A STUDY ON "THE INFLUENCE OF FINANCIAL STRUCTURE, LEVERAGE AND PROFITABILITY ON INDUSTRIAL COMPANIES' SHARES VALUE: AN APPLIED STUDY OF INDIAN INDUSTRIAL COMPANIES

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*Abstract :*The purpose of this study is to examine the influence of financial structure, leverage and profitability on industrial company's share value in the light of the key variables in addition to external environment aspects.

The new dimension financial management in joint-stock companies aims to maximize the value of the shareholders. In other terms maximizing the market value of the company. However, achievement of this goal depends on numerous variables such as historical evolution of the company, promoters, economic indicators of the economy as well as the company. Same time these variables vary in its impact on company's value from one variable to another and from one market to another and from one sector to another. Therefore, this study is intended to answer the following questions:

1. Does the company's capital structure have any influence on share price in the market?
2. Is there any effect/ influence of the degree of leverage in industrial companies on their stock prices in the market?
3. Is there any effect of profitability of industrial companies on their stock prices in the market?

Keywords – Economic Indicators, Leverage, Profitability and Capital Structure

I. INTRODUCTION

Importance of the Study:

The study is focused on investigating the impact of number of key variables in industrial company value in India, which may help finance and investment decision makers to their accuracy of their decision.

Study Objectives: Study objectives were determined as follows:

1. To assess the relationship between financial structures of Indian industrial companies and their stocks market price.
2. To identify the relationship between degree of leverage in Indian industrial companies and their market value.
3. To identify the relationship between profitability of Indian industrial companies and their stocks market price.

Hypothesis:
Based on study model the following hypotheses were formulated.

Ho1: There is no influence of capital structure in Indian industrial company's stock price of Indian financial market.

Ho2: There is no influence of degree of leverage on Indian industrial company's stock price of Indian financial market

Ho3: There is no influence of profitability (return on equity) in Indian industrial company's stock price of in Indian financial market.

Study variables were measured as follows:
1. Stock price as dependent variable was measured by company's stock market values at the end of each year.
2. Capital structure as independent variable was measured through total long-term liabilities and equity.
3. Financial leverage was measured as an independent variable through debt short-and debt to total assets.
4. Profitability as an independent variable was measured through Return on Equity (RoE). Accordingly, the study model is as follows: Market value = Bo + B1 Liabilities + B2 Debt Ratio + B3 ROE + E

Research limitations/implications: This research examined the impact of percentage of debt component, leverage and return on equity on industrial company's value that is share price. However, this study did not cover all the other aspects that might effect the firms value. This was the limitation for the study.

Population and sampling the study population consists of all industrial public shareholding companies listed in Indian stock market amounting 50, a random sample was selected from study population amounting eight companies, which have been adopted to represent all industrial sectors

