

**Formula:**

*Contribution gain(loss) = C/S ratio (Revised Sales revenue – Current Sales revenue)*

**Exam Support:**

*Contribution to sales ratio may be given. If not, you have to calculate using data given.*

### 6.5 Bad Debt Expense/Savings

Risk of bad debts increases with the increase in credit term. Organization may have estimates available for range of credit terms. Bad debt expense needs to be included in the evaluation of credit policy.

If reduction in credit term is proposed, then bad debt expenses could be saved. Then these savings should be included in the evaluation of credit policy.

**Formula:**

*Bad debt (expense) savings = Sales revenue(current bad debt % – Revised bad debt %)*

**Exam Support:**

*Bad debts estimates may be given as percentage of sales revenue.*

### Illustration

Ulnad Co has annual sales revenue of \$6 million and all sales are on 30 day's credit, although customers on average take ten day more than this to pay. Contribution represents 60% of sales and the company currently has no bad debts. Accounts receivable are financed by an overdraft at an annual interest rate of 7%.

Ulnad Co plans to offer an early settlement discount of 1.5% for payment for payment within 15 days and to extend the maximum credit offered to 60 days. The company expects that these changes will increase annual credit sales by 5%, while also leading to additional incremental costs equal to 0.5% of turnover. The discount is expected to be taken by 30% of customers, with the remaining customers taking an average of 60 days to pay.

**Required:**

Evaluate whether the proposed changes in credit policy will increase the profitability of Ulnad Co.

In this question, we need to compare benefits arising from credit policy revision with cost of revision. Revision credit policy is increasing the credit period from average 30 days to 60 days. we need to compare the cost of financing receivables 30 (60 - 30) extra days with profits from additional sales, due to generous credit term of 60 days. cost of financing receivables includes cost of interest payments, administration cost, early settlement

**Solution:**

$$\text{Current average trade receivable period} = 30 + 10 = 40 \text{ days}$$

Despite of 30 days of credit available customers are taking 40 days in actual, as given in question customers are taking 10 more days.

**Explanation:**

30 days are official and 10 days for delay by customers.

$$\text{Trade receivables} = \frac{\text{Trade receivables turnover} \times \text{Credit sales}}{365}$$

$$\text{current trade receivable} = \frac{\$6,000,000 \times 40}{365} = \$657,534$$

Trade receivable amount is determined using trade receivable turnover formula. We need receivables amount to determine the cost of interest payment in the following steps.

**Explanation:**

Accountable receivable turnover formula is manipulated to calculate account receivable amount.

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$$\begin{aligned} \text{Average revised trade receivable period} &= (0.3 \times 15) + (0.7 \times 60) \\ &= 46.5 \text{ days} \end{aligned}$$

30 % of the customers will pay within 15 days to take early settlement discount and rest of 70% will pay on the expiry of 60 days credit term. 46.5 days figure will be used to determine the revised amount of trade receivable.

**Explanation:**

Weighted average is taken for 30% customers that would pay in 15 day and 70% customers that would pay in 60 days.

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$$\text{New level of credit sales} = \$6,000,000 \times 1.05\% = \$6,300,000$$

in the question it is given that credit sales will increase by 5%. therefore, under revised credit policy sales will be increase to \$6,300,000

**Explanation:**

To account for new credit sales those are increased by 5% from existing sales.

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$$\text{Trade receivables} = \frac{\text{Trade receivables turnover} \times \text{Credit sales}}{365}$$

$$\text{Revised trade receivable} = \frac{\$6,300,000 \times 46.5}{365} = \$802,603$$

In previous steps, we calculated revised sales and trade receivable days. By putting these values, we getting revised receivables amount of \$802,603. It will serve as an input towards determining cost of interest payments.

**Explanation:**  
New trade receivable level under new credit policy.

### Incremental financing cost

$$= (\text{Revised tr rec} - \text{Current tr rec}) \times \text{Interest expense}$$

Finally, we will put current receivables amount and revised receivables amount calculated earlier into the formula. Cost of interest is given in the question as  $\text{Incremental financing cost} = (802,603 - 657,534) \times 7\% = \$10,155$  overdraft cost is 7%. We need only additional cost of internet payment, as existing cost will be borne anyhow. Therefore, it is not relevant to the decision.

incremental administration cost will be determined using revised sales revenue as total sales have to be recovered from customers. 0.5% is incremental rate of given in the question the question.

|   | \$       |
|---|----------|
| Incremental in interest cost                        | (10,155) |
| Incremental administration costs (\$6.3m x 0.5%)    | (31,500) |
| Cost of discount (\$6.3m x 1.5% x 30%)              | (28,350) |
| Contribution from increased sales (\$6m x 5% x 60%) | 180,000  |
| Net benefit of credit policy change                 | 109,995  |

From 6.3 sales, 30% of the customers will pay early. those will receive 1.5% discount of sales.

Contribution per sales is 60%. 60% will be applied to incremental sales revenue \$6m x 5% = \$0.3m.

Existing sales revenue is not relevant for decision.

Most tricky part in credit policy evaluation is the incremental cost in interest payment.

## 7 Factoring

| Exam  | Q.no | Requirement   | Marks |
|-------|------|---|-------|
| 06/08 | Q3:b | Discuss the ways in which <u>factoring</u> and invoice discounting can assist in the management of accounts receivable.                       | 6     |
| 12/11 | Q2:d | Comment on the financial acceptability of the factor's offer and discuss the possible benefits to Bold Co of factoring its trade receivables. | 7     |

Financial institution providing factoring services is known as factor. Generally, factoring services are provided by insurance companies and banks.

Factor takes over organization's sales ledger administration. Factor performs following tasks on behalf on organization:

- Assesses creditworthiness of customers both existing and potential.
- Records sales transaction and raising invoice.
- Sends out statements of outstanding debts.
- Sends reminder letters for debts already overdue or close to due date.
- Prepares customer age analysis to identify late payers.
- Follow up customers for recovery of debt and may take legal action if they feel necessary.

Usually, factor provides advanced payment of up to 80% against sales made on credit. Rest of the 20% is paid upon receipt of payment from customer. Factor