ISSN2515-8260 Volume 08, Issue 03,2021

A STUDY ON IMPACT OF CAPITAL STRUCTURE ON EARNINGS PER SHARE OF CEMENT COMPANIES IN INDIA.

Camillo Joseph*1, Dr. N. Periyasami²

*1Research Scholar, Department of Commerce, Annamalai University

²Professor, Department of Commerce, Annamalai University

ABSTRACT

The study was conducted to know the impact of capital structure on Earnings Per Share of Cement Companies in India. The study selected 23 cement companies as samples that are listed in NSE or BSE. The study was done based on balanced panel data that were collected from the Financial Statements of the company for a period of 10 years from 2010-2011 to 2019-2020. 9 explanatory variables such as capital Structure, trading on equity, asset structure, corporate tax, debt service capacity, size, business risk, liquidity, and growth were analyzed to know their relationship with the earnings per share. Trading on equity, asset structure, corporate tax, debt service capacity, size, business risk, liquidity, and growth are used as controllable variables in the study. The study found that capital structure has a negative relationship with the earnings per share of cement companies in India. The study also identified that business risk has a positive relationship and the size of the business has a negative relationship with earnings per share of cement companies in India.

Keywords: Earnings per Share, Capital Structure

INTRODUCTION

Capital structure refers to the combination of different sources of capital. It is a mix of multiple long-term capital streams. Equity Share Capital, Preferred Share Capital, Debentures, Long Term Loans, and Retained Earnings are all examples of long-term capital sources. These capital sources can be classified into two groups. Owner's equity and Outsider's equity are the two types of equity. Equity Share Capital and Retained Profits are also part of the owner's equity. All other forms of capital are regarded as outsider capital. A company that makes the best use of debt in its capital structure is better able to optimize shareholder equity. Since interest on debt is a deductible cost under the income tax act, companies can subtract interest from earnings before interest and taxes. This will reduce tax and enhance the profitability and thereby wealth of shareholders. Various empirical studies show that capital structure has a positive relationship with earnings per share. Taani(2011) and Kennedy (2003) in their studies prove that there is a relationship between capital structure and earnings per share. Various studies were conducted in several industries to know the relationship between CS and profitability. But many studies were not initiated in the Indian cement industry to see the relationship between CS and EPS. Since the pattern of CS varies according to a different industry, the impact on profitability also varies. The impact of CS on profitability and value of shareholders may be different in-service industry, compared to the automobile industry. Therefore a study is necessary for the Cement industry to know the impact of capital structure on EPS.

REVIEW OF LITERATURE

In their paper "The cost of capital, company finance, and the theory of investment," **Modigliani** and Miller formulated a theory that can address the cost of the capital question, and this theory enabled the development of a firm's theory of investment under uncertain conditions, and they discovered that the correlation between the cost of capital and leverage was significantly equal to zero. With leverage, the estimated yield on common stock in either class should rise. They

