

Chapter-10

## Forecasting Statement Analysis

## Lecture 1

**Q No. 1:** You are the Company Secretary of DP Ltd and assigned task of profitability projections of difference scenarios based on historical data provided:

|                              | (Rs in Cr.) |
|------------------------------|-------------|
| Revenue (Sales)              | 200         |
| Variable cost (60% of Sales) | 120         |
| Fixed Cost (others)          | 20          |
| Depreciation                 | 25          |
| Taxes                        | 10          |
| Cash flow from operation     | 50          |
| Net Cash flow                | 50          |

Company is forecasting that sales will be increased by 37.5% approximately keeping in the mind of Market forces whereas, the variable cost will be forecasted at 56% of sales. Company is in the anticipation of having fixed cost of Rs.15 cr. On the other side (i.e.) on worst situation, Company is forecasting the that sales will be curb by 25% approximately keeping in the mind of Market forces whereas, the variable cost will be forecasted at 65% of sales. Company is in the anticipation of having fixed cost of Rs. 25 cr. It is forecasted that depreciation remains unchanged in case of any scenario and tax rate shall be applicable at 28.57%.

Sol.

## Statement showing profitability projections ( in Cr.)

| Particulars           | Historical data | Optimistic scenario       | Pessimistic scenario       |
|-----------------------|-----------------|---------------------------|----------------------------|
| Sales                 | 200             | $(200 + 37.5\%) 275$      | $(200 - 25\%) 150$         |
| - Variable cost       |                 | $(275 \times 56\%) (154)$ | $(150 \times 65\%) (97.5)$ |
| Contribution          |                 | 121                       | 52.5                       |
| - Fixed cost          |                 | (15)                      | (25)                       |
| - Depreciation        |                 | (25)                      | (25)                       |
| Profit before tax     |                 | 81                        | 2.5                        |
| - Income tax (28.57%) |                 | $(23.142)$                | $(0.714)$                  |
| Profit after tax      |                 | 57.858                    | 1.786                      |

Q No. 2: Y Ltd recently reported the following income Statement (Rs in Cr.)

|                   |     |
|-------------------|-----|
| Sales             | 700 |
| Operating Cost    | 500 |
| EBIT              | 200 |
| Interest          | 40  |
| EBT               | 160 |
| Taxes@ 40%        | 64  |
| EAT (Net Income)  | 96  |
| Dividend 3        | 32  |
| Retained Earnings | 64  |

This year company is forecasting 25% increase in sales and it expects that its year end operating cost will be around 70% of sales. It is expected that tax rate, interest and dividend pay-out ratio will be constant. You are required to compute projected Net Income and expected growth rate in dividend.

*Statement showing profitability projections ( in Cr.)*

| <i>Particulars</i>                     | <i>Historical data</i> | <i>Pessimistic scenario</i> |
|--|------------------------|-----------------------------|
| <i>Sales</i>                           | 700                    | $(700 + 25\%)$ 875          |
| <i>- Operating cost (70% of sales)</i> |                        | (612.5)                     |
| <i>EBIT</i>                            |                        | 262.5                       |
| <i>- Interest</i>                      |                        | (40)                        |
| <i>EBT</i>                             |                        | 222.50                      |
| <i>- Tax (40%)</i>                     |                        | (89)                        |
| <i>EAT</i>                             |                        | 133.50                      |
| <i>- Dividend (1/3 of profit)</i>      |                        | (44.50)                     |
| <i>Retained earnings</i>               |                        | 89                          |

$$\text{Dividend payout ratio} = \frac{\text{Dividend}}{\text{EAT}} = \frac{32}{96} = 1/3$$

--- Dividend payout ratio will be 1/3 of the PAT

Q No. 3: At the end of last year, X Ltd reported the following income statement (Rs in Cr.)

|                                       |      |
|---------------------------------------|------|
| Sales                                 | 3000 |
| Operating Cost excluding depreciation | 2450 |
| EBITDA                                | 550  |
| Depreciation                          | 250  |
| EBIT                                  | 300  |
| Interest                              | 125  |
| EBT                                   | 175  |
| Taxes @40%                            | 70   |
| EAT (Net Income)                      | 105  |

Looking ahead to the following year, the company management has assembled the following information.

- Year-end sales are expected to be 10% higher than last year.
- Year-end Operating Cost excluding depreciation are expected to equal 80% of year-end sales.
- Depreciation is expected to increase at the same rate as sales.
- Interest costs are expected to remain unchanged.
- Interest costs are expected to remain unchanged.
- Tax rate is expected to remain at 40%.

Based on the above information, what will be the forecast for year-end net income?

