C. WORKING CAPITAL MANAGEMENT

1. The nature, elements and importance of working capital
2. Management of inventories, accounts receivable, accounts payable and cash
3. Determining working capital needs and funding strategies

The Nature, Elements and Importance of Working Capital

What is Working Capital?

Working capital is the net of current assets minus current liabilities. That is working capital is equal to the value of raw materials, work-in-progress, finished goods inventories and accounts receivable less accounts payable.

What is the aim of Working Capital Management?

The aim of working capital management is to achieve balance between having sufficient working capital to ensure that the business is liquid but not too much that the level of working capital reduced profitability.

What is meant by the term Liquidity?

Liquidity means that the business has sufficient inventory and cash so that it can trade without its cash or inventory depleting.

Why is Working Capital Management important?

Working capital management is essential for the long-term success of a business. No business can survive if it cannot meet its day-to-day obligations. A business must therefore have clear policies for the management of each component of working capital.

Management of Inventories, Accounts Receivable, Accounts Payable and Cash

Can the level of working capital be fixed for all organisations and why?

- Different industry types require different levels of working capital. Service industries need little to no inventory whereas retailers need more. Depending on the retailer’s business their inventory will also vary. Manufacturers will probably require more because they need raw material stocks, work-in-progress and finished goods. Retailers may sell for cash therefore having few receivables and producers may have trade customers and have greater receivables.
• If supply deliveries are uncertain the level of inventory will be greater.
• If the level of activity increases specifically sales then inventory, receivable and payables will increase.
• The company’s operating cycle will also determine the level of working capital

What is the Operating Cycle?

The operating cycle is the length of time between the company’s outflow on raw materials, wages and other expenditures and the inflow of cash from the sale of goods.

What are the characteristics of the Operating Cycle?

The operating cycle is made up of three elements:

- The inventory turnover days
- The average receivable collection days
- The average payable days

How is the Operating Cycle calculated?

Inventory days + receivable days - payable days = operating cycle

- Inventory days = Inventory / Cost of sales x 365days
- Receivable days = Receivables / Sales x 365
- Payable days = Payables / Cost of sales x 365

What is the importance of the Operating Cycle?

The operating cycle is important because it determines the amount of working capital a business needs. If you can have the operating cycle you will have the working capital requirement of the business. If the turnover period for inventories and accounts receivable lengthen, or the payment period to accounts payable shortens, then the operating cycle will lengthen and the investment in working capital will increase.

What is Overtrading?

Overtrading is the term applied to a company which rapidly increase its turnover without having sufficient capital backing. Overtrading is risky because short-term finance can be withdrawn relatively quickly if creditors lose confidence in the business or if there is a general tighten in the economy. The problem with overtrading is not that the company is unprofitable it is that the company has simply run out of cash.

What are the Characteristics of Overtrading?

- More intensive utilisation of existing fixed assets
- More intensive use of working capital
- Reliance more heavily on short-term sources such as overdraft and trade creditors
- Increase in debtors as stock increases
- Declining liquidity

**How can a overtrading be measured?**

Overtrading can be measured using Liquidity Ratios:

- **Current Ratio** = \( \frac{\text{Current Assets}}{\text{Current Liabilities}} \)
  A measure of how much of total current assets are financed by current liabilities. A ratio of 2:1 or greater is considered a safe measure.
- **Quick Ratio** = \( \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}} \)
  A measure of how well current liabilities are covered by liquid assets. A ratio of 1:1 means that we are able to meet our existing liabilities if they fall due at once out of very liquid current assets.
- The bank balance of a company is a good indication of overtrading if changes from a surplus to a deficit and continues to rise.
- If payable days are getting longer, that suggests that the cash position is worsening.
- If the level of activity rises sharply then this may be an indication of overtrading.

**Determining Working Capital needs and Funding Strategies**

**What is a good solution to Overtrading?**

A good solution to overtrading would be to convert short-term financing with long-term financing.

**Working Capital can be funding either by Short-term Finance or Long-term Finance, what are the advantages and disadvantages?**

Advantages of short term finance:

- **Cheaper**
  Short-term finance is cheaper than long-term finance because lenders would demand a greater compensation for having their money tied up for long periods.
- **Flexible**
  Short-term finance is more flexible than long-term finance because the amount of finance needed will fluctuate over the operating cycle. A business will only pay interest on the amount of overdraft (short-term) utilised whereas with long-term the business will pay fixed interest even though the loan is not fully utilised.
- **Easy to arrange**
  An overdraft is simple to arrange and is normally unsecured against the company’s assets. It does not need any of the formalities that go with setting up long-term finance.
Advantages of long-term finance:

- The funds are permanent and will run for the full term of the loan as a pose to overdrafts which is repayable on demand which could seriously damage the company.
- There is no need to continually renew the finance. Equity for example will normally be repaid.

**What are Permanent Current Assets?**

Permanent current assets are the normal level of stock and debtors that the company needs in order to keep the business going. The company will always need a certain amount of stock and having sell these stock they will have the level of debtors that result from selling these stock.

**What are Fluctuating Current Assets?**

These are the levels of current assets that fluctuate up and down with the seasonal nature of the business.

**Aggressive Funding Policy:**

This is where the organisation uses short-term funds to finance its permanent working capital. This is cheaper but high risk because short-term funds can be recalled on demand.

**Conservative Funding Policy:**

This is where the organisation uses long term funding for the permanent working capital.

