Debtor Management
(Relevant to PBE Paper II – Management Accounting and Finance)

Eric Y.W. Leung, CUHK Business School, The Chinese University of Hong Kong

Accounts receivable forms quite a significant part of the current asset of an organization, especially those which substantially sell their products on credit. It is therefore important for an organization to devise proper debtor management policies. In PBE Paper II, the examination syllabus includes the topics of working capital management, students are expected to demonstrate sufficient knowledge in debtor management techniques such as early settlement discount, factoring and invoice discounting.

This article starts by introducing early settlement discount as a technique of debtor management and how an organization can carry out a simple evaluation on whether granting early settlement discount to customers is financially worthwhile. The article then goes on with a discussion on how factoring and invoice discounting can help manage accounts receivable.

Early Settlement Discount

Early settlement discount is simply an offer of a percentage discount to customers who will pay within the defined period after issue of the invoice. Normally, the discount is a small percentage to induce customers to pay earlier. This early settlement discount brings a number of benefits to the organization:

(i) **Reduction in the length of the cash conversion cycle**: Customers will be more willing to pay earlier to enjoy the benefits of discount. This reduces the average credit period and therefore the length of the cash conversion cycle which in turn improves the organization’s liquidity position.

(ii) **Reduction in investment in accounts receivable**: Assume that an organization has an overdraft agreement so that it can borrow at a cost of 7% p.a. If customers are paying 10 days earlier, the organization does not need to use the overdraft as a source of finance for the shortened 10 days since it already has the cash on hand. This effectively reduces the cost of financing accounts receivable and saves interest costs.

(iii) **Reduction in the risk of bad debts**: It is highly likely that customers will pay to organizations offering early settlement discount first, especially when customers are suffering from liquidity problems. This reduces the chance of having bad debts.

(iv) **Increase in sales**: It is arguable that granting early settlement discount can satisfy more customers with a lower cost and therefore brings additional sales to the organization.

Organizations should, however, bear in mind that granting early settlement discount is not without its cost:

(i) **Profits forgone**: The discount allowed reduces profits as the organization is effectively receiving less cash from sales in return for prompt payment.

(ii) **Additional administrative costs**: Granting early settlement discount makes the sales ledger more complicated as it is difficult to predict which customer will take up the discount. This increases the cost in running the debtor management function and preparing budgets.

As offering early settlement discount has both its benefits and costs, it is critical that the organization conducts a proper evaluation before making such decision. The following illustration gives an idea on how the organization evaluates financially whether the early settlement policy should be adopted:

Example:
Sweets Ltd. sells all of its candies on credit to wholesalers in Hong Kong. Sweets Ltd. makes annual credit sales of $350 million. Credit terms are 30 days. The selling price of each box of candy is $30 and the variable cost is $24 per box. Sweets Ltd. uses an overdraft agreement to finance its accounts receivable which has a cost of 15% per year. Sweets Ltd. has considered granting early settlement discount to its customers. If the customers are going to pay within 10 days after issue of invoices, they can then enjoy a 4% discount off from the credit sales. It is estimated that 60% of the customers will take the discount and after this policy, credit sales are expected to increase by 15%. Sweets Ltd. expects that the sales ledger will then be more complicated than before, therefore, the accounting system has to be upgraded with a cost of $0.5 million per year.

Students are advised to apply ‘relevant cost’ concepts which have been covered in management accounting courses to analyze this problem. The relevant benefits and costs are:

Benefits	Costs
• Interests saved from investment in accounts receivable • Contribution on extra sales	• Profits forgone from discount allowed • Additional administrative costs

The most difficult part in this analysis is the calculation of interests saved from investment in accounts receivable, which can be analyzed as follows:

<u>Step 1: Calculation of the finance costs under the existing policy</u>

Annual credit sales	= \$350 million	
Credit period	= 30 days	
Accounts receivable balance	= \$350 million x 30 / 365	= \$28.767 million
Finance costs	= \$28.767 million x 15%	= \$4.315 million

