WORKING CAPITAL MANAGEMENT

Objectives of working capital

1) Maintain sufficient funds
2) Proper allocation of resources
3) Proper management of Current Assets
4) Balance between Current Assets and Current Liabilities

Working Capital Requirement

The **Working Capital Requirement** of a business is the sum of current assets or the amount of funds necessary to cover the cost of operating expenses of the business.

The two main components of working capital are current assets and current liabilities. The excess of current assets over current liabilities is known as working capital.

Working Capital = Current Assets – Current Liabilities

It is simply the cash required for purchase of raw materials and their conversion into finished products.

Gross Working Capital – It is the capital invested in total current assets.

Net Working Capital – It is the excess of current assets over current liability.

Component of Working Capital:

a) Current Assets
b) Current Liabilities

Formula of Current Assets:

Current Assets = Cash + Cash Equivalents + Inventory + Accounts Receivable + Marketable Securities + Prepaid Expenses + Other Liquid Assets

Components of Current Assets:

- **Cash:** This is the money a company has on hand, either in the bank or in physical form.
- **Cash Equivalents:** These are short-term, highly liquid investments that can be easily converted to cash.

- **Accounts Receivable (Debtors, Bills Receivable):** This represents money owed to the company by customers for goods or services already delivered.
- **Inventory/Stock:** This refers to the goods a company has on hand for sale.
- **Prepaid Expenses:** These are expenses that have been paid in advance for future services or goods, such as rent or insurance.
- **Marketable Securities:** These are short-term, liquid investments that are easily converted to cash, such as stocks or bonds.
- **Other Liquid Assets:** These are other assets that can be quickly converted to cash, such as short-term notes receivable.

Formula of Current Liabilities:

Current Liabilities = (Notes Payable) + (Accounts Payable) + (Short-Term Loans) + (Accrued Expenses) + (Unearned Revenue) + (Current Portion of Long-Term Debts) + (Other Short-Term Debts)

Components of Current Liabilities:

- **Notes payable:** Short-term debt obligations, usually written promises to repay with interest. A note payable serves as a record of a loan whenever a company borrows money from a bank, another financial institution, or an individual.
- **Accounts payable (Creditors, Bills Payable):** Amounts owed to suppliers for goods or services purchased on credit.
- **Accrued/Outstanding expenses:** Expenses incurred but not yet paid, such as outstanding/accrued wages, outstanding/accrued salaries, outstanding/accrued rent, etc.
- **Unearned revenue:** Payments received in advance for goods or services not yet delivered.
- **Current portion of long-term debt:** The portion of a long-term debt (like a mortgage) that is due within the current fiscal year.
- **Other short-term debts:** Any other short-term obligations, like short-term loans or tax liabilities.

Components of Working Capital (commonly found in sums/problems)

Current Assets	Current Liabilities
Cash in Hand, Cash at Bank	Bills Payable
Bills receivable	Sundry Creditors
Short term loans	Outstanding Expenses
Sundry debtors (less provision for bad debts)	Payment of dividend
Prepaid Expenses	Bank overdraft
Accrued Income	Taxes
Inventories: Raw Materials, Work in Progress, Stores and Spares, Finished Goods	

Characteristics/features of Working Capital:

1) Short-term Needs
2) Circular Movement
3) Element of
4) Element of Fluctuation
5) Liquidity
6) Less Risky

Types of Working Capital:

A) On the basis of Concept

1) Gross Working Capital
2) Net Working Capital

B) On the basis of Time

1) Permanent/Fixed Working Capital (Funds necessary to carry the operations of a business).
    a) Regular Working Capital (Minimum Level)
    b) Reserve Working Capital (Excess on Regular Working Capital)
2) Temporary/Variable Working Capital (Seasonal or special requirements for funds).
    a) Seasonal Working Capital
    b) Special Working Capital
3) Semi-variable Working Capital (The fund requirements remain same up to a stage, then increases with sales and time).

DETERMINANTS OF WORKING CAPITAL

OR

FACTORS DETERMINING Working Capital:

I. **Nature of Business –** In small trading businesses, the initial investment on fixed assets is low and the working capital requirements are high, whereas big Trading houses incur more investment on initial fixed capital than working capital.

II. **Size of Business –** By virtue of its size a large business with wide range of activities requires more working capital than a small business.

III. **Production Cycle –** In case of continuous production Working Capital requirements will be high and low in case of intermitted production.

