



CHAPTER - IV

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FINANCIAL ANALYSIS

In this chapter the cost analysis, revenue analysis, the profit analysis are made in Section one and the break even analysis in Section second.

SECTION I

4.1 COST ANALYSIS

In this section an attempt is made to analyse fixed and variable cost incurred by the mill. The cost structure is also taken into consideration.

A) Cost Components

Fixed cost :

The fixed cost is the cost, which do not change with change in production. The factors of fixed cost are as under :

- 1) Payment of office staff.
- 2) Expenses on Insurance
- 3) Administrative Expenses
- 4) Depreciation
- 5) Refund of share

In the following Table the fixed cost of the mill for the period 1994-95 to 1998-99 is shown.

B) Variable Cost

The variable cost depends on the level of production. It includes cost on –

- 1) Raw material
- 2) Wages
- 3) Electricity
- 4) Expenses of yarn distribution

In the following table the fixed cost structure of the mill is presented.

Table No. 4.1
Cost Structure

(Rs. in lakh)

Year	Fixed Cost	Variable Cost	Total production cost
1994-95	924.17 (19.88)	3723.41 (80.12)	4647.58 (100)
1995-96	844.00 (15.73)	4520.00 (84.27)	5364.00 (100)
1996-97	723.57 (13.53)	4623.82 (86.47)	5347.39 (100)
1997-98	708.43 (12.11)	5140.97 (87.89)	5849.40 (100)
1998-99	555.20 (9.77)	5130.34 (90.33)	5685.54 (100)

Note : Figures in brackets shows the percentage to total cost.

From the Table No. 4.1 we get following conclusions.

- 1) The fixed cost shows a steady decline in relative term as well as in absolute term. The fixed cost was 19.88% in the year 1994-95 which came down to 9.77% in 1998-99. This shows nearly 50% drop in fixed cost. This can be attributed to this is due to reduced depreciation and reduced distributional cost.
- 2) The variable cost includes cost on wages, electricity and cotton. This cost has increased both in relative and absolute term. Its share in total cost went up from 80% to 90%. The increase in the variable cost is due to increase in cost on cotton, wages and electricity.
- 3) The total production cost increased during the period by 22%. It was Rs. 4647.58 lakh in 1994-95, which went upto Rs. 5685.54 lakh in 1998-99. The increase in the total production cost is due to increase in variable cost. This requires more attention to control the variable cost by the mill.

i) Per Unit Cost Analysis

The production cost of yarn per Kg. to the mill over the period under the study is shown in the Table No. 4.2

Table No. 4.2
Per Kg. Production Cost

Year	Total production in Kg.	Total production cost in Rs.	Per Kg. production cost
1994-95	4814924	41649700	8.65
1995-96	5498268	47613200	8.66
1996-97	6257697	54405800	8.69
1997-98	6273842	54608600	8.70
1998-99	5612208	49759600	8.87

From the Table, it is observed that per Kg. production cost of yarn was increasing. The causes increasing the production cost was increasing the prices of the raw cotton, increasing the wages of labour, increasing the charges of power and increasing the charges of packing and store.

ii) Per Labour Production Cost :

The per labour production cost of yarn to the mill over the period under study is shown in the Table No. 4.3

Table No. 4.3**Per Labour Production Cost**

Year	Total Production cost (in lakh)	Total labour	Per labour production cost (in lakh)
1994-95	4164.97	1100	3.79
1995-96	4761.32	1200	3.97
1996-97	5440.58	1200	4.53
1997-98	5460.86	1200	4.55
1998-99	4975.96	1200	4.15

Source : Various Annual Reports.

From the Table, it is observed that yarn production cost of per labour was constant in the year of 1994-95 and 1995-96. Afterwards increasing the production cost in the year 1997-98 (4.55 lakh). The causes of the increasing the production cost was per spindles production was less and the high wages of labour.

4.2 REVENUE ANALYSIS

In this chapter sources of revenues, composition of revenue and output ratio has been discussed.

Gross Revenue may be referred to as gross income of Mill.

Gross revenue comprises -

- 1) Revenue from yarn selling
- 2) West cotton selling
- 3) Retail selling

Income from the selling of yarn is the main source of the Mill. In as much as the former forms a major part of the latter. While the income from selling of waste cotton and retail selling comparatively low show in the Table No.4.4.