*Statement showing profitability projections (in Cr.)*

| Particulars                     | Historical data | Pessimistic scenario   |
|---------------------------------|-----------------|------------------------|
| Sales                           | 3,000           | $(3,000 + 10\%)$ 3,300 |
| - Operating cost (80% of sales) |                 | (2,640)                |
| EBDITA                          |                 | 660                    |
| - Depreciation                  |                 | $(250 + 10\%)$ (275)   |
| EBIT                            |                 | 385                    |
| - Interest                      | 125             | (125)                  |
| EBT                             |                 | 260                    |
| - Tax (40%)                     |                 | (104)                  |
| EAT                             |                 | 156                    |

Q No. 5: Following is the balance sheet of XL Ltd at the end of 2022 is as follows and you are required to forecast Cash flow for 2023. (Rs. in cr.)

| Liabilities          | Amount Rs  | Assets            | Amount Rs  |
|----------------------|------------|-------------------|------------|
| Share Capital        | 100        | Fixed Assets      | 180        |
| Reserves and Surplus | 20         | Current Assets:   |            |
| Secured Loans        | 80         | Cash              | 20         |
| Loans                | 50         | Trade Receivables | 80         |
| Current liabilities  | 90         | Inventories       | 80         |
| Provisions           | 20         |                   |            |
| <b>Total</b>         | <b>360</b> | <b>Total</b>      | <b>360</b> |

The projected Profit & Loss for the year 2023 is given below:

|                                  |     |
|----------------------------------|-----|
| Revenue from operation           | 400 |
| Cost of Goods Sold               | 300 |
| Depreciation                     | 20  |
| Profit Before Interest and taxes | 80  |
| Interest                         | 20  |
| PBT                              | 60  |
| Tax                              | 30  |
| PAT                              | 30  |
| Dividend                         | 10  |
| Retained Earnings                | 20  |

During the year 2023, company has forecasted to raise secured term loan of Rs. 20 crore and repay of previous term loan to the extent of Rs. 5 crore and increase unsecured loan by Rs. 10 crore. It is forecasted that current liabilities and provisions remains unchanged. While, company is planning to buy fixed assets worth Rs. 30 crore and increase the inventories and receivables by Rs. 10 crore and Rs. 15 crore respectively. Company is in the projection of paying dividend of Rs. 10 crore. Assuming other asset would remain unchanged except cash.

*Sol.* Statement showing forecasted cash flow (in Cr.)

| Particulars                                      | Amount (₹) | Amount (₹) |
|--|------------|------------|
| A) Profit before tax                             |            | 60         |
| Add: Non cash . Non operating expense            |            |            |
| Depreciation                                     | 20         |            |
| Interest   | <u>20</u>  | 40         |
| Less: Non cash . Non operating income            |            | -          |
| Cash operating before changes in working capital |            | 100        |
| Add: Increase in Cur liab & Decrease in Cur Ast  |            | -          |
| Less: Increase in Cur Ast & Decrease in Cur liab |            |            |

| <i>Particulars</i>                                | <i>Amount (₹)</i> | <i>Amount (₹)</i> |
|---|-------------------|-------------------|
| Trade receivable                                  | 15                |                   |
| Inventory   | <u>10</u>         | (25)              |
| Cash generated from operation                     |                   | 75                |
| Less : Tax paid                                   |                   | (30)              |
| Cash flow from operating activity                 |                   | <u>45</u>         |
| <br>B) Investing activity                         |                   |                   |
| Purchase of fixed assets                          | <u>(30)</u>       | (30)              |
| Cash used in investing activity                   |                   | <u>(30)</u>       |
| <br>C) Financing activity                         |                   |                   |
| Add : Secured loan raised                         | 20                |                   |
| Unsecured loan raised                             | <u>10</u>         | 30                |
| Less : Repayment of secured loan                  | (5)               |                   |
| Interest paid                                     | (20)              |                   |
| Dividend paid                                     | <u>(10)</u>       | (35)              |
| Net cash used in financing activity               |                   | <u>(5)</u>        |
| <br>Net changes in cash & cash equivalent (A+B+C) |                   | 10                |
| Add : Opening balance of cash & cash equivalent   |                   | 20                |
| Closing balance of cash & cash equivalent         |                   | <u>30</u>         |

Q No. 6: Following is the balance sheet of Wye Ltd at the end of 2022 is as follows and you are required to forecast Balance Sheet as at the end of 2023. (Rs in cr.)

| Liabilities          | Amount Rs  | Assets            | Amount Rs  |
|----------------------|------------|-------------------|------------|
| Share Capital        | 100        | Fixed Assets      | 180        |
| Reserves and Surplus | 20         | Current Assets:   |            |
| Secured Loans        | 80         | Cash              | 20         |
| Unsecured Loans      | 50         | Trade Receivables | 80         |
| Current liabilities  | 90         | Inventories       | 80         |
| Provisions           | 20         |                   |            |
| <b>Total</b>         | <b>360</b> | <b>Total</b>      | <b>360</b> |