ISSN2515-8260 Volume 08, Issue 03,2021

concluded that common stock investment is beneficial to existing, stockholders, if and only if the yield reaches the capitalization rate. Even when capital markets are fine, the benefit will accrue to stakeholders from getting debt in the Capital Structure when a corporate income tax is considered in which interest is a deductible cost. Myers, S. C. advocates "static tradeoff" and "pecking order" theories of capital structure choice by companies. According to the static trade-off principle, the optimum capital structure is achieved when the tax gain of borrowing is offset by the costs of financial distress. Firms prefer internal funds to external funds, and debt to equity if external funds are needed, according to the pecking order theory. As a result, the debt ratio represents the total amount of external funding required. Simple asymmetric knowledge models predict pecking order behavior. **Kester** tested the hypothesis that Japanese manufacturing firms were more highly leveraged than U.S. manufacturing firms in his research "Capital and ownership structure: A comparison of the United States and Japanese manufacturing companies." Development, profitability, risk, size, and industry classification were all factors considered when determining capital structure. In total, 344 Japanese companies and 452 American companies from 27 different industries were included in the survey. The leverage was calculated using market and book values. Under both bases, the regression result revealed a negative relationship between leverage and profitability. After adjusting for characteristics such as growth, profitability, risk, size, and industry classification, he concluded that there were no significant country differences in leverage between U.S. and Japanese manufacturing firms on a market value basis, but there was a significant country difference when leverage was calculated on a book value basis, and this result was concentrated among the smallest firms. Titman and Wessels used 469 samples of manufacturing firms in the United States from 1974 to 1982 to analyze "The Determinants of Capital Structure Preference." The research looked at several capital structure theories and their empirical consequences for various types of instruments, as well as using a factor analytic methodology to estimate the effect of unobservable attributes on corporate debt ratio selection. Transaction costs were discovered to be a major factor in capital structure selection. Firm size was found to be negatively linked to both long- and short-term debt ratios. The study found that the different costs and benefits associated with leverage were not especially important in assessing the degree of leverage. Rajan and Zingales examined the determinants of capital structure preference by examining the financing decisions of public firms in the major industrialized countries in a paper titled "What do we know about capital structure? Some evidence from international data." Firm leverage was found to be somewhat comparable across the G-7 countries on an aggregate basis. Leverage was found to be negatively associated with profitability. They claimed that dividends and acquisitions were fixed in the short run and that if debt funding was the primary source of external financing, increases in profitability would be negatively associated with changes in leverage.

Pradeep Kumar Das in his study has made a modest attempt to compare the capital structure or debt-equity ratio and its effect on earnings per share in the automobile industry by focusing on six well-known and established companies over a specified period. The study observes a strong correlation between earnings per share (EPS) and debt-equity in the Indian automobile industry. In a few instances, they are not highly dependent on one another for a variety of other reasons. **Ripon Kumar Dey et al.** in their study, investigate the effect of capital structure on profitability in a developing country context by employing two OLS regression models based on 816 cases of panel data (48 companies x 17 years). Financial performance is quantified using return on assets, return on equity, earnings per share, and Tobin's Q. In their study utilizing the debt-to-assets and debt-to-equity ratios, ROA and Tobin's Q are found to be negatively correlated with financial leverage, which is consistent with the pecking order and market timing theories and a large number of empirical studies. The study also found that financial leverage, on the other hand, has a positive effect on ROE but has no effect on EPS.

Additionally, these findings are consistent with the MM theorem, static trade-off theory, and a large number of other empirical studies. Pattiruhu et al. in their study examine the relationship between current ratio (CR), return on equity (ROE), return on assets (ROA), debt-to-equity ratio (DER), and firm size (FS) and dividend policy (DP) in real estate and property companies listed on the Indonesia Stock Exchange from 2016 to 2019. Explanatory analysis and linear regression are used in the research methodology. Nine companies were chosen for the sample based on their eligibility and homogeneity of data. The company's financial statement data is derived from primary data obtained on the Indonesia Stock Exchange, such as current ratio (CR), return-on-equity (ROE), return-on-assets (ROA), debt-to-equity ratio (DER), and firm size and dividend policy variables. The data analysis procedure begins by converting financial data from its original ratio form to interval form and then to ordinal form. The study's findings indicated that the CR, ROE, and firm size had no discernible effect on the value of shareholders. Merugu Venugopal et al. in their study observed that Debt Equity Ratio and ROA have a significant positive effect on the value of shareholders. Among the various financing decisions, the capital structure, or the mix of debt and equity, is critical. Considering the optimal capital structure with the appropriate balance of equity and debt is always a challenge for financial managers, as is successfully running the business by increasing profits and shareholder value. In their study, the impact of capital structure on shareholder value has been examined using CSV as a proxy for shareholder value in 77 Indian pharmaceutical firms listed on the BSE over nine years from 2007 to 2015. They discovered that in the absence of tax, determinants such as debt-equity ratio, long-term debt ratio, and short-term debt ratio have a positive correlation with CSV and a negative correlation with total debt ratio.

OBJECTIVES OF THE STUDY

The study is conducted to analyze the impact of capital structure on Earnings per Share of Cement Companies in India. The following are the objectives of the study.

