## BBPW3203 FINANCIAL MANAGEMENT II

Topic 1<br>Short-term Financing

## Content

1.1 Short-term financing
1.2 Current assets financing policy
1.3 Advantages and disadvantages of short-term financing
1.4 Main sources of short-term financing
1.5 Cost benefit analysis for credit terms
1.6 Accounts payable management

## Learning Objectives

By the end of this topic, you should be able to:

1. Define short-term financing;
2. Explain the differences between temporary and permanent current assets;
3. Elaborate how firms finance their assets and manage costs associated with each type of financing;
4. Differentiate between sources of short-term financing available and their respective costs; and
5. Analyse alternative sources of financing.

### 1.1 SHORT-TERM FINANCING

- Firms use several types of financing to meet their capital requirements.
- Some companies use current liabilities as a major source of financing for current assets, while others depend more heavily on long-term debt and equity.

Short-term credit is defined as any liability originally scheduled for repayments within a year.
$>$ Therefore, short-term financing is used primarily as a tool to finance accounts receivables and for building up inventory.
$>$ These short-term financial needs are usually covered by short-term loans as well as other short-term sources of financing.

### 1.2 CURRENT ASSETS FINANCING POLICY

In order to determine a firm's current assets financing policy, we look at current assets from two perspectives:

## (a) Temporary Current Assets

- There are some periods in the economy in which a firm may accumulate more assets than in other periods.
- Seasonal fluctuations and perhaps a cyclical nature of the business affect sales and inventory.
- When the economy is strong, businesses must build up current assets in order to meet rising demand.
- Such accumulation of current assets to meet seasonal fluctuations is defined as temporary current assets.


### 1.2 CURRENT ASSETS FINANCING POLICY

In order to determine a firm's current assets financing policy, we look at current assets from two perspectives:
(b) Permanent Current Assets

- Other types of assets that the company has are permanent current assets.
- These current assets are maintained all the time including during periods when the economy slacks off.
- After the boom, the firm will provide credit sales (accounts receivables) as well as maintain a minimum level of inventory to meet continuous demand from customers all year round.
- Hence, these types of current assets are considered permanent current assets.


### 1.2 CURRENT ASSETS FINANCING POLICY

In consideration of the proportion between short-term and longterm financing needs for a given firm, there are three different approaches to determining the best current asset financing policy.

They are:
(i) Conservative approach;
(ii) Maturity matching or self-liquidating approach; and
(iii) Aggressive approach.

### 1.2 CURRENT ASSETS FINANCING POLICY

### 1.2.1 Conservative Approach

- In this model, all the permanent capital (long-term debt, equity plus spontaneous financing) is being used to finance all permanent asset requirements and also part of the seasonal needs.


Figure 1.1: Conservative financing policy

- Based on the model, the firm uses a small amount of short-term debt to finance temporary current assets.
- The balance is financed through the sale of some marketable securities that the firm has invested in for this purpose.
- It is a very safe, conservative current asset financing policy.


### 1.2 CURRENT ASSETS FINANCING POLICY

### 1.2.2 Maturity Matching Approach

- In this model, the firm tries to match the maturity of assets and liabilities.
- Figure 1.2 shows the maturity structure of a firm's assets and liabilities that exhibit exact matching.
- This approach will ensure or minimise the risk that a company will be unable to pay off its maturing obligation in due time.


Figure 1.2: Maturity matching financing policy
Firms use short-term and long-term sources of financing, but not with an exact maturity matching because:
(a) There is uncertainty about the lives of assets, so it is impossible to match exactly the maturity of assets and liabilities; and
(b) Some common equity must be used; common equity has no maturity.

### 1.2 CURRENT ASSETS FINANCING POLICY

### 1.2.3 Aggressive Approach

- In this approach, a part of permanent current assets and the temporary current assets are being financed by short-term sources.
- The degree of aggressiveness depends on the proportion of permanent current assets and/or fixed assets that is financed by short-term financing instruments (the more aggressive approach, the lower the dashed line). In this non-conservative position, the firm would be subject to dangers of rising interest rates as well as to loan renewal problems.
- However, some firms prefer this position because short-term debt is often cheaper than long-term debt. The aggressive financing policy is shown in Figure 1.3.


Figure 1.3: Aggressive financing policy

### 1.3 ADVANTAGES AND DISADVANTAGES OF SHORT-TERM FINANCING

- The use of short-term financing offers firms a number of advantages and disadvantages. Table 1.1 compares both long-term and short-term loans.

Table 1.1: Short-term and Long-term Finance

|  | Long-term Loan | Short-term Loan |
| :---: | :---: | :---: |
| Fast Approval |  | $\checkmark$ |
| Flexibility |  | $\checkmark$ |
| Cheap |  | $\checkmark$ |
| Low Risk | $\checkmark$ |  |

### 1.3 ADVANTAGES AND DISADVANTAGES OF SHORT-TERM FINANCING

### 1.3.1 Quickness

- It is faster and easier to obtain a short-term loan than a longterm loan.
- Lenders will conduct a more thorough financial examination before they approve a long-term loan compared with a shortterm loan.
- Long-term loans have to be cemented in considerable detail, because a lot can happen during the life of a 10 to 20 year loan.
- A short-term loan, on the other hand, can be approved simply by looking at a firm's credit worthiness.