Literature Review

company	year	D/E-ratio	%of debt	ROE	SP
AUTOMOBILE INDUSTRY MARUTI SUZUKI	2012-2013	43.9	8155(B)	12% ↑	1406
	2013-2014	45.56	17% ↑	13% ↑	37% ↑
	2014-2015	41.54	20% ↑	15% ↑	159% ↑
	2015-2016	45.13	49% ↑	16% ↑	164% ↑
	2016-2017	40.98	81% ↑	20% ↑	322% ↑
PHARMA INDUSTRY DR.REDDY LABORATORY	2012-2013	0.54	4205	16% ↑	1903(6)
	2013-2014	0.55	23%	21%	39% ↑
	2014-2015	0.54	38% ↑	16% ↓	85%
	2015-2016	0.51 ↓	42%	12%	57% ↓
	2016-2017	0.41	15%] ↓	11.9% ↓	38%
CEMENTINDUSTRY AMBUJA CEMENT	2012-2013	0.41	-3.69%	14.7%	164
	2013-2014	0.36	3.86%	13.6%	23.7%
	2014-2015	0.38	4.91% ↑	14.81%	58.5%
	2015-2016	0.37	6.5%	7.84% ↓	43% ↓
	2016-2017	0.21	15.5%] ↓	5.09%	44.5%
TELECOM IDEA CELLULAR	2012-2013	1.4	20.406	5.8%	103
	2013-2014	1.8 ↑	39%	10.84%	36%
	2014-2015	1.6 ↓	75%	12.84%	67%
	2015-2016	2.2 ↑	172%	10.77% ↓	3.8% ↓
	2016-2017	3.03	253%	-3.5%	-16.5%
CONSUMER NON-DURABLES ITC	2012-2013	0.52	11.729	33%	194
	2013-2014	0.49 ↓	10.55%	33.45% ↓	18.5% ↓
	2014-2015	0.43 ↑	14.75%	31%	14%
	2015-2016	0.50	41%	30%	15%
	2016-2017	0.19 ↓	-24.3% ↓	23% ↓	44% ↑
PETROLEUM INDUSTRY ONGC	2012-2013	0.43	53,673	16.8%	209
	2013-2014	0.45	16.56%	16.16%	38%
	2014-2015	0.43 ↓	18.26% ↑	12.26%	-2.39%
	2015-2016	0.44	27%	10.54% ↓	-33% ↓
	2016-2017	0.33	14.97%	9.65%	-11.48%
SOFWARE INDUSTRY INFOSYS	2012-2013	0.19	6969	25%	1432
	2013-2014	0.25 ↑	52%	24% ↑	15.7% ↑
	2014-2015	028	97% ↑	25.31%	51.7%
	2015-2016	0.19 ↓	67%	21% ↓	-158% ↓
	2016-2017	017	70%	20%	-28.63%
IRON AND STEEL TATA STEEL	2012-2013	0.80	44,392	9.17%	295
	2013-2014	0.77 ↕	7.2%	10.4% ↓	29.8% ↓
	2014-2015	0.70	5.2%	9.6%	4.40%
	2015-2016	0.71 ↓	13.6%	6.95%	2.71%
	2016-2017	1.19	34%	6.94% ↓	55.9% ↑

Jameel (2013) study aims at testing the impact of financial leverage on the performance of firms listed at Palestinian Security Exchange according to accounting performance measures namely return on assets (ROA), return on equity (ROE) , return on sales (ROS) , sales growth , and market value of the firm measured by Tobin's q. On the other hand, the research is an attempt to know which one of them is more influenced by the financial leverage. The sample of the study consisted of (20) corporations listed on

the Palestinian Exchange Security during the period 2004-2011. The research used the multi regression in order to analyze and test the hypothesis. The study revealed that the financial leverage has a negative impact on accounting performance measures, and the market value of the firms according to Tobin's q and this impact extends for several subsequent years. The study recommends that the Palestinian corporations management should make financial study and evaluate the financial structure in order to reach the best optimal ratio of leverage within the financial structure to ensure that the positive impact of leverage on the financial performance and the market value of these companies, and enacting economics laws that allow to Palestinian corporation to use loan bonds and other financial instruments that allow for multiple alternatives to these corporations while using leverage in funding.

Alroud (2013) study aimed to investigate the impact of solvency of financial market value of share price in Jordanian commercial banks. To achieve these objectives financial ratios of solvency of financial short-term and long-term and coverage ratios solvency of the financial statements of commercial banks Jordanian from 2001 till the year 2010 were collected. The study sample consisted of Jordanian commercial banks amounting (15) banks listed in Amman Stock Exchange. Simple Regression Analysis was used to test independent variable (solvency), and shares market value. The study concluded that the proportion of cash solvency short term has been interpreted to (0.79) of the whole variance of the market value of the stock price, and that the ratio of debt to total equity of financial solvency long-term has been interpreted to (0.60) of the variance total market value of the share price, while the effect of variable Interest Coverage of solvency cover interest and taxes on the market value of the share price is weak, where interpreted to (0.24) of the variance total market value of the stock price, and recommended the study ran banks Jordanian business need to take into account the interest rate, because of its impact on benefits.