IV. **Business Cycle –** WC requirements are high in boom period and less at the time of depression in the economy.

V. **Production Policy –** If the company has the policy to stop/reduce production during slack periods and fluctuations their working capital requirement is low but if it continues production at full scale even in slack season it will incur a high working capital.

VI. **Credit Policy –** If the company purchases Raw material on credit basis and sells finished goods on cash basis, it will have low working capital requirements but in the reverse scenario working capital requirements will be high.

VII. **Availability of Raw Materials –** If raw material is readily available the company will have a low working capital, but if the raw material is scarce, the company will incur a high working capital.

VIII. **Earning Capacity –** Firms with high earning capacities are able to earn more cash profits that can be contributed towards working capital requirements, while firms with less earning capacity will have a high working capital.

IX. **Level of Taxes –** High level of taxes indicate a high Working capital while low level of taxes indicate a low working capital as taxes cut down profits of companies which in turn focus on higher productivity and high sales of products which require a high working capital.

X. **Nature of Demand –** If the demand for the company`s product is high it will incur a high working capital, but if the demand for the company`s product is low it will incur less working capital.

Working Capital Cycle OR Operating cycle OR Cash Conversion Cycle

Working capital requirement depends upon the operating cycle of the business. The operating cycle or working capital cycle of a business starts with the acquisition of raw materials and ends with the collection of receivables from sale proceeds.

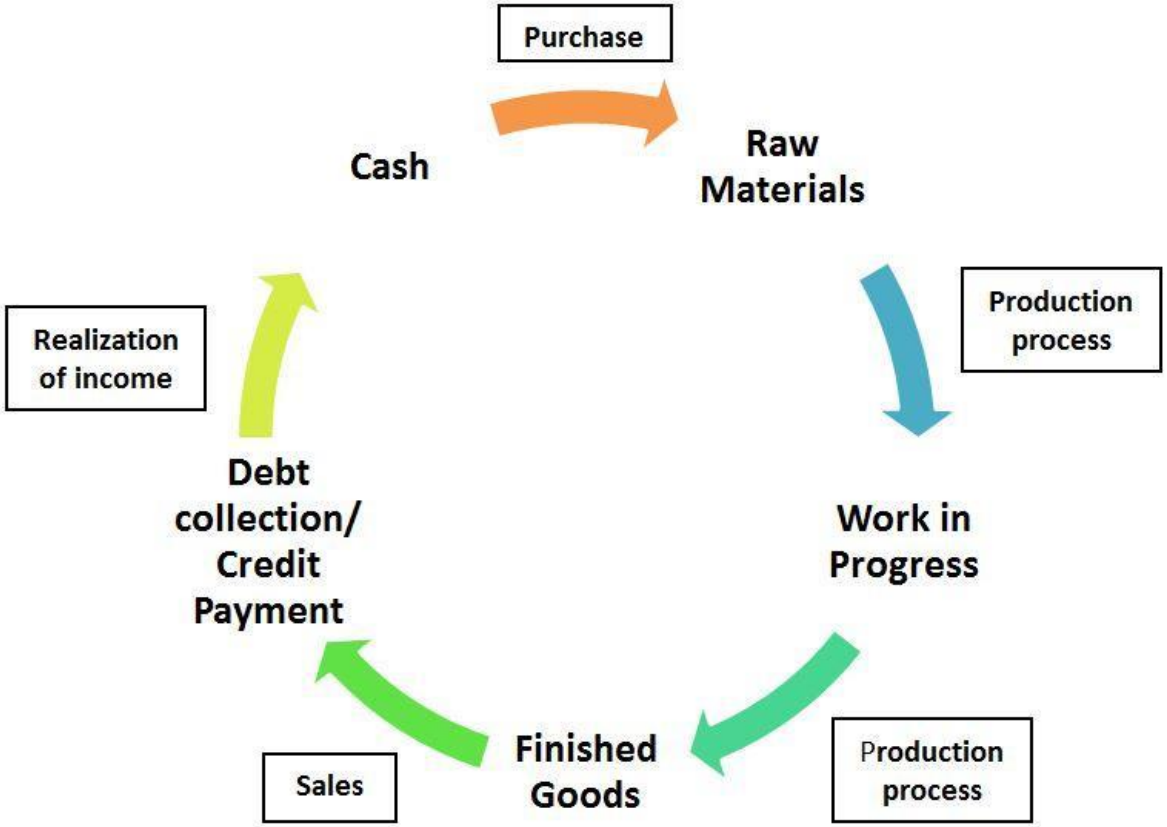
The Operating cycle of a business determines its working capital requirement. The Total time period involved in an operating cycle is the sum total of time taken to carry out two important steps i.e.

