

## **Financial Management (University Elective)**

### **Credit Management**

#### **Numerical 1**

The present sales of Lamp & Light are Rs. 50 million. The firm categorises its customers into three categories of providing credit: X, Y, and Z. It provides unlimited credit to customers in category X, limited credit to customers in category Y, and no credit to customers in category Z. Due to this credit policy, the firm is foregoing sales to the extent of Rs. 2.5 million to customers in category Y and Rs. 5 million to customers in category Z. The firm is considering the adoption of a more liberal credit policy under which customers in category Y would be extended unlimited credit policy and customers in category Z would be provided limited credit. Such relaxation would increase the sales by Rs. 5 million on which bad debt losses would be 4 percent. The contribution margin ratio for the firm is 10 percent, the average collection period is 40 days, and the cost of capital is 12 percent. The tax rate for the firm is 40 percent. What will be the effect of relaxing the credit policy on the residual income of the firm?

#### **Numerical 2 (Practice)**

The present sales of DP Ltd are Rs. 60 million. The firm categorises its customers into three categories of providing credit: P, Q, and R. It provides unlimited credit to customers in category P, limited credit to customers in category Q, and no credit to customers in category R. Due to this credit policy, the firm is foregoing sales to the extent of Rs. 6 million to customers in category Q and Rs. 12 million to customers in category R. The firm is considering the adoption of a more liberal credit policy under which customers in category Q would be extended unlimited credit policy and customers in category R would be provided limited credit. Such relaxation would increase the sales by Rs. 12 million on which bad debt losses would be 8 percent. The contribution margin ratio for the firm is 18 percent, the average collection period is 72 days, and the cost of capital is 18 percent. The tax rate

for the firm is 40 percent. What will be the effect of relaxing the credit policy on the residual income of the firm?

### **Numerical 3**

AB & Co. provides 90 days of credit to its customers. Its present level of sales is Rs. 40 million. The firm's cost of capital is 15 percent and its ratio of variable costs to sales is 0.60. The firm is contemplating to increase the credit by 10 days. This is likely to increase sales by Rs. 1.5 million. The bad debt proportion on increased sales would be 5 percent. The tax rate of 30 per cent is applicable. What will be the effect of lengthening the credit period on the residual income of the firm?

### **Numerical 4 (practice)**

RPR & Co. provides 30 days of credit to its customers. Its present level of sales is Rs. 20 million. The firm's cost of capital is 10 percent and its ratio of variable costs to sales is 0.80. The firm is contemplating to increase the credit by 20 days. This is likely to increase sales by Rs. 2.5 million. The bad debt proportion on increased sales would be 2 percent. The tax rate of 35 per cent is applicable. What will be the effect of lengthening the credit period on the residual income of the firm?

### **Numerical 5**

The current credit terms of PR Ltd are 1/5, net 15. Its sales are Rs.10 million, its average collection period is 12 days, its variable cost to sales ratio is 0.80, and its cost of funds is 15 percent. The proportion of sales in which customers currently take discount is 0.15. DP Ltd is considering relaxing its discount terms to 2/5, net 15. Such relaxation is expected to increase the sales by Rs. 0.6 million, reduce the average collection period to 8 days, and increase the proportion of discount sales to 0.35. What will be the effect of relaxing the discount policy on residual income? The tax rate of the firm is 40 percent.

**Numerical 6 (practice)**

The current credit terms of EC Ltd are 1/20, net 60. Its sales are Rs.24 million, its average collection period is 48 days, its variable cost to sales ratio is 0.80, and its cost of funds is 10 percent. The proportion of sales in which customers currently take discount is 0.4. EC Ltd is considering relaxing its discount terms to 2/20, net 60. Such relaxation is expected to increase the sales by Rs. 2.4 million, reduce the average collection period to 36 days, and increase the proportion of discount sales to 0.5. What will be the effect of relaxing the discount policy on residual income? The tax rate of the firm is 40 percent.

**Numerical 7**

TM Ltd is contemplating to relax its collection efforts. The current sales are 50 million, the average collection period is 20 days, its variable costs to sales ratio 0.70, cost of capital 15 percent, and its bad debt ratio 0.05. The relaxation in collection efforts is expected to push sales up by Rs. 2 million, increase the average collection period to 32 days, and raise the bad debts ratio to 0.06. The tax rate of the firm is 40 percent. What will be the effect of relaxing the collection effort on the residual income of the firm?

**Numerical 8 (practice)**

RC Ltd is contemplating to relax its collection efforts. The current sales are 80 million, the average collection period is 32 days, its variable costs to sales ratio 0.80, cost of capital 12 percent, and its bad debt ratio 0.04. The relaxation in collection efforts is expected to push sales up by Rs. 3 million, increase the average collection period to 40 days, and raise the bad debts ratio to 0.05. The tax rate of the firm is 30 percent. What will be the effect of relaxing the collection effort on the residual income of the firm?

**Numerical 9**

FM Ltd sells on terms 1/10, net 30. Total sales for the year are Rs. 10 million. 20 percent of the customers pay on the tenth day and avail the discount. The remaining customers on an average, make the payment after 40 days of their

purchases. Calculate the average collection period and the average investment in receivables.

**Numerical 10 (practice)**

AB Ltd sells on terms 2/15, net 20. The total sales for the year are Rs. 20 million. The cost of goods sold is Rs. 15 million. Customers accounting for 40 % of sales avail discount while others pay after 25 days of their purchase.

Calculate: (a) the average collection period, and (b) the average investment in receivables.