### 1.3 ADVANTAGES AND DISADVANTAGES OF SHORT-TERM FINANCING

### 1.3.2 Flexibility

- If the need for funds is not periodic, firms might prefer shortterm financing for three reasons.
- They are:
(a) Processing costs are lower for short-term debt than for longterm debt;
(b) If the firm decides to repay the long-term debt earlier, longterm loans include a prepayment provision, which makes longterm debt more expensive; and
(c) Long-term agreements always contain provisions, or obligations, which are specified in the contract. These restrictions may constrain the firm's future actions.


### 1.3 ADVANTAGES AND DISADVANTAGES OF SHORT-TERM FINANCING

### 1.3.3 Cost Consideration

- Interest rates are usually lower on short-term debts than longterm debts.
- This is because the yield curve is normally upward sloping.
- A loan with a longer maturity period will have a higher interest rate than a loan with a shorter maturity period.restrictions may constrain the firm's future actions.


### 1.3 ADVANTAGES AND DISADVANTAGES OF SHORT-TERM FINANCING

### 1.3.4 Risk Consideration

- Though short-term financing offers a number of benefits, there are also disadvantages.
- Short-term credit is riskier than long-term credit because:
(a) Interest rates on a long-term loan are usually stable over the period of the loan, while short-term loans are subject to widely fluctuating interest rates; and
(b) If a firm borrows heavily in a period of time in which a recession is recorded, the company might be unable to repay the loan and would then be forced into bankruptcy.


### 1.4 MAIN SOURCES OF SHORT-TERM FINANCING

- Short-term financing can be categorised into three basic forms:

1. spontaneous financing (accruals and accounts payable),
2. non-spontaneous (bank loans and commercial papers), and
3. alternative sources of financing like factoring, accounts receivable financing, inventory financing and others.

- Figure 1.4 shows the main sources of short-term financing.


### 1.4 MAIN SOURCES OF SHORT-TERM FINANCING



Figure 1.4: Sources of short-term financing

### 1.4 MAIN SOURCES OF SHORT-TERM FINANCING

1. Spontaneous Sources of Short-term Financing

- Spontaneous sources of financing arise from the normal operations of the firm, most notably accruals and accounts payable.
- These spontaneous financing sources also have no explicit costs attached to them.
- Therefore, these types of financing are more attractive to firms for daily operations.
- This kind of financing is unsecured and does not require the pledge of specific assets as collateral.

Accruals are a form of spontaneous short-term financing. Accruals are liabilities for services received for which payment has yet to be made.

Accounts payable, on the other hand, is a form of finance generated from credit purchases and represents a major source of unsecured short-term financing.

### 1.4 MAIN SOURCES OF SHORT-TERM FINANCING

1. Spontaneous Sources of Short-term Financing

- Let us take a look at both concepts in detail.
(a) Accruals
- An accrual is a kind of debt that has been incurred or accumulated over a period of time, but has not been paid yet.
- In the balance sheet of a company, we can find accrued wages and/or accrued income taxes, which increase automatically as the company expands its operations.
- This type of debt is free and the company can use it without having to pay any explicit interest. The most common items accrued are taxes and wages.


### 1.4 MAIN SOURCES OF SHORT-TERM FINANCING

## 1. Spontaneous Sources of Short-term Financing

(b) Accounts Payable or Trade Credit

- The other spontaneous source of short-term financing is derived from accounts payable, which is commonly known as trade credit.
- Accounts payable are the obligation due to trade partners. The existence of accounts payable is due to customers who prefer to receive goods now and pay later, so the seller offers delivery of goods or services prior to receiving cash payment. Instead of collecting money from the buyer, the supplier provides a sort of loan by extending credit terms to the buyer.
- Since accounts payable serve as a source of short-term financing, the accounts payable system should be seen as more than just a bill paying mechanism as this can be easily controlled and well managed together with inventory and accounts receivables.
- Significantly, accounts payable provides a firm with an option to improve the company's cash position. This holds especially for small businesses, which are likely to have limited access to capital. As a result, small businesses often rely heavily on the accounts payable as their primary source of short-term financing.


### 1.4 MAIN SOURCES OF SHORT-TERM FINANCING

1. Spontaneous Sources of Short-term Financing
(b) Accounts Payable or Trade Credit
(i) Size of Trade Credit

The amount of credit provided by the supplier depends on two main factors. The first factor is the level of sales and purchases on credit. The second factor is the time difference between invoice date and payment date. The length of time period provided to settle the account payable differs across companies depending on the supplierÊs credit policy.

## (ii) Credit Terms

Credit terms associated with accounts payable provide crucial negotiating points for small business operators, and as such are well worth mastering. Table 1.2 defines the main factors of credit terms.