Islam (2012) study aimed at revealing the impact of the financial structure of adverse group of Jordanian public shareholding companies listed on Amman Financial Market on profitability represented by earning per share (EPS), and on policies of the distributions of profits represented by Dividends per Share (DPS). In order to achieve the objectives of the study, this researcher used the published financial data of a random sample of (75) companies for the period 2007-2009. The necessary data to conduct the study, namely, the financing structure expressed by debt, the corporate profitability expressed by earning per share. Statistical methods were used to analyze the data, specifically simple regression by using the statistical package SPSS Version 18. In addition, other methods were used such as the descriptive statistics method (mean, standard deviations, the highest value, lowest value). The study concluded the following results:

There is no relationship statistically significant between the independent variable represented by debt (DR) and the dependent variable represented by earnings per share (EPS). However, the relationship between these two variables (DR and EPS) varies between the different sectors represented in its correlation coefficient (R).They also differ in direction represented by the type (R) positive or negative. The results also showed that the ability of manager of Jordanian public shareholding companies to use debt for generating profits varied as per sector. Second, the study showed there is no statistically significant relationship between independent variable (DR) and the dependent variable policies of dividends (DPS). The study shows that the ratio of distributed dividends between the three sectors is varied. The Financial Sector ranked first in the proportion of dividends distributed to its shareholders. This indicates that the manager in the other two sectors (Industrial and Service companies) have failed in using the borrowed money to make profits and thus in their ability to distribute dividends to their shareholders. Sumayya (2012) study is trying to find out the impact of the financial structure on financial decisions in small and medium enterprises. The research also aims to try to build an empirical model that measures the relationship between various financial decisions and financial structure in small and medium enterprises. To achieve this purpose, a field study was carried out over a sample of small and medium enterprises in Warqla state (in Algeria) through the study of financial structure impact on study sample institutions financial decisions. The study concluded that there is a direct correlation between borrowing and investment decision, while the decision of the distribution loses its meaning in small and medium enterprises.

Stefan (2009) study aimed to find the relationship between the financial structure and monetary policies and their impact on assets value. The study sample consisted of 17 countries for the period 1986-2007. Results showed that financial structure affects monetary policies, which in its turn affect the assets prices of (residential real estate, stocks), .The study showed the impact of inflation in those policies and assets prices. Dana (2008) study aimed to identify external and internal factors that affect stock return in Amman stock market. The study population consisted of all companies in Amman Stock Market. The study sample consists of (60) companies. The study found that there is significant statistical relationship between inflation rate, Interest rate, Number of Employees, and the size of the company capital with Stock return, and no significant statistical relationship between Payment Balance sheet and stock return, and also no significant statistical relationship between the gross domestic product and stock return.

Data processing and hypotheses formulation
Sample was selected from industrial public shareholding companies listed in Indian financial market to study its financial statements during the period from 2012-13 until 2016-17 and these companies are:

SECTORS	COMPANIES
AUTOMOBILE INDUSTRY	MARUTI SUZUKI
PHARMA INDUSTRY	DR.REDDY'S LAB
CEMENT INDUSTRY	AMBUJA CEMENTS
TELECOM	IDEA CELLULAR
CONSUMER DURABLES	ITC
PETROLEUM INDUSTRY	ONGC
SOFTWARE INDUSTRY	INFOSYS

IRON AND STELL				TATA STEEL		
REGRESSION						
VARIABLES NAME	B0	B	T	F	R2	SIG
FINANCIAL LEVERAGE	38.999	-0.095	0.229	0.53	0.006	0.826
ROE	12.448	0.456	2.0643	4.278	0.313	0.008
FINANCIAL STRUCTURE	23.09	0.700	5.065	23.765	0.808	0.001

