banks' performance in Ghana from the years 2000 to 2010. The data collected from annual reports of each bank and Ghana Stock Exchange was analyzed using the panel data regression. The results showed that the high debt ratios were possessed by public banks in Ghana and a negative impact remained on the bank performance and the level of debt of the company. The research exhibited a each public bank having huge debt. It was hence clear that the banks were dependent on the short-term debt which resulted in low bond market operations according to the researchers. The analysis using regression highlighted that the capital structure and firm performance had negative impacts on one another when measured using the variables Tobin's Q and ROE.

Goyal (2013) studied the impact capital structure had on the Indian banks' profitability that were listed between 2008 and 2012. The analysis determined the association between the independent variable (ROE, ROA and earning per shares) and dependent variable (long term debt to total capital, short term debt to total capital and total debt to total capital) using the multiple regression analysis. Firm asset growth (AG) and Firm size (SIZE) acted as control variables. An association was found between ROE, ROA and earning per shares (EPS) with short-term debt with profitability.

Saaed et. al. (2013) investigated the impact of capital structure on 25 companies' performance operating in the banking sector which were listed on the Karachi Stock Exchange in Pakistan from 2007-2011. The study deployed multiple regression models to determine an association between bank performance and capital structure. Variables like ROE, ROA and EPS are used to measure the performance. The long-term debt to total capital, short-term debt to total capital and total debt to total capital measured the capital structure and hence an association was attempted to be found. The study used firm asset growth and firm size as its control variables. A positive relationship was found between banking industry performance and capital structure in Pakistan.

San and Heng (2011) in their study concentrated on companies involved in the business of construction which were listed on the Bursa Malaysia's Main Board over the period 2005-2008 and the findings exhibited that a significant relationship existed between corporate performance and capital structure and there was no association between the variables that were examined. With respect to big companies, EPS with LDC and ROC with DEMV possessed significant association but EPS with DC was not positively associated.

A study by Saedi and Mahmoodi (2011) investigated the association between firm performance and capital structure by studying a sample of 320 companies listed on the Tehran Stock exchange pertaining to the years 2002- 2009. The study deploys ROA, ROE, Tobin's Q and EPS as its four performance measures acting as

dependent variables and long-term debt, total debt ratio and short term debt as the determinants of capital structures acting as variables that are independent. The study highlighted that firm performances which are measured by Tobin's Q and EPS are positively and significantly associated with capital structure and a negative association was found between ROA and capital structure along with no indicative association between Capital structure and ROE.

Pratheepkanth (2011) studied the effect of capital structure on the financial performance for the periods 2005-2009 of Sri Lankan companies. The results exhibited an association between the financial performance and capital structure is negative.

Ebaid (2009) examined the impact on firm performance when the companies had an effective capital structure in Egypt. The data pertained to companies listed during 1997 to 2005 in the Egyptian Stock Exchange which belonged to the category of non-financial public companies. Multiple regression analysis was performed which helped form the basis of confirmation if an association existed between firm performance and leverage. ROA, ROE and gross profit margin (GPM) measured the firm performance and the capital structure determinants were long-term debt to total assets (LTD), short-term debt to total assets (STD) and total debt to total assets (TTD). As a control variable, firm size (LogS) variable is considered for this study. The results obtained highlighted that the capital structure of the company had no effect on the performance of the firm.

Akintoye (2008) claimed that the taxes, business risk, financial flexibility or managerial behavior play a great role in the firm performance analysis. The researcher described that the aforesaid factors played a vital role as the capital structure was dependent on the trade-off between expected returns and risk. A target of this kind would provide a path for firms to form an optimal debt-equity mix as it is expected to maximize the value of the firm and reduce the cost of capital. Additionally, the level of capital structure was expected to positively affect the firm's value. Companies were found to take more loans owing to the tax burden which made them perform better.

Hovakimian and Tehranian (2004) in their study found the significance of the returns of stock analyses corporate funding options is not associated with the earmark leverage which is because of the association between Market timing behavior theory and Pecking order theory. This research also found that target leverage and profitability have no effect on each other. Firms that are not profitable issue equity to phase out the surplus leverage owing to the accumulated losses. Hence, the theory that firms had a specific capital structure has been supported by the study. However, focus on internal funding and the urge to hit the market by supplying new equity, when the price of the share is considerably high, hinder the tendency to keep the firm's debt ratio close to its target.

