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"CAPITAL STRUCTURE AND PROFITABILITY OF SELECTED PETROCHEMICAL COMPANIES OF INDIA"

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ABSTACT: Capital structure and the profitability are two important aspects for any company. Here the researcher analyzed 2 components capital structure and profitability. Researcher has focused on 2 petrochemical companies Gujarat stat Petronet ltd and Manali petrochemical ltd. For the year of 2015 to 2020. The data has been collected from various secondary sources of selected companies and analyzed by ratio analysis and independent T- test with equal variances. Debt equity ratio, net profit ratio, return on capital employed, return on asset, return on net worthy/equity and debt to asset ratio has been used to analyse the data. the conclusion of the study was that there is no significant difference of return on capital employed, return on assets, return on net worthy/equity and debt to asset ratio of Gujarat stat petronet ltd. And manali petrochemicals ltd. and there is significant difference of debt equity ratio and net profit ratio.

KEYWORDS :- capital structure, profitability, petrochemical company

INTRODUCTION: Capital structure is the composition of equity and debt used to finance the company.the term capital structure refers to the percentage of capital or money at work in business by type.there are two forms of capital 1) equity capital and 2) debt capital. Capital structure refers to the way in which an organization is financed a combination of long term capital (ordinary shares and reserves, preference shares, debentures, bank loans, convertible loan stock and so on) and short term liabilities. The capital structure of a given firm reflects its financing decisions. Capital structure is the proportion of various long term sources of funds. The proportion of the various sources of funds depends upon their cost structure, their availability and the amount of funds required by the firm. capital structure of a firm denotes its mix of Debt-Equity Ratio, i.e., how much debt and how much equity the firm uses. Profit represent primary factor which always wish to be achieved by every companies. To achieve this profit, companies must empower all of its resources optimally. The main resources is its own capital which is invested in company's assets, such as current assets, fixed assets, and other assets. capital structure refers to a set of rules and incentives by which the management of a company is directed and controlled, hence, sound capital structure will have effects on profitability and long-term value of the firm for shareholders. profitability and capital structure has succeeded in attracting a good deal of public interest because it is a tool for economic development.

LITERATURE REVIEW : (Sher, Muhammad Nauman Sadiq & Fateh, 2016)have analyzed IMPACT OF CAPITAL STRUCTURE ON THE PROFITABILITY OF FIRM'S EVIDENCE FROM AUTOMOBILE SECTOR OF PAKISTAN. He observed capital structure as factor affecting to profitability. The aim of this study is to contribute the literature of capital structure and examine its impact on profitability of automobile industry which is listed in Karachi stock exchange. Sample was taken of nineteen companies from total 22 companies. The data were collected from website of banks of Pakistan and companies' publication. Correlation and regression have been used to interpret the data. The conclusion of the study was the capital structure shows the negative relationship with all profitability ratios. So, the null hypothesis rejected and there is significant relationship between capital structure and profitability of the companies.

(Dr, Mohammad Fawzi Shubita & Dr. Jaafer Maroof Alsawallhah, 2012) has examined THE RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND PROFITABILITY. He examined the impact of capital structure on profit of the companies listed on Amman stock exchange. For the period of six years from 2004 to 2009. 39 companies were selected as a sample. Researcher has used correlation and multiple regression analysis for analyzing the data. companies whose share price data was available for the period of 2004 to 2009 and had not enter in consolidated process were taken as a sample. Manufacturing companies were taken into consideration was the limitation of the study. The result of the study showed that there is negative relationship between the debt and profitability. Increment in debt will lead to decrement in profitability and vice versa. The profitability can be increased with controlled variable of the firm.

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(Derayat, Mojgan, 2012) has investigated THE INVESTIGATION OF EXPERIMENTAL RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND PROFITABILITY IN ACCEPTED COMPANIES OF TEHRAN STOCK EXCHANGE. The data from 2006 to 2010 were collected. Coefficient, t-statistics and standard error has been used for analyzing the data. Rate of return on asset has been used as dependent variable. There were some conditions of the study. The first one was that there should a presence of the company in TSE from 2006 to 2010.The second condition was that Persian date Esfand 29 should be the ending of financial year. And the last one was there should be more than four companies in each industry. The results of the study showed that there was direct relationship of short term and return on asset ratio. Equity on total debt and return on assets also had direct relationship.