- 1. To analyze the determinants of Capital Structure
- 2. To analyze the impact of Capital Structure and its determinants on EPS

METHODOLOGY OF THE STUDY

Data were collected from secondary sources. Ten-year Annual Reports from 2011-2020 of 23 leading Cement Companies in India were collected for data analysis. Reports were collected from the financial data of companies. All the companies are listed in BSE or NSE.

Sampling Design

The purposive sampling technique has been adopted in the study. This study imposes certain specific restrictions on the sample selection and only those firms, which fulfill the following criteria, qualify for sampling:

- 1. Firm should be a company listed either on the Bombay Stock Exchange (BSE) or National Stock Exchange (NSE).
- 2. Firm should have maintained its identity and reported its audited annual financial statements without any gaps for the financial years from 2011-12 to 2019-2020.
- 3. The company should follow its financial year from April 1st to March 31st.
- 4. The firm should have a business in Cement Manufacturing.

Period of Study

The study was based on data of 10 years comprising of the financial year 2010-2011 to 2019-2020

Data Collection

The research in this study is based on secondary data. The financial statements of the selected Cement Companies, such as the profit and loss account and balance sheets, were the main sources of data for this report. The information was obtained from the archives of company websites and other websites like moneycontrol.com, bseindia.com, and nseindia.com. These data were collected ranging from 2010-2011 to 2019-20.

RESULTS AND DISCUSSION

Panel data regression analysis has been carried out to understand the factors influencing the earning per share (EPS), of the cement manufacturing firms in India. A panel data econometric model is specified based on the following general formulation:

EPS = f(TOE, AS, CT, DSC, BR, Size, Tangibility, Liquidity, Growth, DER, Leverage, Time)

The construction of the variables is explained in Table 1. The model included 11 explanatory variables.

Table 1

Description of the Variables Used in the Panel Data Regression Model (EPS)

Sl. No	Variables	Variables Description
1	EPS (Earning Per Share)	It is the dependent variable in the model, here, the <i>Earning Per Share</i> is taken as a measure of the profitability of the firms in this model.
2	TOE (Trading on Equity)	It is the ratio of <i>Earnings Before Interest</i> and <i>Tax</i> (EBIT) to <i>Earnings Before Tax</i> (EBT)
3	AS (Asset Structure)	It is the ratio of Net Assets to Total Assets
4	Corporate Tax (CT)	It is the ratio of <i>Provision for Tax</i> to <i>Profit Before Tax</i>
5	Debt Service Capacity (DSC)	It is the ratio of Earnings Before Interest and Tax to Interest
6	Business Risk (BR)	Standard Deviation of EBIT
7	Size	Total Assets are taken as the proxy of the size of the firm.
8	Tangibility	It is the ratio of Fixed Assets to Total Assets
9	Growth	Annual growth of assets (End Value-Base Value)/Base Value
10	Debt-Equity Ratio (DER)	The <i>Debt Equity Ratio</i> is a measure of the capital structure of the firms.
11	Leverage	It is a dummy variable that takes value 1 if the firm is a high levered one (D.E ratio of the firm, on average, is greater than 1), and 0 otherwise.
12	Time	It is a time variable, were, $t = 1, 2,3,,10$ for the years 2010/11, 2011/12, 2012/13,, 2019/20

Table 2
Panel Data Model Selection Test Results (EPS Model)

Step	Model Comparison	Test	Statistic	p-value	Preferred Model
1	FE vs. Pooled OLS	F or Wald Test	F (21, 196) = 32.3754	<.001	Fixed Effects Model
2	RE vs. Pooled OLS	Breusch -Pagan Test	LM = 422.091	<.001	Random Effects Model
3	FE vs. RE	Hausman Test	H = 14.1766	.165	Random Effects Model

The model for the panel data regression was selected in a three-step model-search process reported in Table 2. Finally, the random-effects model was chosen for the estimation of the factors influencing the earning per share (EPS) of the cement manufacturing firms in India, based on the Hausman test. The Wald joint test on time dummies revealed that there were statistically significant time effects, $\chi 2$ (8) = 1.38, p = .995.