Roden and Lewellen (1995) investigated 48 U.S. firms' capital structure for the period between 1981 and 1990 which found a significant association with capital structure and profitability. Homogenous findings were recorded by Gosh et al. (2000) and Champion (1999). It was recommended by Hadlock and James (2002) that high level of debts is used by firms that have high profitability. It was examined and found by Arbiyan and Safari (2009) that total debts and short-term debts have significant association with ROE as impacts of capital structure on profitability were studied using 100 Iranian listed firms between 2001 and 2007. However, a negative association was found between ROE and long-term debts. Abor (2005) stated to have found a significant relation between STD, TD, capital structure and performance between 1998 and 2002 in Ghanaian firms.

A negative relation between performance (profitability) and capital structure was found by Kester (1986) when the firms of U.S. and Japan were studied. Alike results were described by Titman and Wessels (1988) and Friend and Lang (1988) from the U.S. firms, Wald (1999) in the developed countries and Rajan and Zingales (1995) in the G-7 countries. Additionally, a negative association with ROA and book and market leverage pertaining to 270 Thai firms was found by Wiwattanakantang (1999). Similarly, a negative correlation between leverage and performance was found by Haung and song (2006) when study was conducted in relation to Chinese firms. Chakraborty (2010) used two performance measures, including ratio of cash flows to total assets and two leverage measures and ratio of tax, profit before interest and depreciation to total assets, including ratio of liability and equity and ratio of total borrowing to assets. This particular study found a negative association between the aforesaid factors. Ebaid (2009) examined 64 firms ranging from the period 1997-2005 listed in the Egyptian capital market to ascertain the effect of capital structure on the performance. The author used three accounting based measures, i.e., ROE, ROA and gross profit margin which found that debt-equity mix had a weak or no impact on the performance of the firm.

There were a few researchers that opined that performance is the sum between market value of equity and value of equity options or just the market value of a firm (Cole and Mehran, 1998; Merz and Yashiv, 2007). While, some of the researchers regarded that the value of the company meant a value more than the market capitalization, accounting the activities of the firm (Mehran, 1995; Allen et al., 2007; Ang et al., 2000). The

performance of the firm signifies the efficiency with which the firms utilize the resources. To study the impact of profitability and firm performance, multiple capital structure indicators are present. Earlier studies showed a negative effect from long-term debt to profitability measured in terms of ROE and a significant relationship between total debt, short-term debt and performance (Abor, 2005). Apart from the aforesaid studies, Serghiescu and Vaidean, 2013 mentioned that profitable companies avoid risks and the companies reserving high liquidities avoid debt. Romanian manufacturing firms followed the concept of financing fixed assets with long-term materials blended with short-term debt and needs. A direct association with tax and debt proves that for borrowing, tax-saving was not the vital cause as firms when low on cash tend to increase their liabilities. Hence, by availing short-term maturity with debt when firms face financial distress, companies escalated their business risk. On the grounds of evidence, it was concluded that owing to rising inflation, firms opt for the scheme for temporary debt (Vatavu, 2012).

Based on most of the previous studies, it can be said that an association with firm performance and capital structure was negative and not significantly correlated. Also, some of the studies exhibited that there was a positive association between company performance and capital structure. In this study, it was attempted to ascertain that the capital structure of the firm was a vital performance determinant which had an important impact on their performance.

OBJECTIVES OF THE STUDY:

1. To ascertain if a significant relationship exists between capital structure and firm performance.
2. To study the variables of capital structure and firm performance.
3. To check if the ratio of total debt and assets ratio establish a significant relationship with the company's performance measure ROE.

Hypothesis:

- H1: "There exists a significant relationship between capital structure and firm's performance"
H0: "There does not exist a significant relationship between capital structure and firm's performance"
H2: "The Total debt to total assets ratio has a positive relation with firm's performance"
H0: "The Total debt to total assets ratio does not have a positive relation with firm's performance"

RESEARCH METHODOLOGY:

Research Design and Data Collection Methods:

Panel data approach was used to measure the relation between capital structure of the firm and firm performance. Data for analysis of this relationship was collected from secondary sources like Bombay stock exchange and annual reports of Tech Mahindra over the years 2016-2018. The sample size was Tech Mahindra's data which is listed on the Bombay stock exchange and data was analyzed from 2016 to 2018. The data was evaluated through by measuring descriptive statistics, correlation matrix, and panel regression analysis.

