

# ALTERNATIVE COLLECTION

RELEVANT TO PAPER F9

**Adopting a rigorous receivables collection system is essential to the ability of a company to pay its suppliers and employees, and even survive. Even where such a system is adopted and effective steps are taken to chase late payers, a company may still want to speed up the collection of cash from its customers.**

This article considers two methods a company could adopt in order to speed up the collection of cash from its customers. Additionally, worked examples show how these methods can be evaluated in order to decide whether or not they should be adopted given the circumstances particular to a specific company. This has been a common exam requirement over the years and, as there is no set approach or formula, students very often lack the confidence to attempt such questions.

#### Early settlement discount

An early settlement discount involves a company offering a small percentage discount to customers who pay within a defined short period. For instance a 1% discount may be offered to those who pay within 10 days.

The key advantage of offering such discounts is that customers take the discount and pay earlier than usual, so the company receives the cash sooner. It has also been argued that by effectively offering a choice of payment terms, the company is likely to satisfy more customers, and that by encouraging early payment, the risk of bad debts is reduced.

However, such discounts suffer from a number of key problems. First, it is difficult to decide on suitable discount terms. If the discount is made attractive to customers it is likely to be too costly to the company, whereas if the discount is not too costly to the company it is unlikely to be attractive to many customers. Second, the introduction of such a discount will make the management of the sales ledger more complex and costly to run and is likely to make the budgeting of receipts from customers more difficult, as the company could not be sure whether the discount will or will not be taken. The final – and in reality very often the biggest – problem is that all too often customers will abuse the discount by taking it despite not paying early. When this occurs, the company is left to decide between spending time and effort recovering what is often a small amount, or writing the discount off and encouraging such behaviour. Obviously, neither of these options is attractive.

#### Example 1

Melvin Co has a turnover of \$900,000 (90% of which is on credit) and receivable days are currently 42 despite the company only offering 30-days' credit. Melvin Co finances its receivables using its overdraft which has an annual interest cost of 8% and has a contribution margin of 30%.

Melvin Co is considering the introduction of an early settlement discount at the same time as extending their standard credit terms to 50 days. The company would offer customers a 1% discount for payment within 14 days. It is anticipated that 40% of customers will take the discount, while those that do not take the discount will keep to the new standard credit terms. As a result of the extended credit terms, credit sales are expected to rise by 10%. Due to the extra administration involved it is thought that administration costs will rise by \$10,000 per year.

# RECEIVABLES TECHNIQUES

## Required

Evaluate whether or not Melvin Co should offer the discount.

## Suggested approach

In some questions of this nature it may be worth doing some preliminary calculations. In this case, the calculation of credit sales and the anticipated increase in sales would be worth evaluating:

Existing credit sales	$\$900,000 \times 90\% = \$810,000$
Expected increase in credit sales	$\$810,000 \times 10\% = \$81,000$
Revised credit sales	$\$810,000 + \$81,000 = \$891,000$

Having carried out any preliminary calculations, an annual cost and benefit table should be constructed and each cost or benefit should be evaluated and put into the table.

The important annual benefit, and always the one that is hardest to calculate, is the annual finance saving on reduced receivables as the overdraft will have been reduced and hence an interest saving will arise. I suggest that you leave this calculation to last as it is best to calculate the other costs and benefits first to obtain the easy marks.

The second benefit to Melvin Co will be the contribution earned on the extra sales. This can be easily evaluated by multiplying the expected increase in credit sales by the contribution margin:  $\$81,000 \times 30\% = \$24,300$

EVALUATING A PROPOSED NEW RECEIVABLES COLLECTION SYSTEM HAS BEEN A COMMON EXAM REQUIREMENT OVER THE YEARS. AS THERE IS NO SET APPROACH OR FORMULA, STUDENTS VERY OFTEN LACK THE CONFIDENCE TO ATTEMPT SUCH QUESTIONS.

The costs to be evaluated are the additional administration cost which is given as \$10,000 per year, and the cost of the discount itself. The discount cost is a function of the total credit sales, the proportion of customers expected to take the discount and the percentage discount offered:  $\$891,000 \times 40\% \times 1\% = \$3,564$

The calculations carried out so far are relatively straightforward and can be shown on the face of the cost and benefit table. Hence, prior to calculating the annual interest saving on the reduced receivables, the cost and benefit table should be as follows:

<b>Annual benefits</b>		<b>\$</b>
Finance saving on reduced receivables		
– see Working 1		
Contribution on extra sales – $81,000 \times 30\%$	24,300	
<b>Annual costs</b>		
Extra administration costs	(10,000)	
Discount cost – $891,000 \times 40\% \times 1\%$	<u>(3,564)</u>	
<b>Net benefit/(cost)</b>		<u>          </u>

The annual finance saving on the reduced receivables can now be calculated.

