



SECTION - 3

ALTERNATIVE FINANCING STRATEGY IN THE CONTEXT OF REGULATORY REQUIREMENTS

This Section includes

- **Rewulatory Requirements - Why and how it affect the choice of one's Capital Structure**

3.1. REWULATORY REQUIREMENTS - WHY AND HOW IT AFFECT THE CHOICE OF ONE'S CAPITAL STRUCTURE

3.1.1 Banks and financial institutions:

Regulatory requirements are required to be complied with to ensure that a firm is adequately capitalized to meet multiple objectives. The best example would be the case of banks which accept deposits from the public and deploys the generated funds across various assets like corporate and retail loans. Since public confidence is the foundation for banks survival, regulatory authorities prescribe adequate capital for the banks to be maintained, known as the Capital Adequacy Ratio (CAR).

Banks allocate resources across various assets throug their lending operations. In the process, banks are exposed to various types of risks which are broadly classified into three types, Credit Risk, Operational Risk and Market Risk. Banks are also expected to comply with the RBI guidelines on the creation of necessary risk management architecture and also the guide-lines on Basel II. Capital Adequacy computation has to be done under Basel II requirements effective March 31, 2008.

Credit risk is the risk of default from the borrowers. Operatinal risk is the risk of some of the procedures going wrong and market risk is the risk of market volatility affecting the values of banks' investments in various financial assets.

According to Basel committee norms, banks have to maintain adequate tier I capital as a cushion to take care of all these risks and protect the depositors. Risk is inherent in the nature of the banking business. The Reserve Bank of India prescribes a risk weight for the various assets of a bank like the corporate loans, retail loans and the investments in financial assets like bonds, shares, derivatives etc. Using these weights, the risk weighted assets are computed. Banks have to maintain 10% capital adequacy ratio, which means that the banks tier I capital in the form of equity shares, will go up as the value of risk weighted assets go up. This way the banks depositors are protected. This is an example of how regulatory requirements affect the capital structure of a bank. Insurance companies are also subjected to this kind of capital adequacy ratios. Banks and Non-banking finance companies can raise debt up to 10 times of net worth of the company.

3.1.2 Debt to equity ratio prescribed by banks

Many times banks prescribe the minimum debt to equity ratio for projects to ensure that the promoters bring adequate money as equity contribution. Therefore, when a corporate firm goes for borrowing for a project, it has to bring sufficient equity or deploy the internal accruals to satisfy the requirements of the banks.

The following example illustrates this point.

TRISTAR FOODS plc

<u>Input data</u>	
Cost of new machine	150,000
Salvage value of new machine	10,000
Production (lts. Per day)	300
Working days per year	300
Working life of machine (years)	6
Income per lt. (net)	0.80
Salvage value of old machine	5,000
Warehouse cost	15,000
Allocated cost of marketing	20,000
Increase in working capital	5,000
Depreciation rate	25%
Corporate tax rate	30%
Capital gains tax rate	30%
Opportunity cost of capital	12.5%
Post tax cost of debt	8.8%

ESTIMATION OF CASHFLOWS

YEAR	0	1	2	3	4	5	6
COST OF NEW MACHINE	(150,000)						
SALVAGE VALUE (OLD MACHINE)	5,000						
CHANGE IN WORKING CAPITAL	(5,000)						5,000
SALVAGE VALUE (NEW MACHINE)							10,000
REVENUE		72,000	72,000	72,000	72,000	72,000	72,000
DEPRECIATION		(37,500)	(37,500)	(37,500)	(37,500)		
EBIT		34,500	34,500	34,500	34,500	72,000	72,000
EBIT*(1-T)		24,150	24,150	24,150	24,150	50,400	50,400
OPERATING CASH FLOW		61,650	61,650	61,650	61,650	50,400	50,400
CAPITAL GAINS TAX	-1500						(3,000)
WAREHOUSE COST		(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)
CASHFLOWS	(151,500)	46,650	46,650	46,650	46,650	35,400	47,400

NPV	→	52.394,39
IRR	→	19,83%

FINANCIAL STRATEGY

- The above example, as discussed earlier, shows the cash flows for a project with NPV and IRR.
- What should be the amount of debt and equity for this project which requires 150000 as investment?
- A bank may decide to fix the debt that they are willing to lend to this project based on the debt service coverage ratio. Debt service coverage ratio is computed as follows:
- $(\text{Net operating profit before long term interest and depreciation and after tax}) / (\text{Instalment} + \text{long term interest})$
- Debt service coverage ratio protects the annual amount due to the lender namely the interest and instalment amount. There has to be adequate coverage for this say about 2.0 times.
- Let us say that the bank prescribes an average debt service coverage ratio of 2.5 times for this project and wants to know how much of debt it can finance and how much of equity the promoter has to bring in

=Nopat+Depreciation	61650	61650	61650	61650	50400	50400	
Instalment	23159	23159	23159	23159	23159	23159	
DSCR	2,66	2,66	2,66	2,66	2,18	2,18	2,50

- The table above shows the debt service coverage ratio and the average debt service ratio for all the years which is 2.5. This means how much of debt is shown in the following table:

Total investment		150000
Debt	1,67	1,00
Debt	93881,33	
Equity	56118,67	
Instalment amount		
Debt	93881,33	
Interest	0,13	
Term	6,00	
Instalment amount		23158,63

- This table shows that a debt equity ratio of 1.67 will be optimum to support 2.5 debt service coverage ratio. This means that the bank will lend 93881.33 and the promoter has to bring 56118.67. Of course, generally the amounts would be rounded off to nearest reasonable lacs for ease of accounting.