

A Study of Capital Structure of Pharmaceutical Industry

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ABSTRACT

The present research aimed at making a critical study of the capital structure of selected units in Gujarat. The study included various aspects related to the capital structure. The capital structure of selected pharmaceutical and engineering companies was analyzed with the help of ratios. The ratios like debt-equity, interest-coverage, and fixed assets were studied. The capital structure decision of a firm has its implication on the profitability of the firm. Thus the present study included the profitability study of the selected companies as well. Under the profitability analysis the operating profit margin, net profit margin, return on net worth ratio, return on capital employed ratio and the earnings per share were studied. A comparative study of the debt-equity ratio and the earnings per share of the selected pharmaceutical and engineering companies during 2005-06 to 2010-12 was also undertaken. Thus, the conclusions drawn can be helpful in enriching the prevailing pool of knowledge and can be helpful to the researcher, students, faculties of management, researchers, decision-making authorities, etc.

Keywords : Capital Structure, Finding, Suggestion, ICR, FAR, RONW, ROCE, NPM, DEQR, OPM, ECS

I. INTRODUCTION

The term “business” relates to the state of being busy either as an individual or society as a whole, doing commercially viable and profitable work. This term has at least three usages, depending on the scope; one is to mean a particular company or corporation, the generalized usage to refer to a particular market sector or the broadest meaning to include all activity by the community of suppliers of goods and services.

Business is an economic activity as it is concerned with earning money and acquiring wealth through the production and distribution of goods and services. Businesses are predominant in capitalist economies, most being privately owned and formed to earn profit that will increase the wealth of its owners and grow the business itself.

Capital contributed by the owner or entrepreneur of a business, and obtained by means of saving or inheritance, is known as own capital or equity. This capital that owners of business provide can be in the form of Preference shares/hybrid source of finance

1. Ordinary preference shares
2. Cumulative preference shares
3. Participating preference shares
4. Ordinary shares
5. Bonus shares
6. Founder’s shares

That capital which is granted by another person or institution is called borrowed capital, and this must usually be paid back with interest. This capital which the business borrows from institutions or people includes debentures:

1. Redeemable debentures
2. Irredeemable debentures.
3. Debentures to bearer
4. Ordinary debentures

III. FINDINGS

The observations made from the present study are as follows:

Deciding which source of capital should be tapped so that the entrepreneur gets a fair return, is a type of financial decision and a part of financial management. It is a very important component of corporate finance.

II. MEANING OF CAPITAL STRUCTURE

The term "Financial Management" connotes that fund flows are directed according to some plan. It connotes responsibility for obtaining and effectively utilizing funds necessary for the efficient operation of an enterprise.¹

A formal definition of financial management would be the determination, acquisition, allocation and utilization of financial resources, usually with the aim of achieving some specific goals. To be more specific financial management is about analyzing financial situations, making financial decisions, setting financial objectives, formulating financial plans to attain those objectives, and providing effective systems of financial control to ensure plans progress towards the set objectives.

Thus, a financial manager is primarily concerned with two main types of interrelated decisions, i.e. investment decisions and financing decisions.

- Investment decision includes:
 - Strategic investment decision
 - Tactical/operational investment decisions
- Similarly financing decision also includes:
 - Strategic financing decision
 - Tactical/operational financing decisions.

A. It has been observed that in most of the companies in the pharmaceutical industry which are under the present study, there was a wide fluctuation in the debt-equity ratio during the period of the study. The ratio was not at all stable, as well as, there was continuous rise and fall in the ratio in each year during the period under study. It was seen that Sun Pharmaceutical has a declining debt-equity ratio over the five year period. It seems to be a good sign since the burden of the company seems to be decreasing and thus the proportion of income left for the owners seems to be increasing. It was also observed that in the case of the above company the fall in the debt-equity was drastic by the end of the period. It was almost negligible by 2009. Cadila and Torrent exhibited a similar trend in the debt-equity ratio. There was slight fall in the ratio in the middle period of study and then it ultimately grew by the end of the period. Alembic showed a rising trend in its debt-equity ratio, whereas Lupin showed a declining trend in the later years of the study.

B. It was seen that the ICR of Sun Pharmaceutical shows exorbitant increase from 2008 to 2012. It rose from zero in 2008 to reach as high as 489.91 in 2012. Cadila, Alembic and Lupin showed a fluctuating ICR over the years. There was rise and fall during the five year period. The study showed that the interest coverage ratio of Alembic Ltd. Was at the lowest range. It was 6.08 in 2008. It doubled to 12.21 in 2009 and then fall steeply to 2.63 by 2010. The trend of interest coverage ratio in Torrent was opposite to that of all other units. The ICR in this company was constantly falling for the first three years and then there was a slight rise in the last two years.