## Working 1

### Existing situation:

Receivable days Given as 42 days  
Receivables \$93,205 ( $810,000 \times 42/365$ )

Note: remember to use the existing credit sales  
Annual finance cost \$7,456 ( $93,205 \times 8\%$ )

Note: receivables have not yet been received, so they make the overdraft higher than it would otherwise be, and so incur an interest cost.

THE BASIC SERVICE OFFERED BY A FACTORING COMPANY IS THE ADMINISTRATION AND COLLECTION OF RECEIVABLES. AS FACTORS HAVE SIGNIFICANT EXPERTISE IN THE MANAGEMENT OF RECEIVABLES, A FACTOR SHOULD BE ABLE TO COLLECT CASH FROM CUSTOMERS MORE QUICKLY THAN WOULD A COMPANY OPERATING ITS OWN SALES LEDGER.

## Revised situation

Receivable days  
 35.6 days  $((14 \times 40\%) + (50 \times 60\%))$

Note: the new receivable days are simply an average of the credit period taken by customers taking the discount, and the credit period taken by those refusing the discount weighted by the proportion of customers taking and refusing the discount respectively.

Receivables \$86,903  $(891,000 \times 35.6/365)$

Note: remember to use the revised credit sales. It could be argued that the credit sales should be reduced by the discount cost, otherwise you are calculating a finance cost on an amount which will never be collected. However, this adjustment makes little difference so is often ignored.

Annual finance cost \$6,952  $(86,903 \times 8\%)$

## Annual finance saving \$504 (7,456 - 6,952)

There are often quicker ways to calculate this finance saving. For instance, in this example the reduction in receivables could have been evaluated and the finance saving could then have been calculated from this figure:

Reduction in receivables \$6,302  $(93,205 - 86,903)$

Annual finance saving \$504  $(6,302 \times 8\%)$

However, the original approach shown should always work whatever complications may exist in the question.

Having calculated the annual finance saving, the annual cost and benefit table can now be completed and should be as follows:

<b>Annual benefits</b>	<b>\$</b>
Finance saving on reduced receivables – see <b>Working 1</b>	504
Contribution on extra sales $(81,000 \times 30\%)$	24,300
<b>Annual costs</b>	
Extra administration costs	(10,000)
Discount cost $(891,000 \times 40\% \times 1\%)$	<u>(3,564)</u>
<b>Net benefit/(cost)</b>	<b><u>11,240</u></b>

Note: In this example the finance saving on reduced receivables is small, as although some customers will be paying more quickly, others will be paying more slowly and the amount of credit sales has also increased. Indeed, an additional finance cost could arise as occurs in Question 3 of the Paper F9 *Pilot Paper*.

### Comment

Having calculated a net benefit, Melvin Co can be advised that the proposed early settlement discount appears worthwhile. Before a final decision is made, consideration should also be given to the other advantages and disadvantages of such a settlement discount which have been discussed previously but are not reflected in the above analysis.

### Factoring

The basic service offered by a factoring company is the administration and collection of receivables. As factors have significant expertise in the management of receivables, a factor should be able to collect cash from customers more quickly than would a company operating its own sales ledger. The factor will charge a fee which is usually calculated as a percentage of credit sales. Additionally, the factor will offer to protect a company against bad debts and will also lend money to the company against the security of its outstanding receivables.

If the factor protects the company against all bad debts then this is known as a non-recourse factoring agreement. Obviously the factor will charge a higher fee to cover the risk it is bearing

IF A COMPANY USES A FACTOR, THEN IT HAS EFFECTIVELY OUTSOURCED THE ADMINISTRATION AND COLLECTION OF ITS RECEIVABLES (THE SALES LEDGER FUNCTION) WHICH SHOULD CREATE SIGNIFICANT SAVINGS. THE NEED FOR MANAGEMENT CONTROLS REDUCED AS THERE IS NO NEED TO HIRE NEW STAFF, DEVELOP SYSTEMS, OR TRAIN STAFF.

and will demand to credit check customers before they are offered credit. If a factoring agreement is with recourse, the factor provides no protection against bad debts.

