BENCHMARX
simplifying success

ADVANCED FINANCIAL MANAGEMENT

New Sums Added by ICAI in May 25 SM

All the questions which have been added in ICAI SM are from recent RTPs/MTPs/PYPs and have been covered in our course. This file will help you in case you have studied from Old ICAI SM of May 24

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1. FINANCIAL POLICY AND CORPORATE STRATEGY

Question 1 (Illustration 1)

The Balance Sheet of M/s. Sundry Ltd. as on 31-03-2023 is follows:

(Rs in lakhs)

Liabilities	**Rs**	**Assets**	**Rs**
Share Capital	3000	Fixed Assets	6000
Reserves	2000	Inventory	5000
Long Term Loan	4000	Receivables	2400
Short Term Loan	3000	Cash	600
Payables & Provisions	2000		
Total	**14000**	**Total**	**14000**

Sales for the year was Rs 6000 lakhs. The sales are expected to grow by 20% during the year. The profit margin and dividend pay-out ratio are expected to be 4% and 50% respectively.

The company further desires that during the current year Sales to Short Term Loan and Payables and Provision should be in the ratio of 4 : 3. Ratio of fixed assets to Long Term Loans should be 1.5. Debt Equity Ratio should not exceed 1.5.

You are required to determine:

(i) The amount of External Fund Requirement (EFR)

(ii) The amount to be raised from Short Term & Long Term Funds and issue of new Equity.

Answer

(i) External Funds Requirement (EFR):

	(Rs in lakhs)
Expected sales (Rs 6000 + 20% of Rs 6000)	7200.00
Profit margin @ 4%	288.00
Dividend payout ratio @ 50%	144.00
Balance to be ploughed back (A)	144.00
Additional funds required (Rs 14000 - Rs 2000*) x 0.20 (B)	2400.00
Balance to be met from external source (B - A)	**2256.00**

* As current liabilities shall also be increased proportionately with increase in sales.

(ii) Amount to be raised from different sources with following conditions

- Sales to short term loans and payables & provisions 4:3
- Ratio of fixed assets to long term loans 1.5
- Debt equity ratio should not exceed 1.5

(1) Amount to be raised from Short Term Funds:

	(Rs in lakhs)
New amount of short-term loans and payables & Provision $\left(\frac{3}{4} \times 7200\right)$	5400
Less: Existing Amount of short-term loans and payables & provision (2000 X 1.20 + 3000)	5400
Amount to be raised from short term funds	Nil

(2) Amount to be raised from Long Term Funds:

	(Rs in lakhs)
New fixed assets (Rs 6000 + 20% of Rs 6000)	7200
New long-term loans as per given condition (Rs 7200/1.5)	4800
Less: Existing long-term loans	4000
Amount to be raised from Long term funds	800

(3) Amount to be raised from Equity:

	(Rs in lakhs)
Amount to be raised from external sources	2256.00
Less: Amount to be raised from short term funds	----
Less: Amount to be raised from Long term funds	800.00
Balance amount to be raised from the new Equity	1456.00

Alternative Solution as per Formula Approach

(i) External Funds Requirement (EFR)

$$EFR = \left(\frac{TA}{S} - \frac{P}{S}\right) x\ \Delta S - N \times \text{Projected Sales} \times (1 - d)$$

Where,

TA = Total Assets

S = Current Sales

P = Payables and Provisions

ΔS = Change in Sales

N = Net Profit Margin Ratio

d = Dividend Payout Ratio

Accordingly

$$EFR = \left(\frac{1,4000}{6000} - \frac{2000}{6000}\right) x\ 1200 - 0.04 \times 7200 \times 0.5 = ₹\ 2256 \text{ lakhs}$$

(ii) Funds to be raised from Various Sources

(1) Short Term Funds

Let X be the new Short-Term Loan then meeting the given condition the Additional Requirement shall be computed as follows:

$$\frac{4}{3} = \frac{6000 \times 1.2}{2000 \times 1.2 + X}$$

X = 3000.00

New Short-Term Loans required	Rs 3000.00 lakhs
Less: Existing	Rs 3000.00 lakhs
Additional requirement	0.00 lakhs

(2) Long term funds

Let Y be the new Long -Term Loans then meeting the given condition the Additional Requirement shall be computed as follows:

$$1.5 = \frac{FA}{\text{Long term loans}}$$

$$1.5 = \frac{6000 \times 1.2}{Y}$$

Y = 4800

New Long Term Loans	Rs 4800.00 Lakhs
Existing	Rs 4000.00 Lakhs
Additional Long Term Fund to be raised	Rs 800.00 Lakhs

(3) Equity to be raised

EFR	Rs 2256.00 Lakhs
Less: Amt. to be raised from Short Term Loans	0.00 Lakhs
Amt. to be raised from Long term Loans	Rs 800.00 Lakhs
Equity to be raised	Rs 1456.00 Lakhs

$$\text{New DER} = \frac{\text{Debt}}{\text{Shareholder's Fund}}$$

$$= \frac{4800}{3000 + 1456 + 2000 + 144} = 0.727$$

Thus, required condition is satisfied.