<u>Step 2: Calculation of the finance costs under the new policy with early settlement discount</u>

Annual credit sales = \$350 million x 115% = \$402.5 million

Credit period = 10 days if discount taken; 30 days if discount not taken

Accounts receivable balance
= \$402.5 million x 10 / 365 x 60% + \$402.5 million x 30 / 365 x 40%
= \$19.849 million

Finance costs = \$19.849 million x 15% = \$2.977 million

<u>Step 3: Calculation of the finance costs saved</u>

Finance costs saved = \$2.977 million - \$4.315 million = **\$1.338 million**

The next benefit is the contribution on extra sales. It is the additional contribution (i.e. sales – variable costs) which is relevant for this analysis. Contribution margin is 20% [(\$30 - \$24) / \$30]; therefore, the extra contribution from adopting the early settlement discount is **\$10.5 million** (\$350 million x 15% x 20%).

One of the costs for having early settlement discount is the profits forgone arising from the discount allowed:

Annual credit sales		= \$402.5 million
Percentage of customers taking the early settlement discount		= 60%
Discounts allowed each year	= \$402.5 million x 60% x 4%	= **\$9.66 million**

Another cost for having early settlement discount is the extra administrative fee which is **\$0.5 million** per year.

Summarizing the benefits and costs analyzed above produces the following net cash flows from granting early settlement discount:

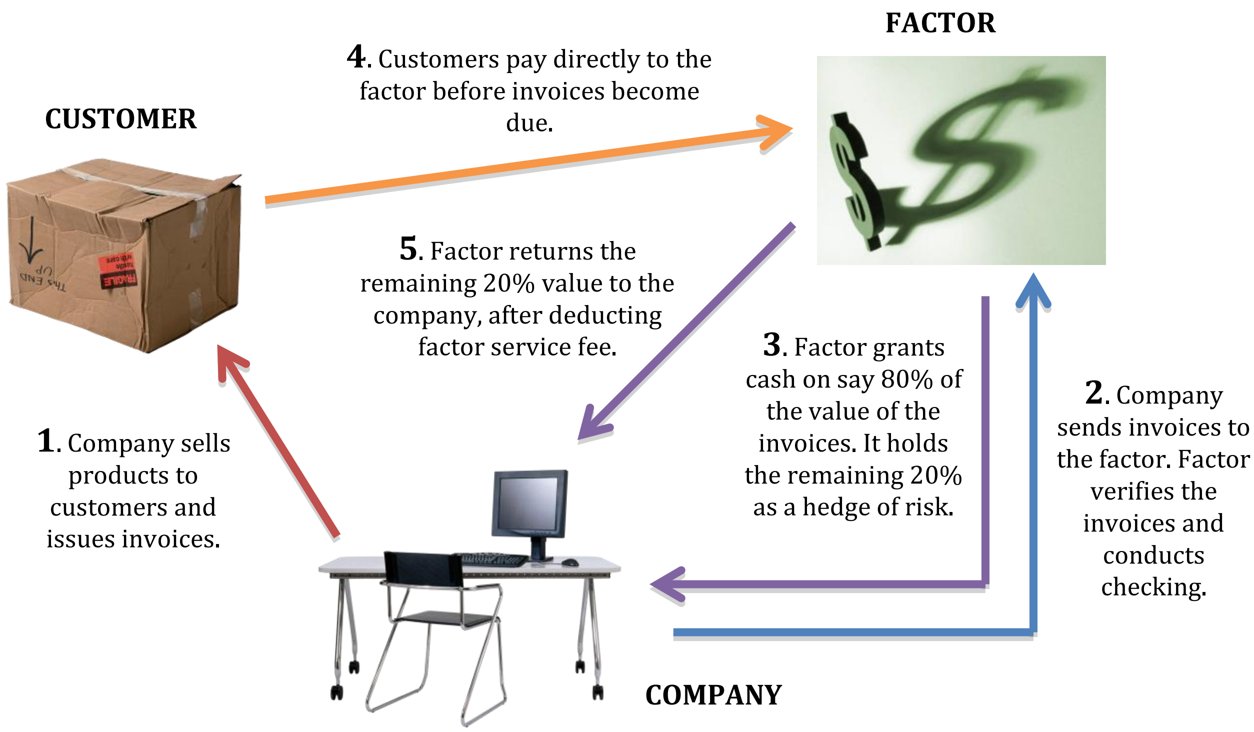
Benefits (in million)
- Interests saved from investment in accounts receivable: **\$1.338**
- Contribution on extra sales: **\$10.5**