C. The study revealed that the FAR of all the pharmaceutical units under study was below 1. Cadila had the highest range of FAR. It showed a declining

trend over the five years period. The second highest ratio was that of Alembic. The FAR of Torrent fluctuated within a range of 0.4 to 0.56. It was observed that the fluctuation in the FAR of Sun Pharmaceutical was minimum among all the units under study. The lowest FAR among all the units was observed of Lupin Laboratories in 2008 at 0.06.

D. In the case of return on investment it was observed that it was higher in the initial year of the study and then there was a great fall in the return in the immediate next year in few companies and then again a slight rise followed by a fall again.

E. The fluctuation in the RONW of all the units was somewhat similar during the five year period of study. Cadila and Lupin showed a similar pattern in the RONW. But the growth in the RONW of Lupin was higher than that of Cadila. The study showed that Alembic Ltd. and Sun Pharmaceuticals Ltd. was having a similar pattern in the RONW. Both the companies showed a rising RONW in the first two years and then it started decreasing in the remaining two years. It was noteworthy that the RONW of Alembic Ltd. fell steeply to 2.22% in 2011 from 32.86% in 2012. This similar observation was made in the net profit margin also. The RONW of Torrent Pharmaceuticals showed an increasing pattern for all the four years but it slightly fall in the fifth year. The RONW was some what stable in a particular range in most of the pharmaceutical companies under the study. It fluctuated every year but the rise and fall was not too varied.

F. It was observed that Sun Pharma was the only company having a constant increase in ROCE over all the five years of study. All the other units under study had a fluctuating ROCE. It was seen that Sun Pharma had the highest ROCE of 23.91% in 2009 whereas Alembic had the lowest ROCE of 0.9% in the same year. The ROCE of Cadila and Alembic were increasing in the initial two years; thereafter it continuously fall for Cadila whereas for alembic there was a fall followed by a rise and a fall again. Lupin Laboratories had a rising ROCE from 2008 to 2012

then it fall in 2008 and again rose in 2012. Torrent was an exception. It was having a RONW of 12.24% in 2008 which fall to 10.52% in 2010 and during all the years there was a constant up and down.

G. It was observed that the OPM of all the four pharmaceutical companies under study except Sun Pharmaceuticals ranged between 11.29% and 22.68% during 2008 to 2012. On an average the OPM was around 16% to 17%. The OPM remained very low in Sun Pharmaceuticals during the five years compared to the other four companies. It was seen that all the pharmaceutical companies under the study showed a constant rise and fall in the operating profit margin.

H. The observation made in case of the earning per share showed that in few pharmaceutical companies it increased during the period of study but with fluctuations every year. Few companies showed a downfall in the earnings per share and the variations were too wide. It was observed that Sun Pharma had an exceptionally high EPS in comparison to other pharmaceutical companies under study. It had a very high growth rate in its earnings per share. The study showed that the lowest range of EPS was that of Torrent. There was rising and falling trend over the years. Lupin showed a continuous rise and fall in its EPS during all the five years. The lowest fluctuations in the EPS were observed in Cadila. It fluctuated between Rs.21.61 to Rs.36.06. There was a rise and fall tendency.

I. The NPM showed an increase in most of the companies in the pharmaceutical industry during the period of study but with a constant rise and fall. It was seen that the NPM of Sun Pharmaceutical Industries had shown a rising trend over the years. It had got a very high range of this margin compared to all the other pharmaceutical units under the study. It was observed that the maximum NPM among all the other units except was 16.3% that of Lupin whereas that of Sun Pharmaceutical started at 30.35% in 2008 which was almost double that of other units. All the other pharmaceutical units did not showed much fluctuation in the NPM. The rise and fall was within a

particular range. The NPM of all the units except Sun Pharmaceutical Industries ranged from 7% to 16% approximately during 2008 to 2012.

Regression correlation was used to see the effect of debt- equity ratio on the earning per share, fixed asset ratio and the interest coverage ratio of the pharmaceutical industries.

J. It was observed that EPS, FAR and ICR had no linear effect of DEQR but FAR was affected exponentially by DEQR and the model gave significant results. It indicated that 1 unit rise in DEQR resulted in 63% fall in FAR exponentially.

K. In case of the engineering units under study, two units were all equity companies with no debt at all. In other units a rise in the debt-equity ratio was observed which may be owing to the growth in the company. It was observed that only Elecon had a debt-equity ratio which was near to the ideal ratio of 2:1. Rest all the engineering units had a ratio of less than one. The study showed that Elecon had the highest range of debt-equity ratio among all the five units under study. Ingersoll was having no debt in its capital structure thus its ratio was zero and FAG had 0.67 times debt-equity ratio in 2008 which was reduced to zero thereafter. It was observed that Bosch had a declining debt-equity ratio from 2010 to 2012 and there was an increase in 2012. GMM had a fluctuating ratio decreasing and increasing over the years and ultimately falling to zero in 2012.