- **Inventory conversion Period –** Total time taken in production and sale of products.
- **Debtors conversion Period –** Total time taken to collect the outstanding amount from customers.

Stages of Operating Cycle

The Operating cycle includes the following stages-

1. Raw material and storage stage (R)
2. Work in Progress stage (W)
3. Finished Goods stage (F)
4. Collection of Receivables and Debtors Collection (D)
5. Payment to Creditors (C)



Operating Cycle of a Business

Gross Operating Cycle = R + W + F + D

The Net operating cycle represents a cash conversion cycle.

Net Operating Cycle = R + W + F + D – C

Increase in operating cycle =

Difference in time taken for debt collection + Difference in time taken in credit payments

Less: Difference in finished goods + Difference in stock of Raw material

Proforma/Statement of Working Capital Requirement:

	Particulars	Amount (Rs.)	Amount (Rs.)
	Current Assets:		
(i)	Minimum Cash and Bank balance		**xx**
(ii)	Inventories (Stock):		
	Raw Material	xx	
	Work-in-Progress (WIP)	xx	
	Finished Goods	xx	**xx**
(iii)	Receivables:		
	Debtors	xx	
	Bills Receivable	xx	**xx**
(A)	**Total Current Assets (Gross Working Capital) (CA)** [(i)+(ii)+(iii)]		**xxxx**
	Current Liabilities:		
	Creditors/Suppliers for Purchase	xx	
	Creditors for Wages	xx	
	Creditors for Overheads	xx	

(B)	**Total Current Liabilities (CL)**		**xxxx**
	Net Working Capital (CA – CL) [(A) – (B)]		**xxx**
	Add: Provision/Margin for Contingency		xx
	Net Working Capital Required		**xxx**

How to calculate:

Estimation of Working Capital Requirements -

A. Total Current Assets =

(1) Raw Material - Output x cost of RM x 360 days or $\frac{\text{Months}}{12}$ or $\frac{\text{Week}}{52}$

(2) Work in Progress - Output x Work in Process x time period

WIP = Cost of Raw Material + Direct Labour + Overhead (excluding depreciation)

(3) Finished Stock – Output x Cost of Finished goods x time period

Cost of FG = Cost of Raw Material + Labour + Overhead

(4) Debtors - in connection with cost of production and credit sales

Output x Cost of Credit sales (cost of finished goods) x time period

(5) Advance Payments – Prepaid sales, promotion expenses

(6) Cash Balance – Cash in Hand, Cash at Bank

B. **Total Current Liabilities** =

(1) Creditors – Output x Credit payment (cost of raw material) x time period

(2) Wages – Output x Labour cost x time period

(3) Administrative Expenses and Manufacturing Expenses –

Administrative Cost x time period
Manufacturing Cost x time period

(4) Overheads - Output x overheads x time period

Working Capital = **(A-B)** **Add** - Provision for Contingences.

Net Working Capital Requirement - _____

No. of operating cycle - $\frac{365}{\text{Operating cycle period}}$

Amount of Working Period – $\frac{\text{Total Operating Expenses for the Period}}{\text{Number of Operating cycles}}$

Working Capital = Cash balance Required + $\frac{\text{Operating cycle period}}{\text{Number of days}}$ x Estimated cost of goods sold

Cost of goods sold = Sales – Gross profit

Problem 1:

ABC Ltd. engaged in retail business. You are required forecast working capital requirements from the following data:

Projected Annual Sales	**Rs. 1,30,00,000**
% of Net Profit on Cost of Sales	**25%**
Average credit period allowed to Debtors	**8 weeks**
Average credit period allowed by Creditors	**4 weeks**
Average Stock Carrying	**8 weeks**

Add 10% to computed figures to allow for contingencies.

Solution:

Working notes: Calculation of Cost of Goods sold:

Sales	Rs. 1,30,00,000
Less: Net Profit	Rs. 32, 50,000
	—----------
	Rs. 97,50,000

Statement of Working Capital Requirement:

Particulars	Amount (Rs.)
Current Assets:	
Debtors (Rs. 97,50,000 x 8 weeks/52 weeks)	15,00,000
Stock (Rs. 97,50,000 x 8 weeks/52 weeks)	15,00,000
Total Current Assets	30,00,000
Current Liabilities:	
Creditors (Rs. 97,50,000 x 4 weeks/52 weeks)	7,50,000
Net Working Capital (CA – CL)	22,50,000
Add: Contingencies (10%)	2,25,000
Net Working Capital Required	24,75,000

Problem 2:

Determine the working capital to a finance level of activity of 1,80,000 units of output for a year.

