

**DEPARTMENT OF COMMERCE AND FINANCIAL STUDIES  
BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI – 620024  
MBA (Financial Management)**

**Course Code and Name: FMSC3/21 -WORKING CAPITAL  
MANAGEMENT**

**Unit – I/ Topic: WORKING CAPITAL POLICY**

# Scheme of Presentation

- Overall Considerations
- Importance of Working Capital Management, Components of Working Capital
- Factors Influencing the Requirements of Working Capital
- Risk-return Trade-off
- Profitability-Liquidity tangle
- Estimating Working Capital Requirements: Operating Cycle Method
- Percent of Sales Method
- Role of finance managers in working capital management

## **Working capital Management:**

Working capital management refers to a company's managerial accounting strategy designed to monitor and utilize the two components of like, current assets and current liabilities, to ensure the most financially efficient operation of the company the primary purpose of working capital management is to maintains sufficient cash flow to meet its short-term operating costs and short-term debt obligations.

**Source:** <https://www.investopedia.com>

# IMPORTANCE OF WORKING CAPITAL MANAGEMENT

- **Importance of Working Capital**

Working capital provide the following advantages to a business:

- **Higher Return on Capital**

Firms with lower working capital will post a higher return on capital so shareholders will benefit from a higher return for money invested in the business.

Source: <https://www.investopedia.com>

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- **Improved Credit Profile and Solvency**

The ability to meet short-term obligations is a pre-requisite to long-term solvency and it is a good indication of counterparty's credit risk adequate working capital management will allow a business to pay on time its short-term obligations..

Source: <https://www.investopedia.com>

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## Higher Liquidity

A large amount of cash can be tied up in working capital could benefit from additional liquidity and be less dependent on external financing this is especially important for smaller businesses have a limited access to external funding sources. Small businesses often pay their bills in cash from earnings so an efficient working capital management.

- [Source: https://www.investopedia.com](https://www.investopedia.com)

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- **Increased Business Value**

Firms with more efficient working capital management will generate more free cash flows which will result in a higher business valuation and enterprise value.

[Source: https://www.investopedia.com](https://www.investopedia.com)

# Financing Conditions

A firm with a good relationship with its trade partners and paying its suppliers on time will benefit from favorable financing terms.

- **Uninterrupted Production**

A firm paying its suppliers on time will also benefit from a regular flow of raw materials, ensuring that the production remains uninterrupted and clients receive their goods on time.

Source: <https://www.investopedia.com>



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- **Shocks and Peak Demand**

Efficient working capital management will help a firm to survive through a crisis or ramp up production in case of an unexpectedly large order.

- **Competitive Advantage**

Firms with an efficient supply chain will often be able to sell their products at a discount versus similar firms with inefficient sourcing.

**Source:** <https://www.investopedia.com>

# Components of Working Capital

- Working capital is the difference between current assets and current liabilities. Current assets usually consist of cash, marketable securities, receivables and inventory. A current liabilities, on the other hand, is the payables.
- Management of working capital refers to the practices and techniques designed to control all the items of current assets and current liabilities.
- **Source:** <https://www.investopedia.com/>

## Cont...

- Accounts receivable are revenues due – what is owed to a company by its customers for sales made. Efficient collection of accounts receivable is essential to a company's smooth financial operation.
- Accounts receivable are listed as assets on a company's balance sheet, but they are not actually assets until they are collected.
- A common way of assess a company's handling of accounts receivable is days sales outstanding, which reveals the average number of days a company takes to collect sales revenues.

Source: <https://www.investopedia.com/>

## Cont...

- Accounts payable is money that a company is obligated to pay out over the short term.
- Companies seek to strike a balance between maintaining maximum cash flow by delaying payments the company need to maintain positive credit ratings while sustaining good relationships with suppliers and creditors. A company's average time to collect receivables is significantly shorter than its average time to settle payables.
- **Source:** <https://www.investopedia.com>

## Cont...

- Inventory is a company's primary asset that it converts into sales revenues. The rate at which a company sells and replenishes its inventory is an important measure of its success.
- Investors consider the inventory turnover rate to be an indication of the strength of sales it indicate how efficient the company is in its purchasing and manufacturing process.
- Inventory that is too low puts the company in danger of losing out on sales, but excessively high inventory levels represent wasteful, inefficient use of working capital.