L. There was great fluctuation in the interest coverage ratio among all the engineering units. It went as high as 589.64 times and as low as -65.43 times. It was observed that the interest coverage ratio of FAG was -65.43 times in 2009. The company did not have debt in that year thus it can be concluded that due to inefficient operations its interest coverage ratio had become negative. The interest coverage ratio of Ingersoll and FAG showed wide fluctuations during 2008 to 2012. Ingersoll had an increasing ICR, being the lowest at 22.06 times in 2005 and reached it's highest at 589.64 times in 2012. It was observed that

Elecon Engineering Ltd. had the lowest range of interest coverage ratio. Bosch Rexroth and GMM Pfaudler exhibited a similar trend of decreasing ICR from 2008 to 2012.

M. The FAR, ideally, should not be more than one. It was observed that all the engineering units under study had a ratio of less than one, except of Elecon only during 2008. Ingersoll Rand had the lowest range of FAR. It showed a decreasing trend from 0.1 in 2008 and then gradually fell from 0.09 in 2008 & 2009 and 0.03 in 2010 & 2011. The FAR of Bosch showed an inclining tendency from 0.26 to 0.28, 0.29, and 0.3 from 2008 to 2012. There was a slight fall to 0.27 in 2012. It was observed that the variations in the FAR were not much. It was seen that GMM had an opposite trend to that of Bosch Rexroth. Its FAR went on falling in the initial four years and then there was a slight increase. A study was conducted to check the effect of debt-equity ratio on the earning per share, fixed asset ratio and the interest coverage ratio by using the regression correlation. It was observed that EPS, FAR and ICR had no linear effect of DEQR but FAR was affected exponentially by DEQR and the model gives significant results. It indicates that 1 unit rise in DEQR results in 43% rise in FAR exponentially.

N. By and large, no stability was observed in the NPM in most of the engineering companies. There has been a continuous upward and downward trend. The variations in Ingersoll are too wide. It also has the highest range of NPM among all the other units. Bosch also has changes in its net profit. It has also a negative NPM in 2012. The lowest range of net profit was observed in Elecon.

O. It was seen that the OPM of all the units except Ingersoll ranges from 15% to 20% approximately. The OPM of Elecon & Ingersoll has shown an increasing trend. The OPM of FAG & Bosch has shown a declining trend over the period.

P. The study shows that there was a wide variation in the return on capital employed of all the engineering units under study during 2005 to 2012. It was seen that the return on capital employed of Elecon was in

the lowest range in between 5.52% and 11.64%. The return on capital employed of Ingersoll varies largely between 7.38% and 39.94% whereas that of Bosch varies between 9.78% and 25%. The variations in the return on capital employed FAG & GMM are not so wide. But it was observed that there was always a rise and fall in the ROCE of all the units over the five year period. The units with all equity have shown a drastic fall in the return on investment over the years whereas few others have shown an increase with variations.

Q. All the engineering companies have shown a fall in the RONW during the five year period. The RONW of Ingersoll Rand has deeply fallen from 27.27% in 2008 to 7.38% in 2010. Elecon Engineering has an upward RONW in the initial period of the study till 2007 and then it slightly fell in 2008 and further fell in 2012. The overall observation shows that the return on net worth in all the engineering units have fallen over the five year period of study from 2008 to 2012. The units with all equity have shown a drastic fall in the RONW the years whereas few others have shown an increase with variations.

R. Among all the five engineering units under study, the earnings per share of Ingersoll Rand reached the highest, i.e., Rs.88.87 during 2008. Elecon has the lowest earnings per share among all the units, i.e. Rs.6.19 during 2010. There are wide fluctuations in the EPS of this unit. The EPS in Bosch & GMM was continuously rising and falling in all the five years. It has been seen that the earnings per share also vary to a great extent in almost all the engineering units under study. There has been an increase but there are a lot of variations observed. A comparison has been made to study the trend in earnings per share of engineering industry and pharmaceutical industry during 2008 to 2012.

A comparison was made between the debt-equity ratio of all the engineering units and the pharmaceutical units under the study. It was seen that the variation in the debt-equity ratio was much

higher in the engineering industry than in the pharmaceutical industry. But on an average the overall debt-equity ratio in the pharmaceutical industry was higher than that of the engineering industry. The study revealed that as in the case of debt-equity ratio, the earning per share in the engineering industry was also the highest at Rs.88.87. The highest EPS in the pharmaceutical industry was only Rs.61.09.