Table No. 4.4
Selling of Waste Cotton

(In lakh)

Year	Revenue			Total Revenue
	Yarn selling	West cotton selling	Retail selling	
1994-95	4054.48	149.23	6.14	4210.45
1895-96	4833.06	164.89	10.51	5008.46
1996-97	5070.44	121.37	9.46	5201.60
1997-98	5223.44	175.95	11.22	5410.61
1998-99	4906.55	252.37	46.31	5205.23

Source : Various Annual Reports.

From the Table, it is observed that yarn selling revenue per year shows growing trend with but in the year 1998-99 the revenue from yarn selling has decreased. The cause behind the decrease the yarn selling revenue was the low production of yarn.

West cotton selling revenue was increasing in 94-95 and 95-96, subsequently 149.83 lakh and 164.89 lakh. But in the year 1996-97 west cotton selling revenue was decrease. There after

increasing the west cotton selling revenue in the year 1997-98 and 1998-99. Subsequently 175.95 and 252.37lakh.

Retail selling revenue was increasing in 94-95 and 95-96 subsequently 6.14 and 10.51 lakh. But in the year 1996-97 retail selling revenue is decrease. Thereafter increasing the retail selling revenue in the year 1997-98 and 1998-99 subsequently 11.22 lakh and 46.31 lakh because in this year selling the cotton seeds. Total revenue of the mill was per year shows growing trend with but in the year 1998-99 the total revenue was decrease because the low production of yarn.

4.3 PROFIT ANALYSIS

The profit analysis is made by using ratio analysis.

A) GROSS PROFIT RATIO :

It express the relationship of gross profit on sales to net sales in terms of percentage, representing the percentage of gross profit earned on sales.

IMPLICATION OF GROSS PROFIT RATIO

Gross Profit Ratio indicates degree to which selling prices of goods per unit may decline without resulting in losses on operations for the firm. From different angle, it shows the average markup on individual products or products lines. There is no norm for judging

the gross profit ratio and therefore, evaluation is matter of judgment. In order to analyze the gross profit margin effectively, information should be available with respect to purchasing mark-ups as well as general purchasing policies. However, these data are not usually available to the external analyst.

The gross profit should be adequate to cover the operating expenses and provide fixed charges, dividends and building up of services.

A low gross profit may indicate unfavourable purchasing and markup policies, the inability of management to develop sales volume, thereby making it impossible to buy goods in large volume, marked reduction in selling prices not accompanied by proportionate decrease in cost of goods, over expansion or over investment in plant facilities, unfavourable property locations and excessive competition.

On other hand, an increase in the gross profit ratio may be due to various factors such as decrease in cost without its impacts on the sale price of goods, stock at the commencement of the trading period valued at a figure lower than it should have been, artificial inflation of sales on consignment while the same are included in closing stock, omission of purchase invoices from account over valuation of stock of goods at the end of accounting period.

The gross profit is measured by following formula

$$\text{Gross profit Ratio} = \frac{\text{Gross Profit}}{\text{Net sales}} \times 100$$

In the following Table gross profit ratio is presented for the period under study of the mill is presented.

Table 4.5
Gross Profit Ratio

(Rs. In lakh)

Year	Gross Profit	Net sale	Gross Profit Ratio
1994-95	518.31	4054.48	12.78
1995-96	381.69	4833.06	7.89
1996-97	517.21	5070.77	10.19
1997-98	402.93	5223.44	7.71
1998-99	202.61	4906.55	4.12
Average	417.15	24088.3	1.73

Source : Figures computed on the basis of Annual Report of the Mills.

Following conclusions can be drawn from Table 4.5.

It is observed from the Table that the overall gross profit after 1994-95 is showing decreasing trend. In 1996-97 increase the gross profit ratio but afterwards decreasing the trend. In the year 1994-95 gross profit ratio is observed higher due to selling of outside product

in addition to existing mills product. In 1998-99 Gross Profit has come down further.

The cause behind the gross profit ratio was decreasing, such as the increasing the price of raw cotton, increasing the expenditure of interest. The change in tax rate such as increasing the excise duties, sales tax also contributed to worsen the gross profit margin.

B) NET PROFIT RATIO :

This ratio goes beyond the gross profit margin and indicates a firm's ability to earn return over above all the costs. The formula used for measuring net profit ratio is :

$$\text{Net Profit Ratio} = \frac{\text{Net profit}}{\text{Sales}} \times 100$$

In the following Table net profit ratio is presented for the period under study for the mill.