Table 3

Descriptive Statistics of the Data used in the Panel Data Regression Model (EPS)

Sl No.	Variables	Mean	S.D.	N
1	Earnings Per Share (EPS)	29.91	63.36	230
2	Trading on Equity	1.78	4.65	230
3	Asset Structure	0.54	0.15	230
4	Corporate Tax	0.27	0.78	230
5	Debt Service Capability	5.50	13.70	230
6	Business Risk	388.27	919.50	230
7	Size	4093.62	8843.96	230
8	Tangibility	0.68	0.60	230
9	Growth	0.07	0.15	230
10	Debt-Equity Ratio	1.66	13.91	230
11	Leverage	0.30	0.46	230
12	Time	5.50	2.89	230

The random-effects model was fitted to a firm-level balanced panel data on 23 cement companies over the 10 years from 2010/11 to 2019/20. The balanced panel data set for 23 firms over the 10 years gave a total of 230 observations for the final estimation of the model. The descriptive statistics of the data used in the panel data regression model are given in Table 3.

Table 4
Panel Data Regression Results on the Factors Influencing the Earning Per Share of the Cement Manufacturing Companies in India

Method: Random-effects (GLS)

Dependent Variable: Earning Per Share(EPS)

Sl. No	Regressors	Coefficient	Std. Error	z	<i>p</i> -value	gnificanc e [@]	Collinearity Statistics Condition	Model Summary Statistics
•			Littoi			Sigr	Index	Statistics
1	(Constant)	12.776	12.411	1.03	0.303	ns	1.00	
2	Trading on Equity	-0.047	0.102	-0.45	0.650	ns	1.31	$R^2 = 0.383$
3	Asset Structure	-16.359	11.064	-1.4/	0.139	ns	1.40	Joint test on
4	Corporate Tax	-0.832	0.812	-1.03	0.305	ns	1.56	regressors: $\chi^2(12)$
5	Debt Service Capability	0.061	0.107	0.57	0.566	ns	1.80	= 8250.88, p < .001
6	Business Risk	0.094	0.009	10.51	<.001	***	1.84	.001
7	Size	-0.005	0.001	-6.33	<.001	***	2.02	AIC = 2481.909
8	Liquidity	6.647	4.488	1.48	0.139	ns	2.28	BIC = 2526.604
9	Growth	4.996	8.576	0.58	0.560	ns	2.36	D16 2020.001
10	Debt-Equity Ratio	-0.219	0.013	-17.26	<.001	***	2.84	Durbin-Watson =
11	Leverage	-11.667	7.912	-1.475	.140	ns	4.14	1.239038
12	Time	1.335	0.800	1.67	.095	*	4.74	p-value < .001

Notes: # Robust (HAC) standard errors; @ *** indicate significant at 01 percent level, * indicates significant at 10 percent level, and 'ns' indicates not significant;

^bAccording to Belsley-Kuh-Welsch (BKW) collinearity diagnostics, CI >= 30 indicates "strong" near-linear dependence, and CI between 10 and 30 is "moderately strong".

The estimates obtained from the panel data regression model (random-effects model) are shown in Table 4. The overall fit of the chosen random-effects model was low ($R^2 = 0.383$) but, the model as a whole was statistically significant as given by the join test, $\chi^2(12) = 8250.88$, p < .001.

The model adequacy tests revealed that the error terms were not significantly different from the normal distribution, $\chi^2(2) = 4.13$, p = .137. Wooldridge test revealed that there was a statistically significant first-order autocorrelation in the data, F(1, 22) = 31.8874, p < .001. There was no severe multicollinearity among the regressors as per the Belsley-Kuh-Welsch (BKW) collinearity diagnostics. In the presence of the autocorrelation problem in the estimated model, robust standard errors (HAC) have been used for the significance testing of the estimated regression coefficients.

Detailed Discussion on the Regression Results of Impact of Capital Structure and its determinants on Earnings per Share

A detailed explanation of regression results showing the impact of capital structure and its determinants on EPS is given in the study. For explaining the results, a small briefing of objectives and hypotheses about the model is required. Hence Table 5 gives the briefing of objectives and hypothesis of this model.