Source:<https://www.investopedia.com>

# Cash Management

- ❖ Cash is one of the important components of current assets. It is needed for performing all the activities of a firm.
- ❖ Therefore it is essential for a firm to maintain an adequate cash balance. One of the important functions of a finance manager is to match the inflows and outflows of cash so as to maintain adequate cash.
- Source: <https://www.investopedia.com/>

# Models of Cash Management

- A fund manager is responsible for maintaining adequate cash balances so that the liquidity position of the firm remains strong.
- It is necessary for the manager to know what should be the optimum cash balance and in what quantity marketable securities should be purchased or sold.
- There are several models of cash management to determine the optimum level of cash balances.

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**The following are important cash management models:**

- **Baumol Model:**

This Inventory Model was developed by William J. Baumol, it is based on the combination of Inventory Theory and Monetary Theory.

According to this model, the optimum level of cash is that level of cash where the cost of carrying and transaction cost are minimum.



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Carrying cost means the interest foregone on marketable securities and transaction cost refers to cost of liquidating marketable securities.

**The optimum cash balance according to this model is:**

- Where,  $C$  = Optimum cash balance,
- $D$  = Annual cash disbursement,
- $F$  = Fixed cost per transaction, and
- $O$  = Opportunity cost of one rupee per annum.

# Miller-Orr Cash Management Model

This model sets two levels for cash—an upper limit  $h$  and a lower limit  $z$ .

Upper limit is three times the lower limit. As per this model, if the cash balance reaches the upper limit, excess cash balance, i.e.  $h-z$  should be invested in marketable securities and in the reverse case, marketable securities should be liquidated.

**The lower limit of cash balance, i.e.  $z$  is calculated by using the following formula:**

- Where,  $z$  is the lower limit,
- $b$  is the fixed cost per order,
- $\sigma^2$  is the variance of daily changes in expected cash balance,
- $LL$  is the lower control limit, and
- $i$  is the interest rate per day.

# Receivables Management

- The term receivable is defined as any claim for money owed to the firm from customers arising from sale of goods or services in normal course of business the term account receivable represents sundry debtors of a firm. It is one of the significant components of working capital next to cash and inventories.
- The total volume of accounts receivable depends on its credit sale and debt collection policy. Liberal credit policy increases the volume of sales but at the same time it also increases the investment in receivables, Therefore, examination of costs and benefits associated with credit policy is one of the important tasks of a finance manager.

# Cost of Maintaining Accounts Receivables

- **Capital Cost:**

There is a time gap between the sale of goods and payment by debtors. The firm has to arrange funds for meeting their obligations like payment for raw materials, wages, etc during the specific time. This additional financing involves some cost, known as capital cost. **Collection Cost:** Collection costs are the administrative costs incurred by the firm for collecting money from the debtors.

- **Default Cost:**

Default cost is the cost that arises from bad debt losses.

Source: Financial Management –Theory and Practice , Prasanna Chandra- GFM – McGraw- Hill Professional Series in Finance

- **Delinquency Cost:**

These costs arise for extending credit to defaulting customers. Such costs are legal charges, costs involved in putting extra effort for collection, costs associated with sending reminders, etc.

- **Formulation of Credit Policies:**

Credit policy has significant impact on the profitability of a concern profit on additional sales arising out of liberal credit policy is sufficiently higher than the cost involved for maintaining additional receivables.