Results of the Study

- There is a statistically significant direct relationship between two independent variables: the return on equity and capital structure and the dependent variable represented by market stock price. However, there is a weak and reverse relation between leverage and stock value, and this relationship is not significant, so there is no statistically significant relationship between financial leverage and company's value.
- There is a clear impact of financial structure and return on equity on company's value through investigating these variables the financial analyst can predict company future value

Testing of the hypothesis

To test the hypotheses that have been formulated before and to determine the effect of the independent variables on the dependent variable (the company value), T-Test has been used using the correlation values and the following table show the results:

To test model parameters, T- test was used; the results were as shown in the following table:

Variable name	T Test	Sig Level
Constant	2.664	0.05
Financial Structure	10.829	0.000
Leverage	-0.862	0.437
ROE	4.935	0.008

FINDING OF THE STUDY

Maruti Suzuki

- The debt equity ratio of Maruti Suzuki during 2012-17 was 043 this indicates the proportion of debt used for every year one rupee of equity used by the company This also implies that with lesser proportion of debt in capital structure a greater margin of safety is available to them. Company will be able to service it debt without much difficulty and its credit standing is not affected for all the year during 2012-17 the debt component had increased from (8155.53) to (14,822.2) . Simultaneously return on equity had also increased during 5years from 0.122 to 0.20. This will create / or send positive signal in share market making share price to move up or in this case it had increased from 1406 to 5944 this indicates that with an increase on debt by 80%, the share price increased by 322% over the 5 years.

Dr.Reddy's Laboratory

- The debt – equity ratio of the company during 2012-13, to 2016-17, was 0.54, 0.55, 0.54, 0.51 and 0.41 times. This is an indicator that on an average their company employees 51%of debt and 49% of equity in its capital structure. This implies a margin of safety of 66.22% available to the creditors of the company. Their company would be able to meet the creditors' claims even, if the value of the assets decline by 66.22%. During 2012-14, the proportion of debt was more than the equity due to this, the return to shareholders had magnified (increased from 16% to 21%). This has resulted in increase in share price of the company from Rs.1903 to Rs. 3533 within a period of one year. During 2012-14. During 2014-17, the proportion of debt had decreased from 0.54 times to 0.341 times. Simultaneously the return on equity of the company had also reduced from 16% to 11.9%

  During 2015-17, the component of debt had drastically reduced from 42% to 15%, indicating repayment of long term loans; Due to this the shareholders could not get the much benefit of trading on equity during this period. This had shown impact on the share price of the company (reduced from 3,533 to Rs.2632

Cement industry

- The debt to equity ratio of the company during 2012-17 was, 0.41, 0.36, 0.38, 0.37, and 0.21 times. This indicator that on an average this company employs 0.34 times or 34% of debt and 66% of equity in the capital structure. This implies a margin of safety of 74.62^ available to the creditor of the company. During 2012-14 , this company's debt component had been reduced by -3.86% . Simultaneously the return on equity and share price had reduced. But during 2014-17 the proportion of debt had reduced from 0.38 times to 0.21 times. This resulted in lower advantage to equity shareholders return of the reduced ROE and share prices.

Idea Cellular

- During 2012-17, the debt – equity ratio of the company was 1.4, 1.8, 1.6, 2.2, and 3.03 times. This indicates that on an average their company employs 2.006 times of debt in its capital structure. This implies that it employs twice debt component than the equity component. During 2012-14 the proportion of debt was more than that of the equity (ie 1.4 and 1.8) this resulted in higher ROE (From 5.8% to 10.84%), simultaneously the prices have increased to 36%.But during 2014-17, the proportion of debt had increased from 1.6 tomes to 3.03 times. This is a danger signal, as owners are putting relatively less money of their own. This small financial stake in the company may lead to speculative activity. This signals a greater risk to creditors. Further it would have to face a heavy burden of interest payment particularly when profits decline. Normally, as the debt component increases in the capital structure, the advantage of trading on

equity is passed on the equity case, During 2014-17, inspite of increase in debt component, the ROE (12.8%,10.7% and -3.5%) and share prices (Rs.172 , Rs.107 and Rs. 86) have reduced.

