READING:

Chapter 8: Source of Short-Term Financing

1. Trade Credit

Trade credit is one of the main source of short-term finance for a business. Current assets such as raw materials may be purchased on credit with payment terms normally varying from between 30 to 90 days.Trade credit therefore represents an interest free short-term loan.

In a period of high inflation, purchasing via trade credit will be very helpful in keeping costs down. However, it is important to take into account the loss of dissounts suppliers offer for early payment.

Unacceptable delays in payment wil worsen a company's credit rating and additional credit may become difficult to obtain.

1.1.Cash discount policy

Cash discounts are not reductions in the agreed sales price of the goods or services at the time of the transaction – they are a reduction in the amount to be paid by a credit customer (to whom you have given credit terms) if that customer pays within a specified time period.

A cash discount is intended to persuade credit customers to pay their bills quickly – not an incentive to make the purchase.

1.2.Net trade credit

Trade credit means many things but the simplest definition is an arrangement to buy goods and/or services on account without making immediate cash or cheque payments.

Trade credit is a helpful tool for growing businesses, when favourable terms are agreed with a business's supplier. This arrangement effectively puts less pressure on cashflow that immediate payment would make. This type of finance is helpful in reducing and managing the capital requirements of a business.

Positive Net Trade Credit: Account receivables > Account payable

Negative Net Trade Credit: Account receivables < Account payable

2. Bank Credit

Bank credit is the aggregate amount of credit available to a person or business from a banking institution. It is the total amount of funds financial institutions provide to an individual or business. A business or individual's bank credit depends on the borrower's ability to repay and the total amount of credit available in the banking institution.

Banks provide funds for the financing of seasonal needs, product line expansion, and long-term growth.

Prime rate

- Be the rate a bank charges its most creditworthy customers.
- Usually increases as a customer's credit risk gets higher.
- At a certain slack loan periods or in a tight international competition, banks charge top customers less than the prime rate.

2.1. Compensating balances

Compensating balance – a minimum average account balance that must be maintained by the business customer in loans services.

The customer will either pay a fee or maintain a compensating balance in relation to loans or other services. The required compensating balance is also computed as a percentage of the customer loans outstanding (20%) or bank commitment toward future loans (10%).

Example 1:

- Borrow $100,000
- Interest rate: 8%
- 20% compensating balance requirement

Paying $8,000 interest to use $80,000 in funds

The effective interest rate is 10% (not 8%)

$$\textit{Amount to be borrowed} = \frac{\textit{Amount needed}}{1-c}$$

Where:

c : compensating balance expressed as a decimal

Example 2:

A firm needs $150,000, the compensating balance is 20%. What is the borrowings ?

$$\text{Amount to be borrowed} = \frac{Amount\ needed}{1-c}$$

$$\text{Amount to be borrowed} = \frac{150{,}000}{1-20\%} = \$187{,}500$$

➔ The borrowings is $187,500.

2.2. Cost of Commercial bank financing

$$\textbf{\textit{Effective rate}} = \frac{\textbf{\textit{Interest}}}{\textbf{\textit{Principal}}} \times \frac{\textbf{\textit{Days in a year}}\ (\mathbf{360})}{\textbf{\textit{Day loan is outstanding}}}$$

Example 3:

$160 interest on a $3,500 loan for one year. What is the effective rate of the same loan for 120 days ?

$$\textit{Effective rate} = \frac{Interest}{Principal} \times \frac{Days\ in\ a\ year\ (360)}{Day\ loan\ is\ outstanding}$$

$$\text{Effective rate} = \frac{160}{3{,}500} \times \frac{360}{120} = 0{,}137 = 13{,}7\%$$

➔ The effective rate is 13,7%

Cost of Commercial bank financing (cont'd)

$$\textbf{\textit{ffective rate}} = \frac{\textbf{\textit{Interest}}}{\textbf{\textit{Principal}}-\textbf{\textit{Interest}}} \times \frac{\textbf{\textit{Days in a year}}\ (\mathbf{360})}{\textbf{\textit{Day loan is outstanding}}}$$

Example 4:

$160 interest deducted in advance on a $3,500 one year loan. What is the effective rate rate on this discounted loan?

$$\textit{Effective rate} = \frac{Interest}{Principal-Interest} \times \frac{Days\ in\ a\ year\ (360)}{Day\ loan\ is\ outstanding}$$

$$\text{Effective rate} = \frac{160}{3{,}500-160} \times \frac{360}{360} = 0{,}0479 = 4{,}79\%$$

➔ The effective rate is 4,79%

2.3. Interest costs with compensating balances

$$\textit{Effective rate with compensating balances} = \frac{\textit{Interest rate}}{1-c}$$

Example 5:

$60 interest on a $1,000 one year loan, but can be use only $800 of the funds. What is the effective rate rate on this loan?

Effective rate with compensating balances = $\frac{\text{Interest rate}}{1-c}$

Effective rate with compensating balances = $\frac{60/1000}{1-(\frac{1000-800}{1000})} = 7.5\%$

➔ The effective rate rate on this loan is 7.5%

2.4. Rate on Installment loans

$$\textit{Effective rate on installment loan} = \frac{2 \times \textit{Annual number of payment} \times \textit{Interest}}{(\textit{Total number of payments}+1)\times \textit{Principal}}$$

Example 6 :

Borrow $1,000 on a 12 months installment basis at the interest rate of 6%. Regular monthly payment applies to interest and principal. What is the effective rate rate on this loan?

$$\text{Effective rate on installment loan} = \frac{2 \times \text{Annual number of payment} \times \text{Interest}}{(\text{Total number of payments}+1)\times \text{Principal}}$$

$$\text{Effective rate on installment loan} = \frac{2*12*6\%}{(12+1)*1000} = 0.01\%$$

➔ The effective rate rate on this loan is 0.01%

2.5. Effective rate with compensating balance

$$\textbf{Effective rate} = \frac{\textit{Interest}}{\textit{Principal}-\textit{Compensating balance in dollars}} \times \frac{\textit{Days in a year (360)}}{\textit{Day loan is outstanding}}$$

Example 7:

A company plams to borrow $2 million for a year, there is a 20% compensating balance requirement, the stated interest rate is 12%. Calculate the effective rate?

$$\textbf{Effective rate} = \frac{\boldsymbol{Interest}}{\boldsymbol{Principal - Compensating\ balance\ in\ dollars}} \times \frac{\boldsymbol{Days\ in\ a\ year\ (360)}}{\boldsymbol{Day\ loan\ is\ outstanding}}$$

$$\text{Effective rate} = \frac{12\% \times 2{,}000{,}000}{2{,}000{,}000 - 20\% \times 2{,}000{,}000} \times \frac{360}{360} = 0{,}15 = 15\%$$

➔ The effective rate is 15%

3. Financing through Commercial Paper and Foreign Borrowing

3.1. Commercial Paper

Commercial Paper is an unsecured, short-term debt instrument issued by a corporation, typically for the financing of accounts receivable, inventories and meeting short-term liabilities.

Maturities on commercial paper is from 90 days to 364 days.

Categories of commercial paper:

- **Finance paper** (Direct paper) is a commercial paper sold directly to the lender.
- **Dealer paper** (industrial paper) is a commercial paper distributed to public through an intermediate dealer network to distribute the paper.

  Advantages of commercial paper:

- Commercial paper represents one way for large firms to borrow money for the short term.
- It has high liquidity as it is a freely transferable instrument.
- The cost of commercial paper is cheaper than a bank loan.

– Limitations of CP.

- It is available only to a few selected profitable companies. (Only firms which are financially sound and have high credit ratings can raise money through CP. New firms are not in a position to raise funds by this method.)
- The amount of money that can be raised through commercial paper is limited.