(S. Revathy, V. Santhi, 2016)have measured IMPACT OF CAPITAL STRUCTURE ON PROFITABILITY OF MANUFACTURING COMPANIES IN INDIA. The purpose of the study was to know how the impact of capital structure on business revenue of company. Selection of sample was based on stage and period of the manufacturing company. 70 companies were taken as sample and the technique of sampling was multistage sampling. The stage of the company was growth stage, pioneering stage and consolidation stage while the period was decided pre-merger and post-merger. Secondary data has been used in the study which was gathered by published research report, annual report, and prowess corporate database. To analyse the effect of capital structure on profitability structure equation modeling has been developed. The results showed that when there was increment in debt equity ratio, the profit of companies may decrease and vice versa.

(Das, Bhagabata behera and abhijit, 2019) have studied MANAGEMENT EFFICIENCY AND PROFITABILITY: A CASE STUDY OF PETROCHEMICAL INDUSTRY. The study was conducted to evaluate how profitability was changing by the efficiency of management in the petrochemical industry. The main objective of the study was to examine the profitability and activity ratio of petrochemical industry and to evaluate the relationship of management efficiency and profitability the study suggested that there was to rise the petroleum products . large domestic chemicals market can pool highly trained manpower. This study reflected petrochemical industry's efficiency which would lead to the growth oil sector.

STATEMENT OF THE PROBLEM

The present study mainly analyses capital structure and the profitability of selected petrochemical companies. It is difficult to determine the capital structure of the firm. Financial managers find it tough to exactly determine the optimal capital structure. A firm has to issue various securities in a countless mixture combinations so that it can maximize its overall profit and gives its optimal capital structure. If a wrong mix of finance is employed then the performance and survival of the business enterprise may be seriously affected. Survival and growth needs resources but financing of these resources has its own limitations. Therefore, the present study is an attempt undertaken to know the capital structure and the profitability of selected petrochemical companies in India. It is always quite problematic to design specific and optimal capital structure for the firms that can maximize the profitability. The optimal capital structure in different economies has different ratios that contribute in the problem of analyzing and measuring Profitability

OBJECTIVES OF THE STUDY

- To study the capital structure of selected petrochemical companies of India.
- To study the profitability of selected petrochemical companies of India.

SAMPLES SELECTED FOR THE STUDY

- Gujarat stat petronet ltd.
- Manali petrochemicals ltd.

SAMPLING TECHNIQUE: Deliberate sampling technique has been used to choose the sample

SOURCES OF THE DATA: Secondary datawereused forthe study. Data were collected from the Published Annual Reports of sample petrochemical companies, Journals, as well as various websites etc.

LIMITATION OF THE STUDY

- The study covered only 2 petrochemical companies.
- Researcher considered 5 year data from 2015 to 2020
- The study is based on the secondary data so there can be a possibility of problem of authentication

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TOOLS AND TECHNIQUES OF THE STUDY

- Ratio analysis
- Independent t- test with equal variance

HYPOTHESIS OF THE STUDY

- There is no significant difference between debt equity ratio of Gujarat stat petronet ltd. And Manali petrochemicals ltd.
- There is no significant difference between net profi margin of Gujarat stat petronet ltd. And Manali petrochemicals ltd.
- There is no significant difference between return on capital employed of Gujarat stat petronet ltd. And Manali petrochemicals ltd.
- There is no significant difference between return on assets ratio of Gujarat stat petronet ltd. And Manali petrochemicals ltd
- There is no significant difference between return on net worth/equity ratio of Gujarat stat petronet ltd. And Manali petrochemicals ltd.
- There is no significant difference between debt to asset ratio ofGujarat stat petronet ltd. And Manali petrochemicals ltd.

DATA ANALYSIS

Table no. 1 Ratios for Gujrat stat petronet ltd.