**Source: Financial Management –Theory and Practice , Prasanna Chandra-  
GFM –McGraw- Hill Professional Series in Finance**

# Factors influencing working capital requirements

The factors influenced by working capital requirements are

- Nature of business
- Seasonality of operations
- Production policy
- Market conditions
- Conditions of supply

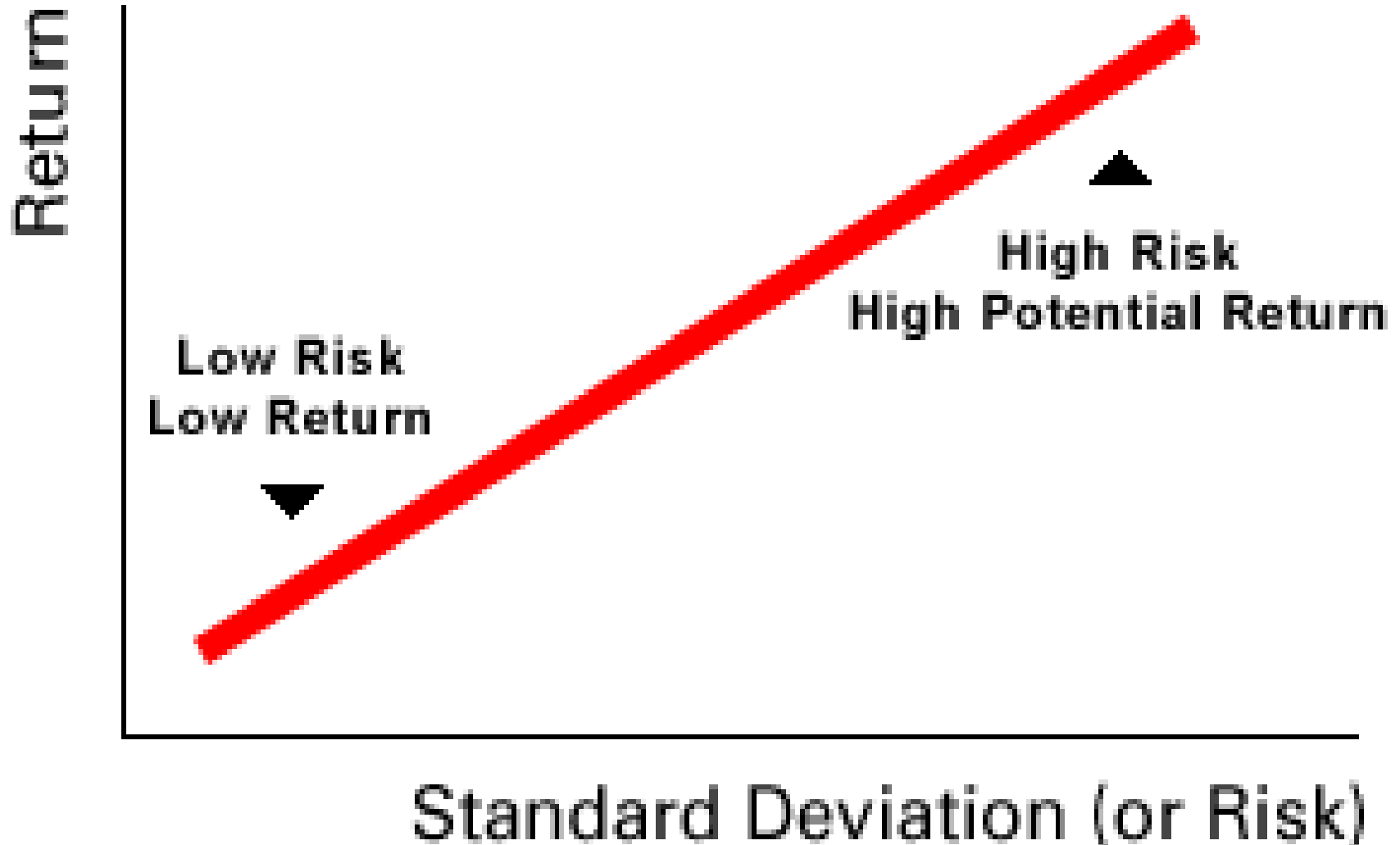
Source: Financial Management –Theory and Practice ,  
Prasanna Chandra- GFM –McGraw- Hill Professional  
Series in Finance.