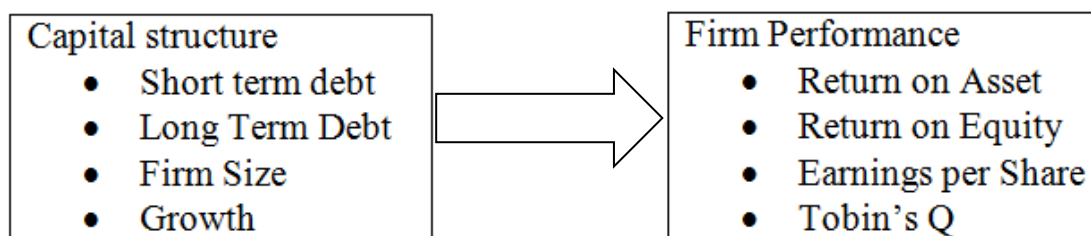


Figure 1: Conceptual Framework

Variables Measurements:

The purpose of this paper was to examine the relationship between capital structure options and firm performance. The independent variables were Return on Equity (ROE), Return on Asset (ROA) Tobin's Q and earnings per share (EPS) and dependent variables consisted of long-term debt, short-term debt, total debt, firm size and firm's growth. Return on assets and return on equity were accounting measures while earning per share and Tobin's Q were market measures of performance. Formulae for measuring all variables are given below in table 1.

Table 1(a): Variables Description

| | |
|---------------------------------|------------------------------------------------------------------------------|
| Total Debt to Asset Ratio | = Total Debt/Total Assets |
| Long term Debt to Assets | = Long Term Debt/Total Assets |
| Short term debt to Assets Ratio | = Short Term Debt/Total Assets |
| Firm Size | = Natural log of total book value of assets |
| Firm's Growth | = (Assets of current year – Assets of previous year)/ Assets of current year |
| Return on Assets | = Operating Income/Total Assets |
| Return on Equity | = Net profit attributed to shareholders/Total shareholders' equity |
| Earnings per share | = Net Earnings/Number of shares |
| Tobin Q | = (Market Value of equity + book value of debt)/ book value of assets |

Table 1(b): Calculation of variables

| Ratios | 2018 | 2017 | 2016 |
|---------------------------------|-------------------|--------------------|--------------------|
| Total Debt to Asset Ratio | 0.35 | 0.38 | 0.36 |
| Long term Debt to Assets | 0.00814 | 0.0109 | 0.0112 |
| Short term debt to Assets Ratio | 0.00616 | 0.00553 | 0.0037 |
| Firm Size | 18677.5 crores | 16865.1 crores | 14760.8 crores |
| Firm's Growth | 6% (30773 crores) | 10% (29141 crores) | 17% (26494 crores) |
| Return on Assets | 14.92 | 12.84 | 15.59 |
| Return on Equity | 20.46 | 18.04 | 23.75 |
| Earnings per share | 40.84 | 31.37 | 33.40 |
| Tobin's Q | 0.0779 | 0.0375 | 0.0538 |

From Table 1(b), it was evident that Tech Mahindra's total debt to assets ratio had been ranging from 0.34 to 0.38. An ideal total debt to assets ratio is 0.4 or lower and a ratio ranging from 0.34 to 0.38 showed that a percentage of company's total assets were adequately leveraged or financed by creditors, liabilities and debt. Similarly, long term debt and short term debt to assets ratio also ranged below 0.4 and implied that a portion of Tech Mahindra's assets were financed by creditors, debt and liabilities. The firm size had grown over the years and stood at 18677.5 crores in 2018. The firm's growth in 2018 stood at 6% with revenue of 30,773 crores during the year 2018. The Return on Assets during 2018 was 14.92%, whereas an ideal ROA is above 5% which indicated that the company was capital intensive. The ROE in 2018 stood at 20.46 showed that the management was capable of generating profitable income from the equity available. The Earnings per share of the company was 40.84 for the year 2018 which signified that the company was doing well and the dividend payout of the company was also high. Tobin's Q of the company was 0.0779 which was considered positive for the company as the company's stock was undervalued.