CONSUMER NON-DATABASE (ITC- Indian Tobacco Company)

- The D/E ratio of company during 2012-17, was 0.52, 0.49, 0.43, 0.50, and 0.19 timer. On an average, it employed 42% of debt and 58% of equity in its capital structure. This indicates that owner had invested more than the lenders. A high margin of safety is available to lender and they get substantial protection against shrinkage in asset. This company will be able to serve debt without much burden and its credit standing is not adversely affected. But in this case, the share holders are deprived of the benefits of trading on equity. During 2015-17, the dept component was further reduced by 0.21 times. As a result of this, the ROE had decreased from 30% from 23% and share prices had increased from Rs.224 to 280 Rs.(44%).

PETROLEUM INDUSTRY (ONGC)

- The debt to equity ratio of ONGC during 2012-17, was 0.43, 0.45, 0.43, 0.44, and 0.33 times. The average D/E ratio was 0.41 times which indicates that the debt proportion is 41% and equity is 59% in its capital structure. The creditors have more margin of safety or equity shareholders investments is high. During 2013-17, the debt proportion had reduced from 0.45 times to 0.33 times. But in this case, with increase in debit, the ROE and share prices had reduced, indicating the reverse effect.

Software industry INFOSYS

- The debt   equity ratio of the company during 2012-17 was 0.19, 0.25, 0.28, 0.19 and 0.17 times .This indicates that on an average this company employee 0.21times or0.21 of debt and 79%of equity in its capital structure. this implies,a margin of safety of 82.6% available to the creditors of the creditors of the company .during 2012-15, the proportion of debt was more than the equity due to the ROE had increased from 2.41% to 25.3%.simultaneously share price had increased from RS 432 to RS2173.But, during 2015-17, the D/E ratio indicates that the proportion of debt had decreased from 28% to 17% respectively. This may be due to payment of loan with   high rate of interest as the employment of debt had decreased; the return to shareholders had also reduced from 25.31% to20%. Further during their period, the prices of Infosys Company had also fallen from RS 2173 to RS 1022. The shareholders couldnot gain advantage of trading on equity due to reduced usage of debt component in its capital structure.

- **IRON &STEEL INDUSTRY (TATA STEEL LTD)**

 DURING 2012-17, the D/E ratio of the company was 0.80, 0.7, 0, 0.71, and 1.19times. On an average the D/e ratio was 0.83 times, Whichindicates that, Tata steelis employing 83% debt funds and 17%equity funds .In their company very little margins of safety is available to the creditors.During 2012-15, Even thoughthe debt proportionwas very high,the return on equity had reduced and share prices had slipped down to 4.40% from 29.8% (i.e.. from RS 383 to RS 303) the usage of more debt couldnot derive more benefit to the equity shareholder. During 2041-17 the debt component in its capital structure had increased from 0.70 to 1.19 times.Simultaneously ROE had increased from 9.6% to6.94%. And the share prices had also increased from Rs 303 to 460 RS .with 67% increases in debt component in the capital structure ,the share prices had increased by 51%but during this period ,there was no much change in ROE

Recommendations:

1. Companies 'management have to pay attention to financing aspects represented by differentiation between different financing sources , and in particular investment debt funds in are turn exceeds capital cost , which leads to increase and improve profitability , which have a positive impact in increasing the company value of.

2-Company's managements should pay attention to profitability and dividend because of their positive impact in increasing and improving company value, thus increasing shareholder wealth.

3. Companies management should aware the positive impact of financial structure and profitability on company value, taking into account the conditions of external environment as an important factor in the analysis of their strategies.

4. Shareholders and investors can through study and analysis of the financial structure as an indicator of e operational and investment strategy to predict company future value as an analysis and strategic long-term.

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