CHAPTER - IV

ANALYSIS & INTERPRETATION OF PROFITABILITY

iv-1) Profitability ratio –

Introduction – The ratios that help to analyse profitability of a concern , throw light on the concern's activities and it's ability to generate profit.

iv-2) Meaning & Significance –

Apart from creditors the other parties interested in the financial soundness of the firm are the owners and the management. Both these groups are interested in higher profitability of the concern. Profitability is the measure of efficiency, it also indicates public acceptance of the product the company is producing, the company itself and shows that the firm or company can produce competitively.

Profitability ratios can the studied in terms of –

1) Profitability in relation to sales.

2) Profitability in relation to assets.

1) Profitability in relation to sales - It is important from the profit standpoint that the firm should be able to generate adequate profit on each unit of sales. If sales lack a sufficient margin of profit, it is difficult for the firm to cover it's fixed charges or debt and to earn a profit for shareholders. Here, we will consider two popular ratios viz.

a) Gross Profit Ratio

b) Net Profit Ratio

2) Profitability in relation to assets - It is also important that profit be compared to the capital invested by owners and creditors. If the firm cannot produce a satisfactory profit on it's asset base, it might be misusing it's assets. Based on this we will take into consideration –

a) Return on Asset ratio –

Let us attempt to analyse the profitability position of Unique Industries with the help of above mentioned three ratios.

1) Gross Profit Ratio –

1.a) Meaning This ratio establishes relationship of gross profit with sales to measure the operative efficiency of the firm and to reflect its pricing policy as well. This ratio shows the profits relative to sales after the direct production cost are deducted. It may be used as an indicator of the efficiency of the production operation and the relation between production cost and selling price.

1.b) Formula - $\frac{\text{Gross Profit}}{\text{Sales}} \times 100$

1.c) Components - The determinants of this ratio are the gross profit and sales.

a) Gross profit - Gross profit is the result from the difference between net sales and cost of goods sold without taking into consideration expenses charged to profit and loss statement.

b) Sales – Sales here we refer to Net Sales, obtained after deducting the value of goods, returned by the customers from total sales.

1.d) Significance – Certain points are important for consideration regarding gross profit ratio as stated under –

1) There is no exact norm of judging the G. P. ratio and therefore evaluation is a matter of judgement. For proper analysis, information should be available with respect to purchasing, credit and collection, as well as general merchandising policies

2) A high G. P. ratio, may reflect an increase in sales price of goods sold, without any corresponding increase in cost, a decrease in cost without its impact on sale price of goods or a lower valuation of commencing stock value, a certified inflation of sale figure, an overvaluation of

closing stock, or also omission of some purchasing invoices from accounts.

3) A low G. P. Ratio, indicate an unfavourable position, reflecting, reflecting improper purchasing policies, the inability of the management to develop sale volume, marked reducing in sale prices not accompanied by proportional decrease in cost of goods on overinvestment in plant facilities or excessive competition in the market.

1.e) Table given below shows the gross profit ratio calculated for Unique Industries for the period under study.

Analysis & Interpretation of Gross Profit ratio

Table IV (1.e) Gross Profit Ratio

	Year				
	1997	1998	1999	2000	2001
A Gross Profit Net Sales Less (-) Cost of goods sold = Gross Profit	 2935715 2328333 607382	 2963984 2350440 613544	 3793890 3008555 785335	 3911057 3101469 809588	 2590725 1978538 612187
B Net Sales	 2935715	 2963984	 3793890	 3911057	 2590725
Gross Profit Ratio A/B x 100	**20.6 %**	**20.6 %**	**20.6%**	**20.6 %**	**23.6 %**
Average	**21.2 %**				

Source - Financial sources of Unique Industries.

1.f) Analysis & Interpretation of Gross Profit ratio-

Gross Profit ratio reflects the managerial efficiency in the production of each unit of the product. Table 4 (i.d) above reveals following points –

1) The ratio of gross profit to sales of unique Industries from 97 to 2001 shows a constant trend, with an increase only in 2001.