Total Debt structure of the company:

The company's debt mix over the years 2016-2018 is as follows:

Table 2: Capital Structure of Tech Mahindra during 2016-2018

| Years | 2018 | 2017 | 2016 | Average | SD | Variance |
|-----------------|------|------|------|---------|--------|----------|
| Long term debt | 0.56 | 0.66 | 0.74 | 0.61 | 0.0707 | 0.005 |
| Short term debt | 0.43 | 0.34 | 0.26 | 0.39 | 0.0636 | 0.004 |

Table 2 shows the debt structure of Tech Mahindra in the years 2016, 2017 and 2018. The total debt structure comprises of long term debt and short term debt. In 2016, it was observed that the company had more percentage of long term debt (0.74%) than short term debt (0.26%). In 2017, the company's short term debt grew to 0.34% and the long term debt reduced to 0.66% than 2016. In 2018, the company moved towards an almost equal long and short term debt mix of 0.56% and 0.43% which implied that the company had borrowed both long and short term debt to meet their capital requirement needs. The average of long term debt was the highest in comparison with the short term debt. The Standard Variance for long term debt was at the highest of 0.0707 and the same was the variance (0.005).

Ownership pattern of the company:

As per recent data, Tech Mahindra reported a promoter holding of 36.21%. Large promoter holding indicated sincerity and conviction of the promoters. The company affirmed that a greater than 35 % promoter holding provided security to the retail investors.

At the same time, institutional holding in the Company stood at 47.90 % (FII+DII). Large institutional holding highlighted the confidence of seasoned investors. At the same time, it could also lead to high volatility in the stock price as institutions bought and sold larger stakes than retail participants.

Analysis and Interpretation:

The data pertaining to independent variable ROE and dependent variable Total debt to Assets Ratio was analyzed in order to find if a relationship existed between ROE and Total debt to Assets Ratio.

Table 3: Variables chosen for analysis

| Year | Total debt | ROE |
|------|------------|-------|
| 2018 | 0.35 | 20.46 |
| 2017 | 0.38 | 18.04 |
| 2016 | 0.36 | 23.75 |

| SUMMARY OUTPUT | |
|-----------------------|-------------|
| Regression Statistics | |
| Multiple R | 0.990863334 |
| R Square | 0.981810147 |
| Adjusted R Square | 0.481810147 |
| Standard Error | 3.449234177 |
| Observations | 3 |

The above gives the overall goodness-of-fit measures: $R^2 = 0.9818$

Correlation between y and y-hat is 0.9908 (when squared gives 0.9818).

Adjusted $R^2 = R^2 - (1-R^2)*(k-1)/(n-k) = 0.4818$.

The standard error in the above analysis implies to the estimated standard deviation of the error term u. It is sometimes referred to as the standard error of the regression. It is expressed in $\sqrt{SSE/(n-k)}$.

Note: The value is not to be confused with the standard error of y itself (from descriptive statistics) or with the standard errors of the regression coefficients as shown below.

$R^2 = 0.9818$ means that 98.18% of the variation of y_i around \bar{y} (its mean) is explained by the regressors x_{2i} and x_{3i} .

| ANOVA | | | | | |
|--------------|----------|------------------|-------------|----------|----------------|
| | df | SS | MS | F | Significance F |
| Regression | 1 | 1284.321267 | 1284.321267 | 107.9514 | 0.061084398 |
| Residual | 2 | 23.79443281 | 11.89721641 | | |
| Total | 3 | 1308.1157 | | | |

The ANOVA (analysis of variance) table splits the sum of squares into its components.

Total sums of squares = Residual (or error) sum of squares + Regression (or explained) sum of squares.

$$\text{Thus } \sum_i (y_i - \bar{y})^2 = \sum_i (y_i - \hat{y}_i)^2 + \sum_i (\hat{y}_i - \bar{y})^2$$

where \hat{y}_i is the value of y_i predicted from the regression line and \bar{y} is the sample mean of y .

For example:

$$R^2 = 1 - \text{Residual SS} / \text{Total SS} \quad (\text{general formula for } R^2)$$

$$= 1 - 23.794 / 1308.11 \quad (\text{from data in the ANOVA table})$$

$$= 0.9818 \quad (\text{which equals } R^2 \text{ given in the regression Statistics table}).$$

The column labeled F gives the overall F-test of $H_0: \beta_2 = 0$ and $\beta_3 = 0$ versus H_a : at least one of β_2 and β_3 does not equal zero. Aside: Excel computes F this as: $F = [\text{Regression SS}/(k-1)] / [\text{Residual SS}/(n-k)] = 107.9514$.