S. It was observed that the lowest EPS was Re.0.42 in 2008 in the pharmaceutical industry whereas that in the engineering industry was Rs.6.19 in 2010. Thus it was seen that there was wide range of fluctuation in the earning per share of both the industries. It was observed in the study that Ingersoll Rand was a company with no debt at all yet it has got the highest EPS among all the engineering units as well as pharmaceutical units under study.

T. It was also seen that Ingersoll has the highest return on capital employed among all the engineering and pharmaceutical units under study. From the above observations it can be concluded that debt-equity ratio does not affect the returns or earnings of the company. It can be said that the company was able to maximize its earnings per share despite the advantage of trading on equity. Among the pharmaceutical units it was observed that the debt-equity ratio in Sun Pharmaceutical Ltd. has continuously fallen from 2008 to 2012. It was almost negligible in 2010. But at the same time its EPS has increased. In 2010 the EPS has reached its maximum. The overall observation pertaining to both the industries under study was that there was no stability or consistency in any of the ratios which may be owing to the drastic changes in the economy. The constant volatility in the economy affects each and every sector and the same was observed in the study.

IV. SUGGESTIONS

A. There were always different perspectives on the impact of the debt-equity mix on the shareholder's

wealth. There is a belief that strongly supports the argument that the financing decision has a major impact on the shareholder's wealth, while there is another one which believes that the decision about the financial decision is irrelevant as regards maximization of shareholder's wealth.

B. The present study aimed at making a critical study of the capital structure of selected units in Gujarat. After analyzing the various aspects of the capital structure and profitability of selected pharmaceutical and engineering units in Gujarat a few suggestions are made.

From the above study it can be suggested that engineering companies need not necessarily concentrate on the debt-equity ratio to maximize its earnings per share.

C. It is theoretically mentioned that the debt-equity ratio of 2:1 is the ideal one. In the above study it was observed that Elecon Engineering Ltd. had a ratio of 2:1 in 2008 but at the same time it does not have the maximum earnings per share among all the units. So it can be recommended that in order to maximize the earnings there are factors other than debt-equity ratio which should be considered.

D. It was also believed that firms with no leverage at all were said to be too conservative in their approach. Leverage is supposed to be beneficial to a firm since it gives the benefit of trading on equity to a firm and in addition to that debt being a cheap source of fund compared to all other sources it helps in magnifying the shareholders' wealth. The study conducted proved this belief wrong from the pattern of Ingersol Rand Ltd. The company had zero debt throughout the period of study i.e. from 2007-08 to 2011-12 and yet it was the only company from among the five companies under the study which had the highest EPS in the year 2010. Similar was the case of Sun Pharma. It had the lowest debt-equity ratio and the highest EPS.

E. From the study, it was seen that the interest coverage ratio in one of the companies had gone negative in one of the year 2008 despite the fact that the company did not have any long-term debt. Thus,

it can be suggested that the companies should concentrate on their operational efficiency to improve its interest coverage ratio.

F. In the pharmaceutical industry too it was observed that the debt-equity ratio did not much affect the earnings per share. It was seen that even though the debt-equity ratio had consistently fallen, the earnings per share had risen. Thus, in order to maximize the EPS, companies do not have to necessarily rely on the debt-equity ratio. In case of Sun Pharma, the company had the lowest debt-equity ratio and the highest EPS.

V. CONCLUSION

Capital structure decision is the strategic financing decision which involves deciding the most appropriate mix of equity and long-term debt finance for a firm. Capital structure policy involves a choice between risk and expected return. The optimal capital structure strikes a balance between these risks and returns and thus examines the price of the stock. The capital structure decision being the strategic decision, aims at achieving the basic objective of every firm i.e., wealth maximization. The pattern of capital structure of a firm has to be planned in such a way that the owner's interest is maximized. It can be concluded from the above study that in practice the determination of capital structure involves considerations in addition to the concerns about earning per share, value and cash flow. A firm may have enough debt servicing ability but it may not have assets to offer as collateral. Attitudes of firms with regard to financing decisions may also be quite often influenced by their desire of not losing control, maintaining operating flexibility and have convenient timing and cheaper means of raising funds. It can be said that there cannot be an ideal debt-equity ratio which can be applicable to all types of industries. Each industry has its own internal and external environment. As per the environmental factors each industry has its different debt-equity ratio. Each and every firm designs its capital structure according to its environmental factors. Thus, as

proved by eminent theorists in the past, it can be concluded that debt-equity ratio alone does not directly affect the earnings per share.

VI. REFERENCES

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