2) The net sales of Unique Industries is seen improved from 1997 to 2000 with controlled cost for goods sold' which has helped its G. P. ratio to remain constant.

3) The Gross Profit, however, in 2001 has become less to 2000 with a decrease in sales figure as well, but with an increase in Gross Profit ratio.

4) The average ratio of Unique Industries comes to 21.2 . There is no standard Gross Profit ratio as so stated. But considering the comparative analysis we can see that the ratio is fairly constant.

1.g) **Conclusion -** Gross Profit ratio depicted above shows a rather constant position of Unique Industries. The average Gross Profit ratio is good, which reveals a good margin available to the concern to meet its other operating cost.

2) Net Profit Ratio -

2.a) Meaning - This ratio measure the relationship between net profit and sales of the firm and is obtained by dividing the net profit by net sales. This ratio shows the earning left to shareholders or owners as a percentage of net sales. It helps in reading overall profitability of a concern, which gives an idea of it's efficiency.

2.b) Formula - $\frac{\text{Net Profit}}{\text{Sales}} \times 100$

2 c) Components - Here two components are to be taken into consideration viz.

a) Net Profit - The Net Profit figure of a concern is obtained by subtracting all operating and non operating expenses from gross profit figure and by adding operating and non-operating income to the figure obtained above.

b) Sales - Like in Gross Profit ratio sales here too are net sales, which are the result of deducting value of goods returned by the customers from the total sales figure.

2.d) Significance – Given points are significant in terms of net profit ratio.

1) It indicates the management's ability to earn sufficient profit on sales not only to cover all the revenue operating expenses of the business, the cost of borrowed funds and the cost of servicing and merchandising, but also to have a sufficient margin to pay reasonable compensation to shareholders on their contribution to firm.

2) This ratio shows the earnings left for shareholders or the owners as a percentage of net sales. It measures the overall efficiency of production, administration, selling, financing and pricing policies of a concern.

3) A high N. P. ratio, ensures adequate return to owners, as well as it ensures firm's capacity to withstand adverse economic conditions. A low margin has an opposite implication.

4) This ratio is widely used to measure overall profitability of a concern and is very useful to a proprietor.

5) Read along with operating ratio, it gives an idea of efficiency. as well as profitability of business.

2.e) Below given table calculates the net profit ratio of Unique Industries for the study period of 5 years.

Table IV (2.e) Net Profit Ratio

	Year				
	1997	1998	1999	2000	2001
A <u>Net Profit/ Net loss</u> Gross Profit Less (-) Operating & Non-Operating expenses Add (+) Operating & Non-operating income	607382 514987	613544 532537 24000	785335 698006 24000	809588 735862 53206	612187 889114 156445
Net Profit * Net Loss	92395	105007	110338	126932	- 120482
B) Net Sales	2935715	2963984	3793890	3911037	2390725
Net Profit Ratio A/B x 100	**3.14 %**	**3.5 %**	**2.9 %**	**3.2 %**	**- 4.6 %**
Average	**1.62 %**				

Source : Financial Statements of Unique Industries.

(2.f) Analysis & Interpretation of Net Profit ratio.

This ratio is an effective measure to check the profitability of business. Above table reveals the following data.

1) The net profit ratio of Unique Industries for a period of five years from 1997 to 2001 is fluctuating not showing any particular trend. It can be presented as follows –

a) The ratio in 97 is 3.1, which is seen improved in 98 at 3.5 due to an increase in net profit figure, with an improvement in sales figure.

b) Net profit ratio in 99 is seen decreased to 2.9 from 3.5. Even with increase in Net profit and sales figure.

c) 3.2 is the improved ratio in 2000 as compared to 1999. There is good improvement in sales and net profit in 2000, with a controlled increase in operating & non-operating expenses as compared to sales.

d) There is Net loss in 2001, which makes the ratio to fall to 4.6 from 3.2 in 2000.

2) No norms can be laid down for Net Profit ratio. The average ratio comes to 1.62,which is very less as compared to each year's ratio.

3) A Negative profit ratio shows a bad profit position for Unique Industries at the end of the period which needs to be improved.