Gujrat stat petronet ltd.					
PARTICULAR	**2016**	**2017**	**2018**	**2019**	**2020**
1 Debt equity ratio(%)	0.08	0.22	0.35	0.11	0.20
2 Net profit ratio(%)	46.81	42.33	50.19	48.33	44.80
3 Return on capital employed(%)	18.51	18.66	14.20	14.47	8.43
4 return on assets(%)	12.18	8.87	7.46	8.51	7.60
5 Return on networth/equity(%)	16.49	13.83	13.19	11.04	11.20
6 Debt to asset ratio(%)	26.15	35.82	43.40	22.93	32.065

(sources: computed from annual published reports)

From the above data researcher has analyzed that GSPL is having highest net profit ratio in the year 2018 which has decreased in 2019 and 2020. There is fluctuation of approximately 2 to 4 % in every year. company had good return on asset and networth in the year 2016 which was 12.18% and 16.49% respectively. it is highest compared to other 4 years. overall the financial performance of the company was good in the year 2016 and and it was not sound in the year 2020. it might be due to the pandemic situation affected in that year. In 2020 company had 0.20% debt equity ration which indicates company had to issue more debt finance in 2020.

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Manali Petrochemicals ltd.					
PARTICULAR	**2016**	**2017**	**2018**	**2019**	**2020**
1 Debt equity ratio(%)	0.10	0.03	0.04	0.07	0.01
2 Net profit ratio(%)	5.71	9.31	8.50	7.25	8.32
3 Return on capital employed(%)	11.34	18.70	21.32	12.04	16.76
4 return on assets(%)	6.36	10.88	10.57	7.82	9.65
5 Return on networth/equity(%)	8.45	14.81	14.21	12.36	17.05
6 Debt to asset ratio(%)	24.66	26.53	25.59	36.75	43.41

Table no. 2 ratios for manali petrochemicals ltd.

(Sources: computed from annual published reports)

After computation of above ratio the researcher has analysed that the company is having lowest debt equity ratio in the year 2020 which is good indicator of the company company had less debt finance in that year. If the debt is compared with assets of the company it was highest in the year 2020. Company had highest profit in the year 2017 which was 9.31%. and it was lowest in the year 2016. Even in the situation of pandemic the profit of the company was increased by 1.07%.company had good return on asset in 2017 . anf good return on networth in the year 2020 .

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Particular	Degree of freedom	Calculated value	Table value	Accept / reject
1 Debt equity ratio	8	2.8377	2.3060	reject
2 Net profit ratio	8	25.7686	2.3060	reject
3 Return on capital employed	8	-0.4401	2.3060	accept
4 return on assets	8	-0.1088	2.3060	accept
5 Return on networth/equity	8	-0.1289	2.3060	accept
6 Debt to asset ratio	8	0.1322	2.3060	accept

Table no. 3 Result of independent T- test

FINDING AND CONCLUSION:

Researcher have used independent T test for the analysis of various ratios. The table value of the independent t-test is 2.3060.with the help of data analysis researcher proved the there is no significant difference of return on capital employed, return on assets, return on networthy/equity and debt to asset ratio of Gujarat stat petronet ltd. And manali petrochemicals ltd. As the null hypothesis has been accepted and there is significant difference of debt equity ratio and net profit ratio as the null hypothesis has been rejected. we can conclude that return on capital employed, return on assets, return on networth and debt to asset ratio of the both the companies are performing good beacause the null hypothesis has been accepted while both the companies have to concentrate more on the net profit and debt equty as the null hypothesis has been rejected. This study was conducted to analyse the capital structure and profitability of the selected petrochemical companies. Debt equity ratio and debt asset ratio are used as components of capital structure and net profit ratio, return on capital employed, return on net worth and return on assets are taken as measures for evaluating the profitability of these companies. The net profit ratio of the Gujarat petronet ltd is more than the net profit ratio of Manali petrochemicals ltd. Which shows GSPL is more profitable than Manali petrochemicals ltd. But net profit ratio is decreasing in GSPL after 2018.in this data we can see that in Manali petrochemicals ltd the debt equity ratio is increasing when the net profit ratio is decreasing and vice versa so we can say that in manali petrochemicals ltd the net profit has effect on capital structure of the firm.while the capital structure of GSPL has no effect on net profit ratio. GSPL has more fluctuation in profitability and capital structure than the manali petrochemicals ltd. Which is not good indication.GSPL must have to focus more on the profitability and capital structure.

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