Costs (in million)
- Profits forgone from discount allowed: **(\$9.66)**
- Additional administrative costs: **(\$0.5)**

The new policy is therefore expected to generate net cash inflows of $1.678 million per year. It is therefore financially worthwhile to implement the new policy with early settlement discount.

Factoring

Factoring is another technique of managing debtors. Other than the customers, there is another third party, normally termed as the factor, involved in the factoring arrangement. The factor will advance a portion of the value of the outstanding receivables to the company (which is sometimes called factor finance). The factor will then take responsibility for the debtor management function like the administration and collection of receivables. The common steps for a factor arrangement are detailed below:



The factor may protect the company from loss of bad debts, depending on the nature of its factor arrangement. If the arrangement is without recourse, the factor takes over the risk of loss from bad debts. In such case that the customers do not pay eventually, the factor will take action against the non-payer. Conversely, if the arrangement is with recourse and the customers do not pay, the company bears the loss. It is therefore important to highlight the terms of the factor arrangement to see whether the factor provides credit protection to the company. If the factor provides such protection, a significantly higher factor service fee will be charged.

Factoring provides a number of benefits to the company from the perspective of working capital management:

(i) **Less resources spent on administration and collection of receivables**: The company outsources the debtor management function to the factor; therefore, managers do not need to spend much time in administration and collection of receivables. The company can even save costs from running its own department in debtor management.

(ii) **More efficient and effective collection of debts**: The factor has much more expertise in the administration of receivables; therefore, it is highly likely that the factor can collect the debts more successfully than the company. This effectively reduces the incidence of having bad debts.

(iii) **Shortened cash conversion cycle**: With factoring, the company is able to obtain cash faster as the factor will advance the outstanding receivables to the company. With such receipt of cash, the company can pay its suppliers earlier to enjoy early payment discount and have sufficient cash to satisfy its needs in maintaining the optimum inventory levels.

Factoring however has its disadvantages. First, factoring may pose a negative effect on customer relations as the factor may 'chase' the customers for the outstanding debts in a vigorous manner. Second, the factor charges a fee slightly greater than the overdraft interest rate which may be considered expensive to the company.

It should be noted that there may potentially be two effects on the finance costs in the investment in accounts receivable under a factoring arrangement:

(i) Finance costs decrease for the entire amount of credit sales due to shortened collection period which in turn requires less investment in receivables;

(ii) Finance costs increase for the amount received in advance from the factor due to higher factor service charge than the overdraft interest rate.

Invoice Discounting

There is another technique to manage debtors which is known as invoice discounting. Invoice discounting is similar to factoring in the sense that the invoice discounter advances part of the values of the invoices from credit sales to the company so that the company can have cash on hand. There is however a significant difference between factoring and invoice discounting. The invoice discounter is not involved in the administration of receivables and the customers pay to the company but not to the invoice discounter. The invoice discounter can therefore be treated as 'behind the scene' in purchasing the receivables.

Conclusion

It is important to manage the accounts receivable well as this affects the liquidity and even the survival of the company. The organization may consider granting early settlement discount, factoring its outstanding debts to the factor or engaging in invoice discounting. These methods will effectively speed up the collection of cash to improve its working capital situation. Students are reminded that, other than the methods mentioned above, it is critical for the organization to implement proper credit evaluation for new customers and to devise appropriate credit terms in order to have a comprehensive debtor management policy.