(2.g) **Conclusion** - This ratio helps in determining the efficiency with which affairs of business are managed. A negative loss ratio for last year will make the concern difficult to withstand adversities. Overall the profitability position of Unique Industries needs to be improved.

3. Return on Asset Ratio –

3.a) Meaning - Here the profitability ratio is measured in terms of relationship between net profits and assets. As these two concepts have conceptual differences the ratio may be calculated by taking into consideration the meaning of the terms according to purpose and intent of analysis & study.

(3.b) Formula - $\frac{\text{Net Profit}}{\text{Total assets or fixed assets or tangible assets.}} \times 100$

(3.c) Components - The two concepts here are Net Profit & Assets.

a) Net Profit - Net Profit as defined in Net Profit ratio is taking in general sense a figure obtained by subtracting all operating and non operating expenses from gross Profit and but adding operating and non-operating income to the above figure.

However the concept of net profit here may be –

i) Net Profit after tax

ii) Net profit after interest and ta› or

iii) Net Profit after tax plus interest minus tax savings.

b) Assets - Taking into consideration the assets figure they may be defined as -

i) Total assets

ii) Fixed Assets or

iii) Tangible assets

In our formula calculations, we have considered the Net Profit after interest and Total assets value.

(3.d) Significance –

1) As the two concepts in its calculation can be considered in different ways many variations on return or assets ratios are possible.

2) It helps in measuring the profitability of total funds or investments of a firm.

(3.e) In the table shown below we can see the return on asset ratio for the period from 1996 to 2001, which is our study period.

Table IV (3.e) Return on Assets Ratio

	Year				
	1997	1998	1999	2000	2001
A Net Profit/ Net loss Gross Profit	607382	613544	785335	809588	612187
Less (-) Operating & Non-Op erating expenses	514987	532537	698006	735862	889114
Add (+) Operating & Non-op rating income		24000	24000	53206	156445
Net Profit * Net Loss	92395	105007	110338	126932	- 120482
B) Total Assets					
Fixed Assets	669698	663918	909959	909959	1051597
Current Assets	1542546	1565187	1988740	2592574	2259239
Investments	190747	313247	318247	422952	565073
	2402991	2542352	3216946	3927665	3875908
Ratio A/B x 100	**3.8%**	**4.1 %**	**3.4 %**	**3.2 %**	**- 3.1 %**
Average	**2.28 %**				

Source : Financial Statements of Unique Industries.

(3.f) Analysis and Interpretation of Return on Asset Ratio.

This ratio helps in analysing as to how efficiently a firm is utilizing it's assets in business.

Table above shows the following nature of return on asset ratio for the following years from 1997 to 2001.

1) The ratio is seen increasing in the initial period from 97 to 98 with a constant decline rate on from 99 to 2001.

2) The trend observed above can be explained in following words

a) The ratio is 3.8 % in 1997, which is seen increased to 4.1 % in 1998, which depicts an improvement in the concern's management of total assets.

b) Ratio is decreased in1999 to 3.4 % from 4.1 % in 1998, which shows a decrease in concern's efficiency of management of total assets.

c) In 2000, the ratio further falls to 3.2 % from 3.4 % in 1999, reflecting firm's fall in efficiency of managing assets as that of previous period.

d) Net loss in 2001 results in negative ratio of – 3.1 %, which shows firm's growing inefficiency in utilisation of assets in a proper manner.

3) Average ratio of return on asset comes to 2.28, which is less if the ratio of first four years are observed. The negative ratio in 2001 is the cause of the fall in average ratio.

(3.g) **<u>Conclusion -</u>** This ratio measures the profitability of total funds or investments in a firm. Taking the above analysis into consideration, we can say that there is a decline of Unique Industries capacity in profitable management of assets. Even though the profits are seen increasing in the first four years of study, they are insufficient to manage the total increasing assets. Net Loss further results in a very weak position of fund management in Unique Industries, which needs to be improved.

IV – 3) Conclusion - The profit ability position of Unique Industries is not very good. The ratios considered above suggest that the profitability position of Unique Industries needs to be improved for concern's betterment.

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