### 1.4 MAIN SOURCES OF SHORT-TERM FINANCING

1. Spontaneous Sources of Short-term Financing
(b) Accounts Payable or Trade Credit
(iii) Net Period without Cash Discount

When credit is extended to customers, the suppliers specify the period of time allowed for the payment.
For example, the terms net 30, indicates that an invoice or bill must be settled within 30 days. If a supplier's bill is on a monthly basis, it might require such terms as net 15/EOM. This implies that all goods shipped before the end of the month must be paid by the 15th of the following month.
(iv) Net Period with Cash Discount

- In addition to extending credit terms, a supplier may also use cash discount as a strategic tool to collect their account receivables earlier than credit terms specified by offering cash discount.


### 1.4 MAIN SOURCES OF SHORT-TERM FINANCING

## Example 1.4

The term $1 / 10$, net 30 indicates that a supplier offers a one per cent cash discount if the bill is paid within 10 days of the invoice date. Otherwise, the customer is obliged to pay the full list price (quoted price) within 30 days of the invoice date. Hence, they are not entitled to the privilege of a discount price.

### 1.4 MAIN SOURCES OF SHORT-TERM FINANCING

## 1. Spontaneous Sources of Short-term Financing

(b) Accounts Payable or Trade Credit

Figure 1.5 shows the credit terms and payment settlement (2/10 net 30 ).


$$
\text { Cost of additional } 20 \text { days }=1000-980=20
$$

Figure 1.5: Credit terms and payment settlement

### 1.5 COST BENEFIT ANALYSIS FOR CREDIT TERMS

- Using Example 1.5, you will learn how to calculate the cost of taking a cash discount compared with giving up the cash discount and taking extended trade credit.


## Example 1.5

A company buys raw materials from a supplier with credit terms of $2 / 10$, net 30. The list price per unit of raw material is RM100. Therefore the true price is RM100 - RM2 $=$ RM98. The remaining RM2.00 is considered as the financing charge if taking extended credit terms.

### 1.5 COST BENEFIT ANALYSIS FOR CREDIT TERMS

(a) Taking the Cash Discount
(i) Pay on the last day of the discount period.
(ii) Amount paid equals cost minus discount.

RM100.00- RM2.00 = RM98.00.
The remaining RM2.00 is considered as the financing charge if taking the extended term.

$$
\text { List Price }=\text { True Price }+ \text { Financing Charge }
$$

### 1.5 COST BENEFIT ANALYSIS FOR CREDIT TERMS

(b) Giving up the Cash Discount and Taking Extended Trade Credit
(i) Pay entire amount on the last day of the credit period.
(ii) There is an implicit cost of giving up the cash discount. The cost can be calculated as:

Annual financing cost (AFC) of forgoing a cash discount $=\frac{X}{100-X} \times \frac{360}{Z-Y}$

Where,
$X$ is the discount per cent
$Y$ is number of days allowed to settle the bill
$Z$ is the number of days for credit outstanding
Therefore, the annual financing cost of forgoing a cash discount
$=\frac{2}{(100-2)} \times \frac{360}{30-10}$
$=0.36734$

### 1.5 COST BENEFIT ANALYSIS FOR CREDIT TERMS

(b) Giving up the Cash Discount and Taking Extended Trade Credit

To obtain effective annual cost rate (EAR) of trade credit, we use th following relationship:

$$
\mathrm{EAR}=(1+\mathrm{r} / \mathrm{m})^{\mathrm{m}}-1
$$

Where,

$$
\begin{array}{ll}
\mathrm{m} & =\text { Compounding period } \\
\mathrm{r} & =\text { Nominal financing cost } \\
\mathrm{r} / \mathrm{m} & =\text { Periodic rate }
\end{array}
$$

EAR

$$
\begin{aligned}
& =(1+0.36734 / 360)^{360}-1 \\
& =44.374 \%
\end{aligned}
$$

### 1.5 COST BENEFIT ANALYSIS FOR CREDIT TERMS

- Advantages and Disadvantages of Trade Credit

Table 1.3: Advantages and Disadvantages of Trade Credit

## Advantages

## Disadvantages

- Trade credit provides the firm an avenue for solving financing challenges without incurring the cost.
- Accounts payable is stretchable, hence increases cash availability.
- Trade credit is a continuous form of credit as there is no need to formally arrange financing.
- If a firm stretches its accounts payable, the firm's reputation might be at stake.
- The supplier might impose a higher selling price for future purchases.


### 1.6 ACCOUNTS PAYABLE MANAGEMENT

- The main objective of accounts payable management is to decide on the payment date.
- Which options will be taken depends on two offsetting factors.
- On the one hand, there are the benefits from holding on to the cash; on the other hand, there are also the costs.
- The best option is found by evaluating and comparing the benefits and the costs inherent in each option.
- Although the solution might look simple, it can be rather complex, especially in the case of late payments, because of the presence of the indirect subjective costs arising from broken relationships, late payer treatment and so on.

