**ANALYSIS OF FINANCIAL STATEMENTS**

1.

Classification of Ratios

|  |  |  |
| --- | --- | --- |
|  | Significance | Important Ratios |
| a) Liquidity Ratios | Ability of firm to meet obligation in short term | Current Ratio |
|  | Determining the solvency of the firm | Acid Test Ratio |
| b) Capitalization Ratio/ Leverage Ratio | Use of debt/ finance | Debt equity Ratio  Funded Debit Equity Ratio |
|  | Assessing the risk arising from the use of debt capital | D.S.C.R. |
| c) Activity Ratio | Measures how effectively the assets are employed | Inventory Turnover Ratio |
|  | To know turnover /  Asset Management | Debtor velocity Ratio |
|  |  | Creditor velocity Ratio |
|  |  | Debtor/Creditor Ratio |
| d) Profitability Ratios | Indicator of effectiveness and efficiency | Gross Profit Ratio  (Operating Profit) |
|  |  | Net Profit Ratio |

2.

The exact implication of a higher DER than the industry average can be better understood by the following illustration:

(Rs. in crore)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Y E A R - 1 | | Y E A R - 2 | |
|  |  | ABC LTD | Industry Average | ABC LTD | Industry Average |
| 1. | Total Investment | 100 | 100 | 100 | 100 |
| 2. | Debt | 80 | 60 | 80 | 60 |
| 3. | Equity | 20 | 40 | 20 | 40 |
| 4. | Debt/Equity | 4 | 1.5 | 4 | 1.5 |
| 5. | Profit on total funds employed | 15% | 15% | 9% | 9% |
| 6. | Profit before Interest | 15.0 | 15.0 | 9.0 | 9.0 |
| 7. | Interest on debt (@12% average) | 9.6 | 7.2 | 9.6 | 7.2 |
| 8. | Balance Profit | 5.4 | 7.8 | Loss | 1.8 |
| 9. | Income Tax @ 50% | 2.7 | 3.9 | N.A. | 0.9 |
| 10. | Net Profit (available for dividend) | 2.7 | 3.9 | Loss | 0.9 |
| 11. | Yield on Equity (10/3) | 13.5% | 9.75% | Loss | 2.25% |

* In 1st year, even though there was high DER at 4, the yield on equity as a percentage is larger as the profit on the total funds employed is higher than the interest cost on debt.
* In the 2nd year, on the other hand, the profit on total funds employed is lower than cost of debt, the high DER dragged and pull down the yield on equity.
* The company with high DER in 2nd year would incur a net loss although the industry as a whole posted a small profit.

3.

|  |  |
| --- | --- |
| Working capital Turnover Ratio | Cost of Sales/Net working capital |
| Working capital Turnover | Sales/Net Working Capital |

**Example**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **2011** | **2012** | **2013** |
| Sales | 166.0 | 151.5 | 169.5 |
| Networking Capital | 53.87 | 62.52 | 103.09 |
| Working Capital Turnover | 3.08 | 2.4 | 1.64 |

This ratio indicates low much net working capital requires for sales. In 2013, the reciprocal of this ratio (1/1.64 = .609) shows that for sales of Rs. 1 the company requires 60 paisa as working capital. Thus this ratio is helpful to forecast the working capital requirement on the basis of sale.

4.

**Interpretation of Financial Statements**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Category |  | High |  | Low |
| **A**. | **Liquidity Ratios** |  |  |  |  |
| a. | Current Ratio | a. | High level of inventory | a. | Unable to pay creditors |
|  |  | b. | High level of book debts | b. | Faster realization of debtors |
|  |  | c. | Credit received is curtailed | c. | Diversion of funds |
|  |  | d. | Prompt payment to creditors |  |  |
| b. | Acid Test Ratio | a. | Idle Funds | a. | Strain on liquidity |
| **B.** | **Solvency Ratio** |  |  |  |  |
| a. | Debt: Equity Ratio | a. | Low stake | a. | Unable to get credit |
|  |  | b. | Overtrading | b. | High capital gearing |
|  |  |  |  | c. | Conservative Management |
| b. | Funded Debt: Equity |  | -do- |  | -do- |
| **C.** | **Activity Ratios** |  |  |  |  |
| a. | Inventory Turnover Ratio | a. | Brisk trading | a. | Obsolete stock |
|  |  | b. | Manufacturing unit diverted to trading activity | a. | Marketing problem |
|  |  |  |  | c. | Poor demand |
| b. | Debtors Velocity Ratio | a. | Unable to insist on payment | a. | Weak management |
|  |  | b. | Highly competitive | b. | Cautious trading |
|  |  | c. | Poor quality of goods | c. | Only net sales taken |
| c. | Creditors Velocity Ratio | a. | Unable to pay the creditors | a. | Poor Management reputation |
|  |  | b. | Quality of goods received is poor | b. | Product in great demand |
| **D**. | **Profitability Ratios** |  |  |  |  |
| a. | Return on Investment | a. | Efficient utilization of assets | a. | Idle/under utilized assets |
|  |  |  |  | b. | Heavy capital investment |
| b. | Gross Profit Ratio | a. | Some manufacturing expenses not accounted | a. | Increase in cost of production |
|  |  | b. | Sales value taken instead of cost of sales | b. | Selling raw materials instead of finished goods |
|  |  | c. | Stocks overvalued | c. | Stocks undervalued |
| c. | Operating Profit Ratio | a. | High turnover | a. | Low turnover |
|  |  | b. | Public utility service |  |  |

Proper interpretation of financial indicators beyond mere ratio analysis helps in getting deeper insight into the affairs of a unit which is vital for a proper appraisal of its credit needs.