The column labeled significance F has the associated P-value. Since $0.06 > 0.05$, we do not reject H_0 at significance level 0.05.

Note: Significance F in general = $\text{FINV}(F, k-1, n-k)$ where k is the number of regressors.

FINDINGS:

The regression analysis showed the goodness-of-fit measure which indicated that the value of R^2 was 98.18 showing that the data is closely fitted to the regression line. The capital structure variable total debt to asset ratio had a negative impact on the firm's performance measured by ROE. Hence, the null hypothesis that Total debt to total assets ratio had a negative relation with firm's performance was accepted. This result supported previous research conducted by Zeitun and Tian (2007), Vitor and Badu (2012) and Hasan et.al. (2014), which stated the capital structure had negative effect on ROE. The negative effect of capital structure to ROE assisted the Pecking Order theory that Myers (1984) proposed.

CONCLUSIONS:

According to the theory, a firm having high profitability level generally reduced their debt level as the firms that have high profitability had abundant internal funds. This theory had not considered any rule for having an optimal capital structure, whereas the firm had a specific preference in deploying funds. The company earlier used internal financing rather than external financing but it was found that in 2018, the company opted for both long term debt and short term debt in the proportion of 0.56% and 0.43% respectively. Internal funds utilized from retained earnings were generated from the firm's operations. If there arose a need for external funds, the company chose debt which possessed lowest risk and was safe. It was found that the company utilized preferred stock, bonds, and common stock as the last option for funding their activities. Meanwhile, to ROE variable, the capital structure had no effect. The Total Debt to Assets Ratio variable had negative effect on ROE. It can hence be concluded that deployment of debt was vital for the firm's business and if the available debts were used properly, it would generate a high return to the firm.

REFERENCES:

- Abor, J. (2005). The effect of capital structure on profitability : an empirical analysis of listed firms in Ghana, *Journal of Risk Finance*, 6: 438-447.
- Akintoye, I. R (2008). Sensitivity of Performance to Capital Structure, *European Journal of Social Sciences*, Volume 7, Number 1
- Arbabiyan, Ali-Akbar & Safari, Mehdi, (2009). The effects of capital structure and profitability in the listed firms in Tehran Stock Exchange, *Journal of Management Perspective*, 33: 159-175.
- Berger, A & Bonaccorsi di Patti, E (2006). Capital structure and firm performance: a new approach to testing agency theory and an application to the banking industry, *Journal of Banking and Finance*, 32: 1065-1102.
- Boodhoo, Roshan (2009). Capital Structure and performance of Mauritius Listed Firms: Theoretical and Empirical Evidences, Online Web
- Bradley M. Jarell GA, & Kim EH (1984). On the existence of an Optimal Capital Structure: The Theory and Evidence, *Journal of finance*, 39: 857-880.
- Chakraborty I. (2010). Capital structure in an emerging stock market: The case of India, *Research in International Business and Finance*, 24: 295-314.
- Champion, D. (1999). Finance: the joy of leverage, *Harvard Business Review*, Vol. 77, pp. 19-22.
- Chen JJ. (2004), Determinants of Capital Structure of Chinese Listed Companies, *Journal of Business Research*, 57: 1341-1351.
- Deesomsak R, Paudyal K & Pescetto G (2004), The determinants of capital structure: Evidence from the Asia