Table 5
Objectives and Hypothesis of Regression Model - Impact of Capital Structure and its
Determinants on Earnings per Share

Model/Objective	Hypothesis
	$\mathbf{H_0}^1$: There is no relationship between Capital structure and EPS
To find out the	$\mathbf{H_0^2}$: There is no relationship between Trading on Equity and EPS.
influence of CS	H ₀ ³ : There is no relationship between Asset Structure and EPS.
determinants on EPS	$\mathbf{H_0}^4$: There is no relationship between Corporate Tax and EPS.
	H ₀ ⁵ : There is no relationship between Debt Service Capacity and EPS.
	$\mathbf{H_0}^6$: There is no relationship between Business Risk and EPS.
	$\mathbf{H_0}^7$: There is no relationship between Size and EPS.
	$\mathbf{H_0}^8$: There is no relationship between Liquidity and EPS.
	$\mathbf{H_0}^9$: There is no relationship between Growth and EPS.

 $(\mathbf{H}_0^{\mathrm{X}})$ where 0 represents null hypothesis x is no. of hypothesis i.e., 1,2,3,4,5,6,7,8,9,10.)

Capital Structure

The capital structure of a firm will affect the earnings per share of cement companies in India. Various studies prove that the capital structure of firms will affect the earnings per share positively. Taani (2011) in his study proves that the debt-equity ratio has a significant effect on earnings per share. The positive correlation of capital structure and earnings per share is supported by the research result of Kennedy(2003). The debt-equity ratio is the proxy of the capital structure of firms. A high debt-equity ratio suggests that the firm uses debt financing aggressively. The debt fund can be used to support long-term growth for the firm, so it can earn profit. But several other empirical studies show a negative relationship between capital structure and earnings per share of the companies.

The result of this study finds that the capital structure of cement companies in India has a negative relationship with earnings per share. The regression result shows a p-value of <.001 which indicates that there is a significant relationship between capital structure and earnings per share.

The findings indicate that increasing the amount of debt in the capital structure of a company reduces its earnings per share. On the other hand, a reduction in debt and an increase in equity

will increase earnings per share. When a business uses more debt in its capital structure, its profitability suffers, and earnings per share decline. As a result, firms should employ a prudent mix of debt in their capital structure to maximize profitability and shareholder value.

The result of the study is similar to Tifow et. al(2015) and Nguyen(2019) Which find that the capital structure of firms is negatively correlated with the earnings per share of the companies. Additionally, this study discovered that firms with a higher debt-to-equity ratio have a detrimental effect on profitability and earnings per share.

Hence Capital Structure has a significant relationship with EPS, the study rejects the null hypothesis $\mathbf{H_0^1}$

Trading on Equity

Numerous studies have demonstrated that trading 0n equity affects earnings per share. Investments in fixed-income securities such as debt, loans, and bonds, among others, can help to increase earnings per share by effectively utilizing interest tax benefits. Numerous studies have shown a positive correlation between trading on equity and earnings per share (EPS).

The findings of the study indicate that trading on equity does not affect the earnings per share of cement companies in India. According to the regression results, the p-value is 0.650 (>.001). The reason that trading on equity and earnings per share are insignificant is that the cement industry does not rely heavily on debt to finance its investments. The previous findings of the study indicate that the cement industry relies heavily on retained earnings to finance projects and other investments. As a result, the effect of interest-bearing securities on EBIT and EPS is not visible in the results.

The results of the study are similar to the studies of Patel (2014) which proves that trading on equity and earnings per share has no relationship. As a result, the study fails to reject the null hypothesis \mathbf{H}_0^2 that trading on equity does not affect EPS.

Asset Structure

Earnings per share are influenced by a firm's asset structure. Assets are all the resources and property that a business owns for use in its operations. In general, businesses have two types of assets, current assets, and fixed assets. Asset structure is a term that refers to the distribution of a business's assets among various asset categories. In manufacturing firms, fixed assets such as buildings and machinery dominate the asset structure. Businesses raise capital to acquire assets that will generate revenue or to invest in new projects that will generate a positive expected return. The asset structure of a business determines how it uses funds from owners and creditors to increase shareholder earnings. This demonstrates that the asset structure and shareholder value have a positive relationship.