The cost structure is as follows:

Particulars	Cost Per Unit (Rs.)
Raw Materials	20
Overheads (including Depreciation of Rs. 5)	15
Direct Wages	5
Total Cost	40
Profit	10
Selling Price	50

Additional information:

(1) Minimum desired cash balance is Rs. 20,000

(2) Raw material, on an average, for 2 months.

(3) WIP (assume 50% completion stage) will approximate to half a month production.

(4) Finished goods remain in warehouse, on an average, for a month

(5) Suppliers for materials extend a month's credit and debtors are provided 2 months credit. Cash sales are 25% of total sales.

(6) Time lag in payment of wages for a month and half month for overheads.

Solutions:

Working Notes:

a) WIP includes cost per unit of Raw material and cost per unit of overhead cost, so here WIP cost per unit is Rs. 20 + Rs. 15 = Rs. 35 per unit.

b) Finished goods include cost per unit of Raw material and cost per unit of overhead cost, so here Finished goods cost per unit is Rs. 20 + Rs. 15 = Rs. 35 per unit.

c) Debtors include cost per unit of Raw material and cost per unit of overhead cost, so here Debtors cost per unit is Rs. 20 + Rs. 15 = Rs. 35 per unit.

d) Overhead cost per unit excluding depreciation = Rs. 15 - Rs. 5 = Rs. 10.

Statement of Working Capital Requirement:

	Particulars	Amount (Rs.)	Amount (Rs.)
	Current Assets:		
(i)	Minimum Cash and Bank balance		20,000
(ii)	Inventories (Stock):		
	Raw Material (1,80,00 x Rs. 20 x 2/12)	6,00,000	
	WIP (1,80,00 x Rs. 35 x 0.5/12 x 50%)	1,31,250	
	Finished Goods (1,80,00 x Rs. 35 x 1/12)	5,25,000	12,56,250
(iii)	Receivables:		
	Debtors 75% of total units produced (1,80,00 x Rs. 35 x 2/12)		7,87,500
(A)	**Total Current Assets (Gross Working Capital) (CA)** [(i)+(ii)+(iii)]		20,63,750
	Current Liabilities:		
	Suppliers (1,80,00 x Rs. 20 x 1/12)	3,00,000	
	Wages (1,80,00 x Rs. 5 x 1/12)	75,000	
	Overheads (1,80,00 x Rs. 10 x 0.5/12)	75,000	
(B)	**Total Current Liabilities (CL)**		4,50,000

	Net Working Capital (CA – CL) [(A) – (B)] Add: Provision/Margin for Contingency Net Working Capital Required		16,13,000 **NA** 16,13,000

Financing of Working Capital

Financing of Working Capital refers to obtaining funds to cover short-term business needs, ensuring uninterrupted operations. Unlike long-term loans used for purchasing assets, this type of financing focuses on managing day-to-day expenses such as inventory, rent, and employee salaries.

For example, a retail business may need Financing of Working Capital to stock up inventory before the festive season, ensuring they meet customer demand efficiently

Importance of Financing of Working Capital

Managing working capital effectively ensures smooth business operations, prevents cash flow disruptions, and supports growth. Understanding its importance helps businesses maintain financial stability and meet short-term obligations without stress.

1. **Ensures Smooth Business Operations**

Without adequate Financing of Working Capital, businesses may struggle to pay vendors, employees, or utility bills, leading to operational disruptions.

2. **Helps Manage Seasonal Cash Flow Fluctuations**

Businesses that experience seasonal variations, such as agriculture or tourism, require Financing of Working Capital to sustain operations during off-peak months.

3. **Supports Business Growth**

Expanding into new markets or launching a new product requires initial investment. Financing of Working Capital provides the necessary funds until the new venture becomes profitable.

4. **Improves Creditworthiness**

Timely repayment of working capital loans enhances a company’s credit score, making future borrowing easier and more affordable.

FINANCING OF WORKING CAPITAL

Sources of finance for working capital include external sources like trade credit, short-term bank loans, and lines of credit, as well as internal sources such as retained earnings and public deposits. Other options are spontaneous sources like supplier credit and customer advances, along with long-term sources like equity and debentures.