**What are some Short-term Sources of Finance?**

- Factoring – the debts of the company are effectively sold to a factor
- Invoice Discounting – selected invoices are used as security against which the company may borrow funds.
- Trade Credit – the delay of payment to suppliers on credit terms, no interest funding
- Overdrafts – Short-term borrowings from a financial institution
- Bank Loans – Loans between one and three years
- Bills of Exchange – an agreement to pay a certain amount at a certain date in the future

**Asset Specific Sources of Finance**

- Hired Purchase
- Finance Lease
- Operating Lease
What are the advantages/disadvantages to offering Credit?

Advantages

- Offering credit encourages customers to take up our goods

Disadvantages

- Bad debts
- Slow payers that increase working capital
- Administration of the sales ledger
- Debt collection

Credit Management

There are three aspects to credit management:

- Assessing credit status
- Deciding the terms on which credit will be offered
- Day to Day management

How to assess credit status – Bank references, trade references, published accounts, credit rating agencies and company’s own sales records.

How do we calculate the cost of financing receivables?

The receivable balance needs to be financed and it is important that a company knows how much the receivables are costing it in the course of a year. The interest rate to be applied to receivables will usually be the overdraft rate that is financing the working capital.

Interest cost = Receivables balance X Interest rate

Discounts

Discounts encourage customers to pay early. The cost of the discount is balanced against the savings the company received from a lower receivables balance and a shorter average collecting period.

Advantages/Disadvantages of early settlement discounts:

Advantages:

- Early payment reduces the debtor balance and hence the interest charge
- Reduces bad debts arising

Disadvantages:

- If discounts are too high it will cost the company
• If discounts are too low many customers will not take it
• Greater uncertainty as to who will pay early and who will not
• May not reduce bad debts
• Customer may pay over normal term but still take the cash discount

**What is factoring?**

They are three main factoring services:

• Debt collection and Administration
• Credit insurance – with recourse and without recourse
• Financing

**What are the advantages / disadvantages of factoring?**

Advantages:

• Improve cash flow
• Savings on internal administration costs
• Useful for small and fast growing organisations who credit department may not be able to keep up
• Reduction in the need for day-to-day management control
• Debt collection is outsourced therefore managers have more time to run the organisation
• The factor is more experience at enforcing credit terms leading to lower level of outstanding debts

Disadvantages:

• It is more costly than an efficiently run internal credit control department
• Factoring has a bad reputation associated with failing companies and this may cause customers to be concerned that the company has cash flow problems/failing hence they may not feel confident to continue business
• Customers do not like dealing with a factor.
• Customers like to think that their suppliers can manage their own affairs
• Difficult to revert to an internal credit control
• Factors are more aggressive towards the company’s customers because their main concern is collection and not customer care

**Managing Inventory**

There needs to be a balance between the benefits and cost of holding stock. The benefits of holding stock are that it allows the business to sell a range of goods which is immediately available to customers. However, holding stock incurs costs, in particular, opportunity cost of money tied up in stock.
They are four types of cost associated with stock:

1. Ordering cost
2. Holding cost
3. Stock-out cost
4. Purchase cost

Ordering costs are the costs relating to the placing of orders. These include clerical, administrative and the accounting costs of placing an order and excludes the costs of the materials ordered.

Holding costs is the total annual cost of holding orders. These include the warehousing and cost related to storing/holding stock and exclude the costs of the materials ordered.

Stock-out costs are the costs relating to the lost contribution through loss of sales, the lost future contribution through loss of customers, the cost of emergency orders of materials and the cost of production stoppages.

Purchase costs are the cost of what is bought.

**What is the Economic Order Quantity?**

The economic order quantity is the reorder quantity which minimises the total cost of holding and ordering materials over a given time period. The size of the order placed will affect the total holding costs and ordering costs over the year. If the company has a policy of placing large orders rather than small orders then the total annual holding costs will increase. However, if the order size increases the number of orders needed to satisfy the year’s sales will decrease and so the total annual cost of placing the orders will fall.

**Just In Time**

The basic aim is to eliminate or minimise inventory. The theory holds that stock is only needed if there are inefficiencies in the production process, that is, the business need stock because they cannot schedule the work accurately, quality problems, inflexible work practices. The idea behind Just-in-time is that if you can eliminate the inefficiencies and can plan and deliver production process to a fixed time schedule then inventory is either unnecessary or at least minimised. However, for this to work the suppliers must also be JIT suppliers.

**Managing Cash:**

Cash like inventory is another balancing act, the company needs cash to be able to run the business while at the same time trying not to keep idle cash which generates little or no return and costs money to fund.
**There are three methods for managing cash:**

1. Miller-Orr model
2. Baumol model
3. Cash budget

**The Miller-Orr Model:**

This is a model that considers the level of cash that should be held in an environment of uncertainty. This involves studying the cash movement over a period of time to get a good idea of how cash fluctuates with no controls in place. The organisation will then set lower and upper limits. These limits are set using a formula (given in the exam). If the cash exceeds the upper limit, the excess cash should be invested. If the cash falls below the lower limit, more cash is needed in order to be able to operate.

- Transaction cost is the cost of investing or realising cash as the limits are reached.
- Variance is a measure of uncertainty or dispersion.
- Interest rate is the rate of interest per day.
- The upper limit is simply the lower limit plus the spread
- Return point = lower limit + 1/3 of the spread
- The model is based on uncertainty of cash flows
- The model is designed to offer a way of controlling cash balances on a day to day basis
- If the transaction cost increases the spread increases and vice versa
- If the interest rate increases the spread decreases and vice versa

**Baumol Model**

This is simply the use of the EOQ model to manage cash.

**Cash Budgets**

A cash budget is a statement of all the inflows and outflows of cash for a given period. We are only concerned with the inflow and outflows of cash. Non cash flows such as depreciation are ignored.

**THE END.**