The result of the study conducted in cement companies in India shows that there is an insignificant relationship between asset structure and earnings per share. The results show a p-value of 0.139(>.001) which indicates that when other variables remain constant, asset structure does not have any correlation with earnings per share.

The findings indicate that there is no direct relationship between asset structure and earnings per share. It is one of the variables that indirectly accelerate earnings per share, i.e. the assets of the firm increase sales, which magnifies earnings before interest and taxes, increasing shareholders' earnings. As a result, the findings indicate that asset structure is a non-significant variable when compared to a wide range of other variables that have a strong relationship with shareholder value.

The findings of the study are consistent with the observation of Hilmola(2020) that the inventories and assets are components of a collection of other inputs that collectively generate shareholder value.

The result of this study also contradicts the findings of Ukhriyawati et.al (2017). As a result, the study fails to reject the null hypothesis H_0^3 that the asset structure does not affect EPS.

Corporate Tax

Corporate tax is the tax that businesses pay on their earnings from business operations. Corporate tax and earnings per share generally have an inverse relationship. That is, as corporate tax rates rise, earnings per share fall, and vice versa. There are empirical studies that both confirm and refute the above perception.

According to McCormick (2018), the tax cut increases earnings before taxes and accelerates earnings per share. According to jhunjhunwala(2019), a corporate tax cut benefits businesses by enabling them to generate more post-tax income, which is then used to pay down debt and invest, thereby increasing the firm's earnings.

Experts also found that the corporate tax and earnings per share have an inverse relationship. Published by Kerrie et. al(2018) found that companies that pay more tax deliver better returns to shareholders.

The study of cement companies in India discovered an insignificant negative relationship between corporate tax and earnings per share. It demonstrates that corporate tax has did not affect the earnings per share of cement companies in India.

The study found that the effect of sales and earnings before interest and tax along with operating expenses control earnings per share in the cement industry. changes in an outstanding number of shareholders also affect earnings per share. The effect of Corporate tax does not make much of a shift in the earnings per share.

Since Corporate Tax is insignificant in deciding the EPS, the study fails to reject the null hypothesis H_0^4 .

Debt Service Capacity

Debt service capacity shows the ability of firms to pay off their debt. The firm with high debt service capacity can raise more fixed interest-bearing securities which will enhance the earnings per share of the firm. so there is a positive relationship expected between the service capacity and earnings per share.

The study analyses the effect of debt service capacity on earnings per share and finds that there is no relationship between these variables. The results show that P-value is 0.566 which indicates that the effect of debt service capacity on earnings per share is insignificant.

There are several reasons why debt service capacity seems insignificant in making a shift in earnings per share. Firstly, the cement industry is using a very low degree of leverage in its capital structure. Secondly, earning per share in the cement industry is affected by the accelerated earnings before interest and tax which is the by-product of sales. Therefore, the debt service capacity is not much affected by earnings per share in the cement industry.

Hence Debt Service Capacity is insignificant in deciding the EPS, the study fails to reject the null hypothesis $\mathbf{H_0}^5$.

Business Risk

Business risk represents the volatility of earnings. The general relationship between business risk and profitability of the business is positive. That means the profit or Return earned by the business will increase according to the risk-bearing of the business. when a business tries to expand to more markets and takes strategic decisions earnings will be volatile. But these decisions may enhance the earnings of the company and increase earnings per share.

The result of the study is supporting this general assumption. The regression result shows that business risk and earnings per share have a significant positive relationship. P-value <.001 of in the regression result indicates that the business risk of cement companies in India is positively affecting the earnings per share. Implementing new products in the market, export fluctuations, government policies, increasing market share e.t.c will make fluctuations in the earnings of the cement industry. But the cement industry is always trying to maximize their business and earnings before interest and tax during the volatility in earnings. This could provide better earnings per share to the industry.

As a result of the positive relationship between Business Risk and EPS, the study rejects the null hypothesis H₀⁶.

Size of the Business

The size of the business affects the earnings per share of the firm. There will be positive and negative shifts in earnings per share due to the effect of the size of the firm. Many empirical studies prove the effectiveness of the size of the firm on earnings per share.