Table No. 4.6

Net Profit Ratio of the mill

(Rs. in lakh)

Year	Net profit	Sale	Net profit Ratio
1994-95	- 300.44	4054.48	- 7.41
1995-96	- 411.55	4833.06	- 8.51
1996-97	- 134.64	5070.77	- 2.65
1997-98	- 184.38	5223.44	- 3.52
1998-99	- 424.95	4906.55	- 8.66
Average	-291.19	4817.6	-6.04

Source : Figures computed on the basis of Annual Report of the mills.

Following conclusion can be drawn from Table No. 4.6.

Net profit is effective measure to evaluate the profitability of a business. This is an indicator of the performance of firm and its sales promotion. A ratio insures adequate return to share holders as well as to a enable a firm to face adverse economic condition. A low margin has an opposite implication.

We an derive following conclusions :

- a) There is overall net loss Rs. -1455.96 is for the five years. The overall net loss ratio is -6.04 with aggregate sales of Rs. 24088 lakh. The average net loss for the five years Rs. 291.19 lakh.
- b) The loss incurred by the mill was showing a trend of decline till 1997-98 alongwith rise in sales. However, again in the year 1998-99 the net loss shoots up to Rs. 424.95 lakh with fall in sales from Rs. 5223.44 to 4906.55 lakh.
- c) The trends in sales and net profit (loss) shows that the mill can earn profit or reduce the loss if it succeeds in pushing up sales.

C) WORKING CAPITAL TURN OVER RATIO :

The efficiency of the economic unit in using working capital is measured by working capital turnover ratio. The net working capital is current assets minus current liabilities.

The current assets of the mil are cash, bank, stores and spares parts, cotton at godown, cotton in process, yarn in process, yarn at packing section and bonded godown, yarn at selling center, salable waste cotton, building construction, sports materials.

Current liabilities includes refundable deposits from members, loan taken from the Maharashtra State Co-operative Bank Ltd., Bombay (a) Hypothecated cotton and yarn stock (b) mortgage (c) clean cash credit, freeshipment credit, deposits from contractors, yarn and others, sundry creditors, expenses, education fund, subscription, others, sales tax, interest, provision for income tax, gratuity provision.

Larger the net sale in compared with net working capital, less suitable situation is likely to be, if the resultant net working capital turnover has been made possible by the use of an excess of amount of current credit. The real danger lies in a possibility of a decline in sale due to unforeseen circumstances, like-off orders, strikes, depressions, and competitions.

Low turnover ratio may be the outcome of an excess of net working capital, slow turnover of inventories and for acceptance a large cash balance or investment of working capital in the form of temporary investments.

This ratio relationship between net sale and net working capital turnover ratio and is calculated as,

$$\text{Working Capital Turnover Ratio} = \frac{\text{Net sale}}{\text{Net working capital}}$$

This ratio indicates the efficiency or inefficiency in the use of whole working capital.

In the following Table working capital turnover ratio is presented for the period under study.

Table No. 4.7
Working Capital Turnover Ratio from 1994-95 to 1998-99

(Rs. in)

Year	Current Assets	Current Liabilities	Net sale	Working capital	Working capital Turnover Ratio
1994-95	97456604.92	33057648.64	40544800.00	643589561.28	0.62
1995-96	113372119.89	55771965.46	48330600.00	57600154.34	0.83
1996-97	106080085.08	69146977.76	50707700.00	36933107.24	1.37
1997-98	100730622.55	69616288.05	52234400.00	31114334.45	1.67
1998-99	94201366.69	43823225.30	49065500.00	50378141.39	0.97

Source : Computed on the basis of Annual Reports of the mills.

We get following conclusion from the Table No. 4.7.

- 1) Net sale increased upto 1997-98 and the working capital is decreased during the same period. This shows improved performance of the mill.
- 2) However, in 1998-99 net sale is decreased but the working capital is increased showing deterioration in the performance of the mill.
- 3) The fall in sale is attributed to the lower demand for yarn as a result of depression in the textile industry on one hand and cheaper import on the other.

In the following Table net working capital is presented for the period under study.

D) NET PROFIT AND NET LOSS :

The performance of the unit is measured by its profit and loss. The profit earned by the unit and an increase in it shows healthy trends in its functioning. On the contrary the loss made by the unit and increase in it shows its poor performance. The profit and loss position of the mill is shown in the following table.

In the Table No. 4.8 Net Profit and Net Loss is presented for the period under study.

Table No. 4.8**Table shows the Net Loss**

(Rs. lakh)

Year	Net loss
1994-95	- 300.44
1995-96	- 411.55
1996-97	- 134.64
1997-98	- 184.38
1998-99	- 424.95
Average	-291.19

Source : Computed on the basis of Annual Reports of the mill.