External sources

Trade Credit: This is when suppliers allow you to purchase inventory on credit, delaying payment until a later date.

Bank Loans: Banks provide short-term loans, overdrafts, or cash credit facilities to meet short-term needs.

Line of Credit: A flexible arrangement with a bank that allows you to borrow up to a certain limit as needed.

Public Deposits: Companies can raise funds directly from the public (including employees and shareholders) by offering deposits for a set interest rate.

Commercial Paper: Short-term, unsecured promissory notes issued by companies.

Factoring/Invoice Financing: Selling your accounts receivable (invoices) to a third party for immediate cash.

Internal and spontaneous sources

Retained Earnings: Profits that are reinvested back into the business rather than paid out as dividends.

Spontaneous Sources: Funds that arise automatically through normal business operations.

Credit from Suppliers: Same as trade credit, it's a spontaneous source as it arises from your normal purchasing activities.

Customer Advances: Customers pay in advance for goods or services, providing immediate funds before the product is delivered.

Long-term sources

Equity Financing: Issuing shares to raise capital from investors.

Debentures: Long-term borrowing through the issuance of debentures, which can be used for long-term working capital needs or strategic projects.

Long-term Loans: Loans from financial institutions for longer-term working capital needs or asset financing.

Other sources

Leasing: Leasing assets instead of buying them outright can free up cash.

Loans from Directors/Sister Units: In pressing situations, a company might borrow from its own directors or other sister business units.

NORMS OF BANK FINANCE

Banks follow certain norms to ensure proper assessment and control of working capital.

A. Tandon Committee Norms

The Tandon Committee recommended 3 methods of determining Maximum Permissible Bank Finance (MPBF):

Method I – 25% of Working Capital Gap

Borrower must contribute 25% of Working Capital Gap:

WCG = Current Assets - Current Liabilities (other than bank borrowings)

Method II – 25% of Total Current Assets (widely used)

Borrower brings 25% of Total Current Assets from long-term sources.

Method III – Full Core Current Assets + 25% of remainder

Borrower finances entire core current assets plus 25% of the balance current assets.

B. Nayak Committee / Turnover Method

Used for MSME working capital needs up to ₹5 crore.

Working Capital Requirement = 20% of projected annual turnover

Out of this, bank finances around 15% and borrower brings 5%.

C. Chore Committee Norms

- Improved supervision and monitoring of bank credit.
- Introduction of Quarterly Information System (QIS).
- Encouraged reduction of cash credit system and promoted loan system.

Conclusion

Financing of working capital is essential for uninterrupted business operations. Businesses obtain funds from banks, trade creditors, financial institutions, and internal sources. Banks follow structured

norms like Tandon Committee methods, Turnover Method, and Chore Committee guidelines to ensure proper assessment and safe lending.

Factoring services - One of the important sources of working capital

Factoring services provide working capital by allowing businesses to sell their accounts receivable (invoices) to a third party (a factor) at a discount for immediate cash. This process converts unpaid invoices into a source of liquidity, providing upfront cash to cover immediate operational needs like payroll and inventory, and freeing the business from waiting for long payment terms. The factor then collects the payment directly from the business's customers and remits any remaining balance to the business after deducting their fees.

How it works

A business sells its unpaid invoices to a factoring company (the "factor").

The factor provides an immediate advance, typically 80% to 90% of the invoice's value.

The factor takes on the responsibility of collecting the payment from the business's customers.

Once the customer pays the full invoice amount, the factor deducts its fees and service charges.

The factor then pays the remaining balance to the original business.

Benefits

Immediate cash flow: Factoring provides quick access to cash, improving liquidity and helping to meet short-term financial obligations.

No debt creation: Unlike traditional loans, factoring doesn't create new debt for the business.

Credit risk mitigation: In non-recourse factoring, the factor assumes the risk of customer non-payment, which protects the business from potential losses.

Improved creditworthiness: Factoring can improve a company's creditworthiness, as the factor takes on the credit risk.

No collateral required: Factoring is a type of collateral-free financing, making it an option for businesses that may not have traditional assets to use as collateral.

Below is a **perfect, exam-ready answer** on **Various Committee Reports on Bank Finance**—written in clear and simple language for B.Com/BBA/BMS semester exams.