- Pacific region, *Journal of Multinational Financial Management*, 14: 387-405.
- Ebaid I E, (2009). The impact of capital structure choice on firm performance: empirical evidence from Egypt, *The Journal of Risk Finance*, 10(5): 477 -487.
- Eriotis N, Vasiliou D & Neokosmidi V Z. (2007). How firm characteristic affect capital structure: an empirical study, *Journal of Managerial Finance*, 33(5): 321-331.
- Frank M & Goyal, V. (2003). Testing the pecking order theory of capital structure, *Journal of Financial Economics*, 67: 217-248.
- Friend, I., & Lang, L. H. P. (1988). An empirical test of the impact of managerial self-interest on corporate capital structure, *Journal of finance*, 43(2): 271-281.
- Ghosh, C., Nag, R., Sirmans, C. (2000). The pricing of seasoned equity offerings: evidence from REITs, *Real Estate Economics*, 28: 363-84.
- Goyal A.M. (2013). Impact of capital structure on performance of listed public sector banks in India. *International Journal of Business and Management Invention*, 2(10), 35-43.
- Harris M, and Raviv R. (1991). The Theory of Capital Structure, *Journal of Finance*, 46 (1): 297-355.
- Hasan M.D, Ahsan A.F.M.M, Rahaman M.A, Alam M.N. (2014). Influence of capital structure on firm performance : Evidence from Bangladesh. *International Journal of Business and Management*, 9(5), 184-194.
- Heinkel, Robert (1982). A theory of capital structure relevance under imperfect information, *Journal of Finance*, 37: 1141-1150.
- Hovakimian, A., Hovakimian, G., & Tehranian, H. (2004). Determinants of target capital structure: The case of dual debt and equity issues, *Journal of financial economics*, 71(3),517-540.
- Huang S, & Song FM (2006). The Determinants of Capital Structure: Evidence from China. *China Economic Review*, 17: 14-35.
- Jensen, M and Meckling, W (1976). Theory of the firm: managerial behavior, agency costs and capital structure, *Journal of Financial Economics*, 3: 11- 25.
- Kester, W. (1986). Capital and ownership structure: a comparison of United States and Japanese manufacturing corporations, *Financial Management*, 15: 5-16.
- Khan, Imran (2012). Capital Structure, Equity Ownership and Firm Performance: Evidence from India, *Social Science Research Network*, Online Web.
- Kouki, M. (2012). Capital Structure Determinants: New Evidence from French Panel Data, *International Journal of Business and Management*, 7(1): 214 -229.
- Majumbar, S and Chhibber, P (1999). Capital structure and performance: evidence from a transition economy on an aspect of corporate governance, *Public Choice*, 98: 287-305.
- Miller, M (1977). Debt and Taxes, *Journal of Finance*, 32: 262-275.
- Modigliani, F and Miller, M (1963). Corporate income taxes and cost of capital: a correction, *American Economic Review*, 53: 443-453.
- Myers S.C. (1984). The Capital Structure Puzzle. *Journal of Finance*, 39(3), 575-592.
- Pratheepkanth. Puwanenthiren, (2011). Capital Structure and Financial Performance: Evidence from Selected Business Companies in Colombo Stock Exchange Sri Lanka, *Journal of Arts, Science & Commerce*, II (2): 1-13.
- Rajan, R. G., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data, *Journal of finance*, 50(5): 1421-1460.
- Ramaswamy, K (2001). Organizational ownership, competitive intensity, and firm performance: an empirical study of Indian manufacturing sectors, *Strategic Management Journal*, 22: 989-998.
- Razak, N.H.A., Ahmad, R. & Aliahmed, H.J. (2008). Government ownership and performance: An analysis of listed companies in Malaysia, *Corporate Ownership and Control*, 6(2): 434-442.
- Roden, D., Lewellen, W. (1995). Corporate capital structure decisions: evidence from leveraged buyouts, *Financial Management*, 24: 76-87.
- Saeed M.M, Gull A.A, Rasheed M.Y. (2013). Impact of capital structure on banking performance (A case study of Pakistan), *Interdisciplinary Journal of Contemporary Research in Business*, 4(10), 393-403.
- Saeedi, A & Mahmoodi I, (2011). Capital Structure and Firm Performance: Evidence from Iranian Companies, *International Research Journal of Finance and Economics*, 70: 21-28.
- San, O.T. & Heng, T.B. (2011). Capital Structure and Corporate Performance of Malaysian Construction Sector, *International Journal of Humanities and Social Science*, 1(2): 28-36.
- Taub, A. (1975). Determinants of firm s capital structure, *Review of Economics and Statistics*, 57: 410- 416.

- Titman, S., & Wessels, R. (1988). The determinants of capital structure choice, *Journal of finance*, 43(1): 1-19.
- Vitor D.A, Badu J. (2012). Capital structure and performance of listed banks in Ghana. *Global Journal of Human Social Science*, 12(5), 57-62.
- Wald, J., (1999). How firm characteristics affect capital structure: an international comparison, *Journal of Financial Research*, 22: 161-87.
- Warner, J (1977). Bankruptcy costs: some evidence, *Journal of Finance*, 32: 337-347.
- Zeitun R, Tian G.G. (2007). Capital structure and corporate performance: Evidence from Jordan. *Australian Accounting, Business, and Finance Journal*, 1(4), 40-61