**Fund Flow Statements**

5.

The broad pattern outlining the movements of funds within an entity may be traced through successive balance sheets as illustrated as under:-

Comparative balance sheets of XYZ (Rs. in Lakh)

|  |  |  |  |
| --- | --- | --- | --- |
| Balance Sheet heads | 2012 | 2013 | Net Change |
| Capital  Preference  Ordinary |  |  |  |
| 40 | 40 | ….. |
| 80 | 80 | ….. |
| Reserves and surplus | 82 | 106 | +24 |
| Long term loans | 113 | 96 | -17 |
| Short term loans | 47 | 36 | -11 |
| Current liabilities and provisions | 39 | 46 | + 7 |
|  | 401 | 404 | + 3 |
| Fixed Assets  Less Depreciation  Net Block | 375 | 412 | …. |
| 167  208 | 203  209 | + 1 |
| Current assets | 169 | 171 | + 2 |
| Inventory | 90 | 93 | +3 |
| Sundry debtors | 44 | 63 | +19 |
| Cash and marketable securities | 9 | 1 | - 8 |
| Loans and advances | 26 | 14 | -12 |
| Technical know-how | 24 | 24 | .. |
|  | 401 | 404 | + 3 |

The above statement reveals that there is an increase of Rs. 24 Lakh in reserves and surplus and current liabilities and provisions by Rs. 7 Lakh. This amount of Rs. 31 Lakh was used to (i) redeem long term debt of Rs. 17 Lakh; (ii) for the reduction of short term credit by Rs. 11 Lakh; (iii) for addition of net fixed assets by Rs. 1 Lakh and current assets by Rs. 2 Lakh. Further, from the asset side, it could be found that the current assets have undergone a re-engineering whereby a surplus of Rs.2 Lakh has been registered.

6.

Statement of Sources and uses of funds of XYZ

|  |  |  |  |
| --- | --- | --- | --- |
| Sources | Rs. | Uses | Rs. |
| Increase in reserves and surplus | 24 | Increase in fixed assets | 1 |
| Increase in current liabilities and provisions | 7 | Increase in current assets:  Inventory  Sundry Debtors | 3  19 |
| Decrease in Current Assets  Cash & Marketable securities  Loans and advances | 8  12 | Decrease in long term loans  Decrease in short term loans | 17  11 |
| Total funds - source | 51 | Total funds used | 51 |

7.

The Fund Flow statements can also be prepared based on Profit & Loss account as under:

Profit & Loss Account for year ended …….

|  |  |
| --- | --- |
| Net sales | 308 |
| Cost of goods sold | 205 |
| Gross profit | 103 |
|  |  |
| Administrative and selling expenses | -21 |
| Operating profit | 82 |
| Other income | + 1 |
| Earnings before interest and tax (EBIT) | 83 |
| Interest | -13 |
| Taxes | -30 |
| Net profit | 40 |
| Dividends | -16 |
| Preference 3 |  |
| Ordinary 13 |  |
| Retained earnings | 24 |
| Inclusive of depreciation of Rs. 36 Lakh |  |

The statement above reveals that the increase in net worth by Rs. 24 Lakh of net profit after Rs. 16 Lakh of dividend payments. Depreciation of Rs. 36 Lakh lowers profits but it is a book-keeping expense that does not draw funds from the entity. Therefore, the charge is considered a source of funds and is balance restoring correspondingly the value of the asset to which it is applicable. After making the adjustments as above the funds statement would be as per below.

|  |  |  |  |
| --- | --- | --- | --- |
| Sources | Rs | Uses | Rs |
| Net Income  Depreciation (expenses requiring no cash outlay) | 40  36  76 | Dividends paid  Additions to gross fixed assets  Net change in working capital  Reduction in long term debt | 16  37  6  17  76 |

**Cash Flow Statement**

Using the data in XYZ, the Cash Flow statement can be drawn as under:-

|  |  |
| --- | --- |
| Opening Cash balance | 9 |
| Add |  |
| Cash from operations | 24 |
| Depreciation provided for | 36 |
| Increase in current liabilities | 7 |
| Decrease in loans and advances | 12 |
| Total Cash generated | 79 |
| Less |  |
| Increase in fixed assets | 37 |
| Increase in current assets | 22 |
| Decrease in long/short term loans | 28 |
| Total cash used | 87 |
| Closing Cash Balance | 1 |
| {Opening Cash Balance + cash generated – cash used = closing cash balance} |  |

* Increases in current assets at the end of the year balance exceeding the beginning balance reduce cash flow from operations. Conversely decreases in the current assets increase the cash flow from operations.
* Increase in current liabilities increases cash inflow from operations while decrease in current liabilities reduces it.