The projected Profit & Loss for the year 2023 is given below:

|                                  |     |
|----------------------------------|-----|
| Revenue from operation           | 400 |
| Cost of Goods Sold               | 300 |
| Depreciation                     | 20  |
| Profit Before Interest and taxes | 80  |
| Interest                         | 20  |
| PBT                              | 60  |
| Tax                              | 30  |
| PAT                              | 30  |
| Dividend                         | 10  |
| Retained Earnings                | 20  |

During the year 2023, company has forecasted to raise secured term loan of Rs. 20 crore and repay of previous term loan to the extent of Rs. 5 crore and increase unsecured loan by Rs. 10 crore. It is forecasted that current liabilities and provisions remains unchanged. While, company is planning to buy fixed assets worth Rs. 30 crore and increase the inventories and receivables by Rs. 10 crore and Rs. 15 crore respectively. Company is in the projection of paying dividend of Rs. 10 crore. Assuming other asset would remain unchanged except cash.

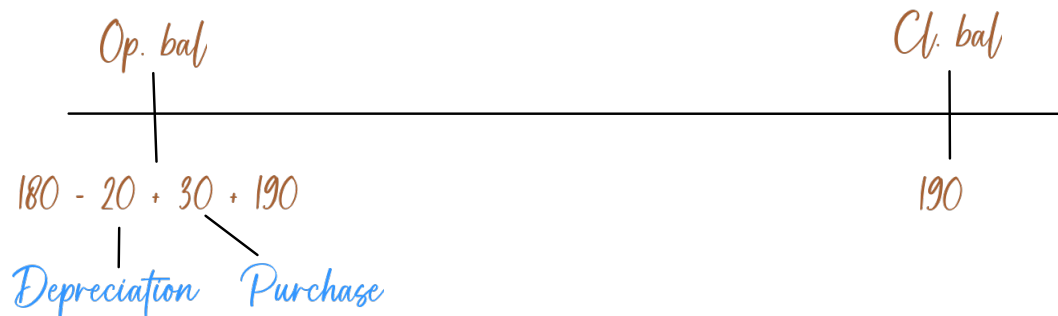
Sol. Forecasted balance sheet of Wye Ltd

| Particulars                     | Note no. | Historical<br>(₹ in Cr) | Forecasted (₹ in Cr) |           |
|---------------------------------|----------|-------------------------|----------------------|-----------|
|                                 |          |                         | Change               | (₹ in Cr) |
| <b>I Equity &amp; liability</b> |          |                         |                      |           |
| 1) Shareholder's fund           |          |                         |                      |           |
| a) Share capital                |          | 100                     | -                    | 100       |
| b) Reserve & surplus            |          | 20                      | + 20                 | 40        |
| 2) Non-Current liability        |          |                         |                      |           |
| a) Long term borrowings         |          |                         |                      |           |
| - Secured                       |          | 80                      | + 20 - 5             | 95        |
| - Unsecured                     |          | 50                      | + 10                 | 60        |

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| Particulars               | Note no. | Historical<br>(₹ in Cr) | Forecasted (₹ in Cr) |                  |
|---------------------------|----------|-------------------------|----------------------|------------------|
|                           |          |                         | Change               | (₹ in Cr)        |
| 3) Current liability      |          |                         |                      |                  |
| a) Trade payable          |          | 90                      | -                    | 90               |
| b) Short term provision   |          | 20                      | -                    | 20               |
| TOTAL                     |          |                         |                      | 405              |
| II Assets                 |          |                         |                      |                  |
| 1) Non-Current asset      |          |                         | - 20 + 30            | 190              |
| a) Fixed asset            |          | 180                     | <del>+ 30</del>      | <del>210</del>   |
| 2) Current asset          |          |                         |                      |                  |
| a) Inventory              |          | 80                      | + 10                 | 90               |
| b) Trade receivable       |          | 80                      | + 15                 | 95               |
| c) Cash & cash equivalent |          | 20                      | (b/f)                | <del>10</del> 30 |
| TOTAL                     |          |                         |                      | 405              |

Alternative treatment for fixed asset



**Note** - Balance of retained earnings 20 cr had been transfer to balance sheet which is after subtracting dividend. Therefore . no need to adjust dividend while preparing projected balance sheet

|                      |      |
|----------------------|------|
| Practical question 1 | 10.1 |
| Practical question 2 | 10.2 |
| Practical question 3 | 10.3 |
| Practical question 5 | 10.4 |
| Practical question 6 | 10.6 |