Financial Reporting - Sem VI B.Com(Hons)- Prof. Radhanath Pyne - Ratio Analysis
FRCN5(8.4.2020)

We have nothing to explain about the theories of Ratio Analysis. So we are going direct to solve the problem for completing the Balance Sheet.

Problem 1 (Sheeba Kapil)

Assume that a firm has owner's equity of Rs.1,20,000. The ratios for the firm are as follows

| Current debt to total debt | 0.40 |
| :--- | :--- |
| Total debt to owner's equity | 0.60 |
| Fixed assets to owner's equity | 0.60 |
| Total asset turnover | 2 times |
| Inventory turnover | 8 times |

Complete the balance sheet in the following format

| Current Debt | xxx | Cash | xxx |
| :--- | :---: | :--- | :--- |
| Long term debt | xxx | Inventory | xxx |
| Total Debt | xxx | Total Curr Asst | xxx |
| Owners Equity | xxx | Fixed assets | xxx |
| Total Cap | xxx | Total Assets | xxx |

Solution 1
i) Total Debt $=.60 \times 1,20,000=72,000$
ii) Fixed Assets $=.60 \times 120000=72000$
iii) Total capital $=$ Total debt + Owners equity $=72000+120000=192000$
iv) Total Capital $=$ Total Asset $=$ Fixed Asset + Current Assets

1,92,000 = 72000 + Current Assets, So Current Assets = 192000-72000 = 120000
v) Sales are calculated as follows

Asset turnover = Sales/ Assets = 2

Sales $/ 192000=2$, Sales $=3,84,000$
vi) Inventory Turnover = Sales/ Inventory = 3,84,000/Inventory or Inventory = 3,84,000/8 48,000

Cash $=$ Current asset - Inventory $=120000-48000=72000$

Current Debt $=.4 \times$ total debt $=.4 \times 72000=28800$

Long term debt $=$ total debt - current debt $=72000-28800=43,200$

The complete balance sheet will be as under

| Current Debt | 28800 | Cash | 72000 |
| :--- | :---: | :--- | :--- |
| Long term debt | 43200 | Inventory | 48000 |
| Total Debt | 72000 | Tot Curr Asst 120000 |  |
| Owners Equity | $\underline{120000}$ | Fixed assets | $\underline{72000}$ |
| Total Cap | $\underline{192000}$ | Total Assets | $\underline{192000}$ |

TN1 If the balance sheet structure is given the indication is given through which we have to proceed for the answer

## Problem 2

From the following information prepare the balance sheet where GP $=60000$ and Closing stock is 5000 excess of the opening stock

Stock turnover 6
Capital Turnover 2
Fixed asset turnover 4

GP (\%) 20

Debt Coll Period (mth) 2

Cr pay period (days) 73

Solution2
i) GP ratio $=\mathrm{GP} /$ Sales $\times 100$ or $.2=60000 /$ sales or Sales $=300000$, Cost of Goods sold $=300000-60000$ $=240000$
ii) Stock Turnover $=$ Cost of goods Sold/ Average stock or 6= 240000/Av Stock, Av Stock $=40000$
$($ opening stock + closing $) / 2=40000,($ opening + opening +5000$) / 2=40000$, opening $=37500$, closing $=$ 42500
iii) Capital Turnover Ratio $=$ Cost of Sales/Capital, $2=240000 /$ Capital, Capital $=120000$
iv) Fixed asset turnover $=$ Cost of Sales/ Fixed Asset, $4=240000 /$ fixed assets, fixed assets $=$ 240000/4=60000
v) Debt Collection period $=12 /$ Debtors turnover $=12 / 2=D T=6$
debtors $=$ Sales $/$ DT or $300000 / 6=50000$
vi) Creditors payment period $=73$ days

Creditors turnover ratio $=365 / 73=5$
Cost of goods sold = opening stock + Purchase $\boldsymbol{-}$ closing stock
$240000=37500+$ Purchase - closing stock
37500 + Purchase - 42500
$240000+42500-37500=$ purchase $=245000$
Creditor $=$ Credit purchase/Creditor turnover $=245000 / 5=49000$
The complete balance sheet will be

| Capital | 120000 |  | Closing Stock |
| :--- | :--- | :--- | :--- |
| Creditors | $\underline{49000}$ | Debtors | 50500 |
|  |  | Fixed Asset | 60000 |
|  |  | Cash (Balancing fig) | $\underline{16500}$ |
|  | $\underline{169000}$ |  | $\underline{169000}$ |

TN2 The important part of the problem is to find the purchase amount when cost of goods sold is given. Purchase was required to find the sundry creditors.