Fatoki et.al (2017) conducted a study in Nigeria found that there is a positive relationship between size and earnings per share of cement companies. Another study conducted by Khalaf(2011) in the Jordanian industry found that size has a significant positive relationship with earnings per share of Companies.

The result of the study reveals that firm size and earnings per share have a negative effect. That means when the size of the firm decreases earnings per share of the company will increase. Likewise, earnings per share will increase according to the decrease in the size of a firm.

According to the trade-off theory, there is a positive relationship between firm size and capital structure. Because the larger companies are more diversified with stability in cash flows, high earnings, and having less potential for financial distress. But the result of the study is consistent with pecking order theory which states that firm size does not guarantee the interest of investors and creditors for investing their funds in the company.

Hence size has a negative relationship with EPS, the study rejects the null hypothesis $H0^7$.

Liquidity

The liquidity ratio is the ratio of current assets over current liabilities. A good liquidity ratio indicates that the company is in good financial health is less likely to face financial hardships. The higher ratio of liquidity shows the higher safety margin than the business possesses to meet its current liabilities.

Several empirical studies provide evidence that proves the relationship between liquidity and earnings per share. Abbasali et. al(2013) provide that the current ratio with earnings per share has a positive relationship in his study. The studies of Nguyen et al(2020) show that there is a negative relationship between liquidity and earnings per share.

The result of this study is different from the empirical studies mentioned above. The results of cement companies in India show that liquidity has no significant impact on earnings per share. Regression results show a p-value of 0.139 (>.001) which means that liquidity does not affect earnings per share.

The result of the study is similar to the studies of Khalaf (2011) which proves that the relationship of liquidity is insignificant on earnings per share. Rejaul(2018) also got evidence on the insignificant effect of liquidity on earnings per share from a study conducted on the steel manufacturing industry in Bangladesh.

Since Liquidity has an insignificant relationship with EPS, the study fails to reject the null hypothesis H_0^8 .

Growth

The growth of the firm will affect the capital structure, profitability, and earnings per share of the firm. Many empirical studies show that the growth potential of a firm has a positive impact on earnings per share of the firm. A study by Venugopal et al (2018) shows that growth has a significant positive impact on shareholders' value. Salim (2019) Found that asset growth has a negative impact on shareholders' value. There are also a lot of studies that show contradictory results regarding the relationship between growth and shareholder value. In this study, the relationship between earnings per share and asset growth has been evaluated. The results show a value of 2.36 (>.001) which indicates that growth and earnings per share have no significant relationship. The study finds that the asset growth of the cement industry in India is not affecting the value of shareholders.

The result is similar to several other empirical studies. In the study of Nguyen(2020), the relationship between earnings per share and growth is insignificant. Other empirical studies were done by Nguyen bye et.al (2020) and Tifow et.al (2015) also opined that there is no statistically significant relationship between the growth and earnings per share of firms.

Hence Growth has an insignificant relationship with EPS, the study fails to reject the null hypothesis H_0^9

Leverage of firm

A dummy variable, leverage of firms, was included in the regression model to determine the effect of the capital structure and its determinants on earnings per share in the case of high- and low-leveraged firms. However, the result indicates that the effect of capital structure and its determinants on earnings per share is identical for highly leveraged and low leveraged firms.

CONCLUSION

The study analyzed 9 independent variables such as capital Structure, trading on equity, asset structure, debt service capacity, corporate tax, size, business risk, liquidity, and growth to find out its relationship with the Earnings per share of cement companies in India. The study found that among the 9 variables, Capital structure and its determinants like size and business risk only have a relationship with the Earnings Per Share. It indicates that when other factors remain constant, an increase in debt in the capital structure will reduce the earnings per share of cement companies in India and vice versa. The study also reveals that size and EPS will have a negative relationship. When the size of firms increases EPS will get reduced and small firms will have higher EPS compared to big companies. The study also made a revelation that Increase in business risk will enhance EPS and vice versa. All other variables have no significant relationship with the EPS of cement companies in India.