The amount a factor will lend to a company is based on its experience of managing receivables but may be up to 80% of the outstanding receivables. The charge for this borrowing is likely to be slightly in excess of the overdraft interest rate that the company pays.

If a company uses a factor, then it has effectively outsourced the administration and collection of its receivables (the sales ledger function) which should create significant savings. The need for management control is reduced as there is no need to hire new staff, develop new systems, train staff, etc. However, an executive of the company will have to manage the relationship with the factor. Factoring is often considered useful where a company is growing quickly, as management can attend to other issues and does not have to worry about the need to grow the sales ledger function. Additionally, as the factor will lend a percentage of the outstanding receivables, the amount the factor will lend grows automatically as the business grows. This growing source of finance can be very useful to a growing company where additional finance is often required and overtrading is a potential problem.

Criticisms of factoring include:

- ▣ the factor's charges may be high
- ▣ once a company has started to use a factor it is hard to rebuild its own sales ledger function
- ▣ the factor will collect receivables in a vigorous manner and this may damage the company's relationship with its clients
- ▣ the use of a factor may indicate that the company has cash flow problems (this last criticism is less relevant in the modern business environment where outsourcing of support functions has become very common).

#### Example 2

Velmin Co has a turnover of \$700,000. Receivable days are currently 48 despite the company only offering 30-days' credit and bad debts are currently 3% of turnover. Velmin Co finances its receivables using its overdraft which has an annual interest cost of 8%.

Velmin is considering the use of a factor. The factor would charge 4% of turnover for a non-recourse agreement and would expect to reduce receivable days to 34 and bad debts to 2%. The factor would lend Velmin 75% of the outstanding receivables and would charge Velmin 1% above their current overdraft interest cost. It is anticipated that using the factor would reduce administration costs by \$6,000 per annum.

#### Required

Evaluate whether or not Velmin Co should use the factor.

#### Solution

	\$
<b>Annual benefits</b>	
Finance saving on reduced receivables – see <b>Working 1</b>	1,659
Administration savings	6,000
Bad debts saved ( $700,000 \times 3\%$ )	21,000
<b>Annual costs</b>	
Factor's fee ( $700,000 \times 4\%$ )	<u>(28,000)</u>
<b>Net benefit/(cost)</b>	<b><u>659</u></b>

**Table 1** on the following page shows **Working 1**.

#### Comment

Having calculated a net benefit, Velmin Co can be advised that using the factor appears worthwhile. However, the net benefit is very small, so before a final decision is made the estimates used in the evaluation should be checked and consideration should be given to the other advantages and disadvantages of using a factor which have not been quantified.

TABLE 1: WORKING 1, EXAMPLE 2

**Working 1****Existing situation**

Receivable days	48 days – given
Receivables	\$92,055 ( $700,000 \times 48/365$ )
Annual finance cost	\$7,364 ( $92,055 \times 8\%$ )

**Revised situation**

Receivable days	34 days – given
Receivables	\$65,205 ( $700,000 \times 34/365$ )
Annual finance cost	
– on receivables financed by the factor	\$4,401 ( $65,205 \times 75\% \times (8\% + 1\%)$ )
– on receivables still financed by overdraft	\$1,304 ( $65,205 \times 25\% \times 8\%$ )
– Total	\$5,705 ( $4,401 + 1,304$ )

**Annual finance saving****\$1,659 (7,364 - 5,705)****Notes**

- 1 As the agreement with the factor is a non-recourse agreement the total bad debts will be saved as far as Velmin Co is concerned. The remaining 2% of bad debts will simply be a cost to the factor.
- 2 The assumption used in questions of this nature is that the company borrows the maximum available from the factor. In reality, as the finance provided by the factor is more costly, a company will probably only use the finance offered by the factor when they are at – or close to – their overdraft limit.

**Summary**

Working capital management, and in particular the management of receivables and the evaluation of proposed new methods of managing receivables, has been a popular exam topic. When carrying out these evaluations, a structured approach should be adopted so that a marker can easily follow a student's thought process and give credit where it is due even if the numbers have, at some stage, gone awry.

The approach suggested in **Example 1** looks very long, because considerable explanation has been included. **Example 2** adopts the same approach even though the scenario is different and demonstrates that those confident with such an approach can quickly and easily generate a concise, logical and, I hope, accurate answer to any question of this nature.

**REFERENCE**

- ▣ *Corporate Finance – Principles and Practice*, Deniz Watson and Antony Head

**William Parrott is a lecturer at Kaplan Financial**