The main reasons for this company going into losses are as follows :

- 1) The total loss of the mill is Rs. 1455.96 lakh. The trends in the loss show that there was fall in loss in the year 1996-97. But since the mill is in red and the loss is increasing. The average loss for 5 years is 291.19 lakh.
- 2) Increased cost of cotton, wages, electricity, packing charges, store and spares.
- 3) Lower selling prices of yarn due to competition in the yarn market..

SECTION – II

BREAK-EVEN ANALYSIS

4.4 BREAK-EVEN ANALYSIS CONCEPT

The break-even point is defined as a volume of output at which aggregate revenues equal aggregate costs. It is a situation where there is neither profit nor loss. Any output below this break-even implies losses to the unit while any excess output above this break-even point leads to profits. It depends mainly on three factors namely, the sales price per unit (S) variable cost per unit (V) and the fixed cost (F). If V and F are held constant a high unit sale price would mean a low break-even point and vice-versa. If S and F are held constant a low unit variable cost means that the company would attain break-even at a lower level. Again if S and V are held constant a low fixed cost means a low break-even point and vice a versa.⁽¹⁾

While applying the technique break-even analysis to the Shetkari Sahakari Soot Girni Ltd. Sangole. Some modifications are required to be made in it. On the cost side, the total cost of a Soot Girni comprises fixed cost which includes the depreciation on machinery and other assets like building, interest paid on the borrowed funds, administrative expenditure, donations etc. Such cost does not vary as the raw cotton is used production increases or decreases in a given

year. Other component of the total cost is the variable cost or prime cost. It consists of costs on purchase of raw cotton and related production cost and cost of selling the yarn (transport, taxes) etc.

The total revenue of the soot Girmi is the function of total sale of yarn multiplied by the average yarn price received by the concerned Girmi during the specific year.

The average yarn sale price is the average of free market price, and export price of the yarn.

$$\text{B. E. P.} = \frac{F}{S - V}$$

Where :

BEP = break even point

F = Fixed cost

S = amount of sales

V = variable costs

The break-even point shows the minimum quantity sold or the minimum revenue earned by the unit. It depends upon the price realised by the unit and the cost incurred by the unit alongwith the quantity produce and sold. Any upward revision in the priced reduces the break-even point and vice-a-versa. Moreover, any increase in fixed cost or variable cost leads to increase in the break-even point. Hence, it becomes imperative for the mill either the realise the better

price. And or to reduce the cost. In a competitive market the firm has least control over price. The only way is to manage the cost in this section will present the break-even achieved by the mill during the period under study.

In the Table No. 4.9 the break-even level of the mill is presented.

**Table No. 4.9
Break-Even Analysis**

Year	Fixed Cost (Rs. lakh)	Variable Cost (Rs. lakh)	Sales (in Quintal)	Sales (per Kg)	Total Revenue (Rs. lakh)	Production (in quintal)	Percentage of Variable Cost	Difference between Price & Variable Cost	Fixed Cost/ Difference between Price & Variable Cost	% Break- even point/ Safety
1994-95	92417000	372341000	4735597	85.62	434714000	4814924	77.33	8.289392	11148827	36.36
1995-96	84400000	452000000	5559097	86.94	495245000	5498268	82.20	4.732294	17834903	27.09
1996-97	72357000	462382000	6281970	80.72	521275000	6257697	73.89	6.829877	10594188	47.96
1997-98	70843000	514097000	6021186	86.75	566502000	6273842	81.94	4.807069	14737254	35.44
1998-99	55520000	513034000	5520576	88.87	526059000	5612208	91.41	- 2.543993	-21824500	- 22.48
Average	75107400	462770800	5623685	85.78	508759000	5691388	81.35	4.42294	6498138	24.8585

Source :Annual Reports of the Mill

We have considered the fixed cost as given in the annual reports of the mill similarly aggregate variable cost sales, price per Kg. is given in the reports. The variable cost per unit is computed by dividing the variable cost by production on the basis of this data the break-even measured for the study period. (1994-95 to 1998-99). The break-even as shown on an average 25%.

During the period under study the break-even as fluctuated between 48% to 27%. This is due to fluctuations in variable cost, fixed cost and price as well as sales. The difference between price and variable cost was highest in 1994-95 which decline to Rs. 4.73 from Rs. 8.28 it improved to Rs. 6.83 in the year 1996-97 but again it decreased to Rs. 4.80 in the year 1997-98. The position worsened in the year 1998-99 where the variable cost is higher than the price by Rs. 2.54 this negative margin has resulted the loss to the mill.

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