

## Case 27

### HEALTHY DRINKS COMPANY

Healthy Drinks Company is planning to produce a new mixed fruit juice. It has engaged a consultant at fees of Rs. 50 million to conduct a market survey to find demand for the juice. The market survey indicated that there was enough demand, and that the company could sell at the maximum 100 million one-litre pack of the product each year. Half of the consultant's fee is to be paid immediately on the submission of the survey report and half after one year subject to the company's decision to manufacture and sell the product. For the full capacity utilization, the manufacturing plant would cost Rs. 2000 million. The economic life of the plant is estimated to be five years. The plant can be depreciated at a written down depreciation rate of 25 per cent for tax purposes. The company is considering using an idle fully depreciated building for setting the manufacturing facility. The current market value of the building is Rs. 50 million and the expected market value after 5 years is Rs. 100 million. The market value of the plant is expected to be Rs. 150 million after five years. Assume that the corporate tax will be considered on loss or profit on sale of assets. The corporate tax rate is assumed to be 30 per cent.

The company expects demand to pick up over years. It expects to utilize 70 per cent of capacity for the first year, 80 per cent in the second year, 90 per cent in the third year and 100 per cent in years four and five. The selling price per one-litre pack at the current price level is expected to be Rs. 100. The company has estimated that the variable cost per pack at the current price level will be Rs. 40. At the full capacity, the fixed overhead cost per unit is estimated at Rs. 60 at the current price level. One-third of these fixed overhead costs are allocations of the corporate general and administrative expenses. The net working capital is estimated to be 20 per cent of sales and will be incurred in the beginning of the year. The general inflation rate is expected to be 5 per cent per annum that will affect both the price and all costs.

The proposal for producing the new product is as risky as the current business. Currently, the company has 30 per cent debt. Its equity beta is 1.20. Both the risk-free rate and risk premium, respectively, are 3 per cent and 5 per cent in real terms. The new project will be financed by 50 per cent debt (at risk-free rate) and 50 per cent equity.

### DISCUSSION QUESTIONS

1. Should the project be accepted? Justify by calculating

- (a) the project's nominal cash flows after tax;
- (b) the firm's real and nominal cost of capital;
- (c) the project's real and nominal cost of capital and
- (d) the NPV of the project (round-off the discount rate to the nearest whole number).

2. Show all computations and state your assumptions explicitly.