3.2. Foreign Borrowing

Eurodollar loans

a. **Eurodollar -** US dollar deposited in a bank outside the US and used for trade within Europe. Euro used as a prefix for any currency held in a country where it is not the national currency (ex: Euroyen, Euroeuro)

Eurodollar loans - Large short-term loans demoninated in dollars and made by a foreign bank holding dollar deposits. (ex: If a British subsidiary borrowed US dollar in UK, would constitute a eurodollar loan.) It is usually unsecured, made in multiples of $1 million and for terms of one year or less. It also allows MNCs (Multinational Corporations) to arrange large loans quickly, confidentially and at attractive interest rates.

b. **LIBOR** (*London Interbank Offered Rate)*

Average interest rate estimated by major banks in London at which thay would make short-term loans to each other.

Basically, it represents the cost of funds – an average of what banks believe they would have to pay to borrow a "reasonable" amount for a specified short preiod.

LIBOR is compiled by the British Banker's Association in conjunction with Reuters and are released for 15 different time periods and for 10 currencies every day (including US dollar, Canadian dollar, British pound, Euro, Swiss france, Danish kroner, Swedish krona, Japanese yen, New Zealand dollae, Australian dollar)

Importance of LIBOR :

- LIBOR is viewed as the most important benchmark in the world for short-term interest rates
- Banks use LIBOR interest rates as the base rate when setting the interest rates for loans, savings and mortgages.
- It currently serves as a benchmark rate for millions of contracts worth billions of dollars written every day over the world

4. Account Receivable Financing

Accounts receivable financing, also known as accounts receivable factoring, is when businesses sell their invoices to a third party, known as a factoring company, in exchange for immediate cash. It's a common form of financing that businesses use to improve cash flow and eliminate the wait on slow-paying customers, among many other reasons.

The financial receivables account has three main contents :

- Pledging account receivable.
- Factoring receivable.
- Asset-backed public offering.

4.1. Pledging account receivale :

Accounts receivable pledging occurs when a business uses its accounts receivable asset as collateral on a loan, usually a line of credit. When accounts receivable are used as collateral on a loan, the lender typically limits the amount of the loan to either.

The lending institution will stipulate which of the accounts receivable is of sufficient quality to serve as collateral for a loan.

- A firm can borrow 60 to 90 percent of the value of the acceptable collateral.
- the lender have a full recourse against the borrower if any of the account go bad.
- the interest rate in a receivable borrowing is generally in excess of the prime rate.

The factors affecting the loan percentage :

- The creditworthiness of its account receivable.
- The financial strenght of the borrowing firm.

4.2. Factoring Receivable :

Factoring receivables is the sale of accounts receivable for working capital purposes. A company will receive an initial advance, usually around 80% of the amount of an invoice when the invoice is purchased by the lender. When the invoice is collected, the remaining 20% (less a fee) will be paid to the borrower.

The factoring firm (finance company) generally does not have recourse against the seller of the receivables .

As the factoring firm accepts an account, it may forward funds immediately to the seller.

The customers will be instructed to remit the proceeds directly to the purchaser of the account.

5. Inventory Financing

5.1. Factors influencing use of inventory for financing:

- Marketability of the pledged goods
- Associated price stability
- Perishability of the product
- Degree of physical control that the lender can exercise over the product.

5.2. Stages of Production

- Raw materials and finished goods usually provide the best collateral
- Goods in process may qualify only a small percentage of the loan

5.3. Nature of lender control

Provides greater assurance to the lender but higher administrative costs

Types of Arrangements:

- Blanket inventory liens
  - Lender has a general claim against inventory
- Trust receipts (floor planning)
  - An instrument – the proceeds from sale in trust for the lender
- Warehousing
  - A receipt issue – goods can be moved only with the lender's approval
  - Public warehousing (with a warehousing firm)
  - Field warehousing (on the borrowers premises)

6. Hedging to reduce Borrowing Risk:

Engaging in a transaction that partially or fully reduces a prior risk exposure

The financial futures market

- Allows the trading of a financial instrument at a future point in time
- No physical delivery of goods
- In selling a Treasury bond futures contract, the subsequent pattern of interest rates determine if it is profitable or not
- The purchase price of the futures contract is established at the time of the initial purchase transaction

If interest rates increase:

- The extra cost of borrowing money to finance the business can be offset by the profit of the futures contract.

If interest rates decrease:

- There will be a loss on the futures contract as the bond prices rise
- This is offset by the lower borrowing costs of the financing firm