Various Committee Reports on Bank Finance

Several expert committees were appointed by RBI/Government of India to improve the system of **bank finance, working capital assessment, credit control, and monitoring**. The major committees are:

1. Tandon Committee (1974)

Purpose: To study bank credit requirements and suggest norms for working capital finance.
Major Recommendations:

1. **Three Methods of Lending (MPBF – Maximum Permissible Bank Finance):**
    - **Method I:** Borrower finances 25% of Working Capital Gap.
    - **Method II:** Borrower finances 25% of Total Current Assets (most used).

- **Method III:** Borrower finances Core Current Assets + 25% of remaining CA.

2. **Norms for Inventory & Receivables:**
   Set industry-wise norms for holding stock and debtors.

3. **Credit Information System (CIS):**
   Better reporting and monitoring of working capital.

4. **Reduction in dependence on bank finance:**
   Encouraged firms to use long-term sources for permanent working capital.

2. Chore Committee (1979)

Purpose: To improve the functioning and supervision of cash credit system.

Major Recommendations:

1. **Quarterly Information System (QIS):**
   Regular submission of performance and financial data by borrowers.

2. **Credit Monitoring Arrangement (CMA):**
   Better analysis of working capital needs.

3. **Encouraged Loan System:**
   Shift from pure cash credit to a mix of **cash credit + working capital loan**.

4. **Penal interest and discipline:**
   Discouraged irregular and overdrawn accounts.

3. Nayak Committee (1991)

Purpose: To review credit flow to the **SSI/MSME sector**.

Major Recommendations:

1. **Turnover Method:**
   Working capital requirement = **20% of projected annual turnover**.
   - Bank finances around 15%
   - Borrower contributes 5%
2. **Single-window system:**
   Simplified procedures for small units.
3. **Faster and adequate flow of credit** to small-scale industries.

4. Marathe Committee (1982)

Purpose: To review lending and follow-up processes.

Major Recommendations:

1. Improve **follow-up**, **supervision**, and **control** on bank credit.

2. Strengthen reporting and internal audit.

3. Promote financial discipline among borrowers.

5. Khusro Committee (1989)

Purpose: To review agricultural credit and the role of NABARD.

Major Recommendations:

1. Strengthen NABARD as the main refinancing agency.

2. Improve credit flows to agriculture and rural sectors.

3. Encourage cooperative credit institutions.

6. P. L. Kapur Committee (1982)

Purpose: To examine the cash credit system more deeply.

Major Recommendations:

1. Discourage excess dependence on cash credit.

2. Introduce a system of **credit limits with periodic review**.

3. Encourage use of **loan system** instead of flexible cash credit.

7. Kannan Committee (1997)

Purpose: To suggest improvements in credit delivery system.

Major Recommendations:

1. Simplify bank procedures.

2. Improve customer service and reduce paperwork.

3. Promote technology in banking.

8. Malegam Committee (Existing from various years)

Several Malegam committees were formed relating to:

- Priority sector lending reforms
- Microfinance institution regulation
- Non-performing assets (NPAs)

Conclusion

The various committee reports have significantly improved the Indian banking system by introducing **scientific credit appraisal, better monitoring, financial discipline, MSME support, and transparency in bank finance**. These committees form the foundation of how banks assess and control working capital today.

Dimensions of Working Capital Management

The three core dimensions of working capital management are the management of current assets (like cash, inventory, and receivables), the management of current liabilities (like accounts payable and short-term debt), and the formulation of policies that balance the trade-off between liquidity and profitability. Effective working capital management also involves ensuring an optimal composition and level of these current assets and liabilities and determining the appropriate financing mix for them.

1. Management of current assets

- This involves the administration of all current assets, including cash, marketable securities, inventories, and accounts receivable.
- Decisions include determining the ideal composition of these assets and their levels.
- For example, managing inventory involves determining the right amounts of raw materials, work-in-progress, and finished goods.
- Managing receivables involves setting credit policies to attract customers while monitoring cash flow.

2. Management of current liabilities

- This dimension focuses on managing short-term obligations, such as accounts payable, short-term loans, and other accruals.
- It involves deciding on the composition and level of these liabilities.
- For instance, managing accounts payable involves a strategy for paying suppliers, which can impact cash flow and profitability.

3. Policy formulation and the liquidity-profitability trade-off

- This is a critical strategic dimension that involves balancing the need for liquidity to meet short-term obligations and the desire for profitability.
- A firm must decide how to finance its current assets—some through long-term financing and some through short-term sources.
- Holding too much liquid capital can reduce profitability, while holding too little can risk the firm's ability to operate smoothly.