# Risk –return Trade-off

Definition: Higher risk is associated with greater probability of higher return and lower risk with a greater probability of smaller return. In trade off investor faces between risk and return while considering investment decisions is called the risk return trade off.

Source: <https://economictimes.indiatimes.com>

# Risk / Return Tradeoff





## What is the 'Risk-Return Tradeoff'

- The risk-return tradeoff is the principle that potential return rises with an increase in risk.
- Low levels of uncertainty or risk are associated with low potential returns, whereas high levels of uncertainty or risk are associated with high potential returns.
- According to the risk-return tradeoff, invested money can render higher profits only if the investor to accept the possibility of losses.

source: <https://www.investopedia.com>

# Operating cycle and cash cycle

working capital is influenced by the following events in the operating cycle of the firm

- Purchase of raw materials
- Payment of raw materials
- Manufacture of goods
- Sale of finished goods
- Collection of cash for sales

Source: Financial Management –Theory and Practice , Prasanna Chandra- GFM –McGraw- Hill Professional Series in Finance.

Inventory period

Inventory period = Average inventory/ annual cost of goods sold  
/365

Account receivable period

= Average accounts receivable / annual sales/365

Accounts payable period:

=Average accounts payable /Annual cost of goods sold/ 365

Source: Financial Management –Theory and Practice , Prasanna

Chandra- GFM –McGraw- Hill Professional Series in Finance.

- **Percent of sales method:**

The percentage of sales method is used to calculate how much financing is needed to increase sales.

The method allows for the creation of a balance sheet and an income statement. The equation to calculate the forecasted net income is: Forecasted Sales = Current Sales x (1 + Growth Rate/100).

Source:<https://www.managementstudyguide.com/>

# **Role of finance managers in working capital management**

## **Role of a Financial Manager**

Financial activities of a firm is one of the most important and complex activities of a firm. Therefore in financial manager performs all the requisite financial activities.

A financial manger is a person who takes care of all the important financial functions of an organization the person in charge should maintain a far sightedness in order to ensure that the funds are utilized in the most efficient manner.

**Following are the main functions of a Financial Manager:**

## **Raising of Funds**

In order to meet the obligation of the business it is important to have enough cash and liquidity.

A firm can raise funds by the way of equity and debt it is the responsibility of a financial manager to decide the ratio between debt and equity. It is important to maintain a good balance between equity and debt.

**Source:**<https://www.managementstudyguide.com>

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- Once the funds are raised through different channels the next important function is to allocate the funds.
- The funds should be allocated in such a manner that they are optimally used.
- In order to allocate funds in the best possible manner the following point must be considered
- The size of the firm and its growth capability.
- **Source:**<https://www.managementstudyguide.com>

## Cont...

These financial decisions directly and indirectly influence other managerial activities. Hence formation of a good asset mix and proper allocation of funds is one of the most important activity.

- Source:<https://www.managementstudyguide.com/role-of-financial-manager.htm>



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- Profit earning is one of the prime functions of any business organization. Profit earning is important for survival and sustenance of any organization. Profit planning refers to proper usage of the profit generated by the firm.
- Profit arises due to many factors such as pricing, industry competition, state of the economy, mechanism of demand and supply, cost and output a healthy mix of variable and fixed factors of production can lead to an increase in the profitability of the firm.
- Source:<https://www.managementstudyguide.com/role-of-financial-manager.htm>

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- costs are incurred by the use of fixed factors of production such as land and machinery.
- In order to maintain a tandem it is important to continuously value the depreciation cost of fixed cost of production.
- An opportunity cost must be calculated in order to replace those factors of production which has gone through wear and tear. If this is not noted then these fixed cost can cause huge fluctuations in profit.
- Source:<https://www.managementstudyguide.com/role-of-financial-manager.htm>

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