2. ADVANCED CAPITAL BUDGETING DECISIONS

Question 1 (Illustration 1)

Determine NPV of the project with the following information:

Initial Outlay of project	Rs 40,000
Annual Cash Flow from the Project (Without inflation)	Rs 15,000
Useful life	4 years
Cost of Capital (Including inflation premium of 10%)	12%

Answer

Annual Cash Flow of project is Rs 15,000.

It would be inconsistent to discount these real cash flows at 12% (nominal rate of return). There are two alternatives:

(i) Either to restate the cash flow in nominal term and discount at 12% or

(ii) Restate the discount rate in real terms and use this to discount the real cash flows.

NPV using (i) approach

Since inflation rate is 10% a year, real cash flows may be stated in nominal cash flows as follows:

Nominal Cash Flow = (1 + Inflation Rate) Real Cash Flows

Year	Real Cash Flows	Nominal Cash flows
1	15000	15,000 × 1.10 = 16,500
2	15,000	15,000 × $(1.10)^2$ = 18,150
3	15,000	15,000 × $(1.10.)^3$ = 19,965
4	15,000	15,000 × $(1.10)^4$ = 21,962

NPV using nominal discounting rate 12%

$$\frac{16,500}{(1.12)}+\frac{18,150}{(1.12)^2}+\frac{19,965}{(1.12)^3}+\frac{21,962}{(1.12)^4}-40,000$$

= Rs 14,732 + Rs 14,469 + Rs 14,211+ Rs 13,957 – Rs 40,000

= Rs 17,369 (Approx)

NPV using (ii) approach

To compute NPV using (ii) approach, we shall need real discount rate, which shall be computed as follows

$$\text{Real Discount Rate}=\frac{1+\text{Nominal Discount Rate}}{1+\text{Inflation Rate}}-1$$

$$\text{Real Discount Rate}=\frac{1+0.12}{1+0.10}-1=0.0182 \text{ i.e. } 1.8\%.$$

$$NPV=\sum_{t=1}^{n} cf_t - I_o$$

Where t = Time Period

cf_t = Annual Cash Flow

I_o = Initial Outlay

Accordingly NPV of the project

$$\frac{15,000}{(1.0182)} + \frac{15,000}{(1.0182)^2} + \frac{15,000}{(1.0182)^3} + \frac{15,000}{(1.0182)^4} - 40,000$$

= Rs 14,732 + Rs 14,469 + Rs 14,210+ Rs 13,956 – Rs 40,000

= Rs 57,367 – Rs 40,000 = Rs17,367(Approx)

NPV based on consideration that inflation rate for revenue and cost are different shall be computed as follows:

$$N.P.V. = {}^{n}\Sigma_{t=1} [\{R_t (1+i_r) - C_t{}^{t}\Sigma_{r=1}(1+i_c)\} (1-T) + D_t T] / (1+k)^t - I_0$$

$R_t \rightarrow$ revenues for the year 't' with no inflation.

$i_r \rightarrow$ annual inflation rate in revenues for 'r th ' year.

$C_t \rightarrow$ costs for year 't' with no inflation.

$i_c \rightarrow$ annual inflation rate of costs for year 'r'.

$T \rightarrow$ tax rate.

$D_t \rightarrow$ depreciation charge for year 't'.

$I_\theta \rightarrow$ initial outlay.

$k \rightarrow$ cost of capital (with inflation premium).

3. MUTUAL FUNDS

Question 1 (TYK 10) (Deleted)

A has invested in three Mutual Fund Schemes as per details below:

Particulars	MF A	MF B	MF C
Date of investment	01.12.2009	01.01.2010	01.03.2010
Amount of investment	Rs 50,000	Rs 1,00,000	Rs 50,000
Net Asset Value (NAV) at entry date	10.50	10	10
Dividend received upto 31.03.2010	Rs 950	Rs 1,500	Nil
NAV as at 31.03.2010	Rs 10.40	Rs 10.10	Rs 9.80

Required:

What is the effective yield on per annum basis in respect of each of the three schemes to Mr. A upto 31.03.2010?