REFERENCES

- [1] Modigliani, F. a. The cost of capital, corporation finance and the theory of investment. The American Economics Review, 1958, 261-97.
- [2] Jensen, M. C. Theory of firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 1976, 60-305.
- [3] Myers, S. C. Determinants of Corporate Borrowings. Journal of Financial Economics, 1977, 147-175.
- [4] Kester, C. W. Capital and ownership structure: A comparison of United States and Japanese manufacturing corporations . Financial Management, 1986, 5-16.
- [5] Titman, S. a. The determinants of capital structure choice. The Journal of Finance, 1988 1-19.
- [6] Rajan, R. G. What do we know about capital structure? Some evidence from international data. The Journal of Finance,1995, 1421-1460.
- [7] Taani, K. (2011). The effect of financial ratios, firm size and cash flows from operating activities on earnings per share:(an applied study: on Jordanian industrial sector). International journal of social sciences and humanity studies, 3(1), 197-205.
- [8] Kennedy, P. S. J. (2003). Analisis pengaruh ROA, ROE, EPS, profit margin, asset turnover, leverage, DER terhadap return saham: Studi pada saham-saham yang termasuk dalam lq-45 di bursa efek Jakarta (Doctoral dissertation, Thesis in Pasca Sarjana Ilmu Manajemen FEUI).
- [9] Tifow, A. A., & Sayilir, O. (2015). Capital structure and firm performance: An analysis of manufacturing firms in Turkey. Eurasian Journal of Business and Management, 3(4), 13-22.
- [10] Nguyen, V., Nguyen, T., Tran, T., & Nghiem, T. (2019). The impact of financial leverage on the profitability of real estate companies: A study from Vietnam stock exchange. Management Science Letters, 9(13), 2315-2326.
- [11] Patel, J. B. (2014). Impact of leverage on profitability: A study of Sabar Dairy. International Multidisciplinary Research Journal, 1(3), 1-6.
- [12] Hilmola, O. P. (2020). Role of inventory and assets in shareholder value creation. Expert Systems with Applications: X, 5, 100027.
- [13] Ukhriyawati, C. F., Ratnawati, T., & Riyadi, S. (2017). The influence of asset structure, capital structure, risk management, and good corporate governance on financial performance and value of the firm through earnings and free cash flow as an intervening variable in banking companies listed in Indonesia stock exchange. International Journal of Business and Management, 12(8), 249-260.
- [14] McCormick, B. (2018, August 24). The Independent Market Observer. Retrieved from Common Wealth: https://blog.commonwealth.com/independent-market-observer/the-effect-of-tax-reform-on-earnings-per-share
- [15] Jhunjhunwala, S. (2019, November 29). Financial Express. Retrieved from www.financialexpress.com: https://www.financialexpress.com/money/how-investors-caAn-benefit-from-corporate-tax-cuts/1767324/
- [16] Sadiq, K., & McCredie, B. (2018, January 24). The Conversation. Retrieved from https://theconversation.com/companies-that-pay-more-tax-deliver-shareholders-better-returns new-study-90386
- [17] Fatoki, O. I., & Olweny, T. (2017). Effect of Earnings Per Shares on Capital Structure Choice of Listed Non-Financial Firms in Nigeria. European Scientific Journal, 13(34), 1857-7881.
- [18] Abbasali Gamlath, G. R. M., & Darshi, G. A. N. The Effect of Financial Ratios, Firm Size and Operating Cash Flows on Earning Per Share: Evidence from Listed Plantation Companies of Colombo Stock Exchange (Cse) In Sri Lanka.
- [19] Nguyen, T., & Nguyen, H. (2020). Capital structure and firm performance of non-financial listed companies: Cross-sector empirical evidences from Vietnam. Accounting, 6(2), 137-150.

- [20] Karim, R., Kamruzzaman, A. S. M., & Kamruzzaman, M. (2018). Working Capital Management and Profitability: An Empirical Investigation of Steel Manufacturing Industry in Bangladesh. Journal of Business, 11(1), 53.
- [21] Venugopal, M., Bhanu Prakash Sharma G., & Reddy, R. (2018). Impact of capital structure on shareholder value in Indian pharmaceutical industry: An empirical approach through created shareholder value. Global Business Review, 19(5), 1290-1302.