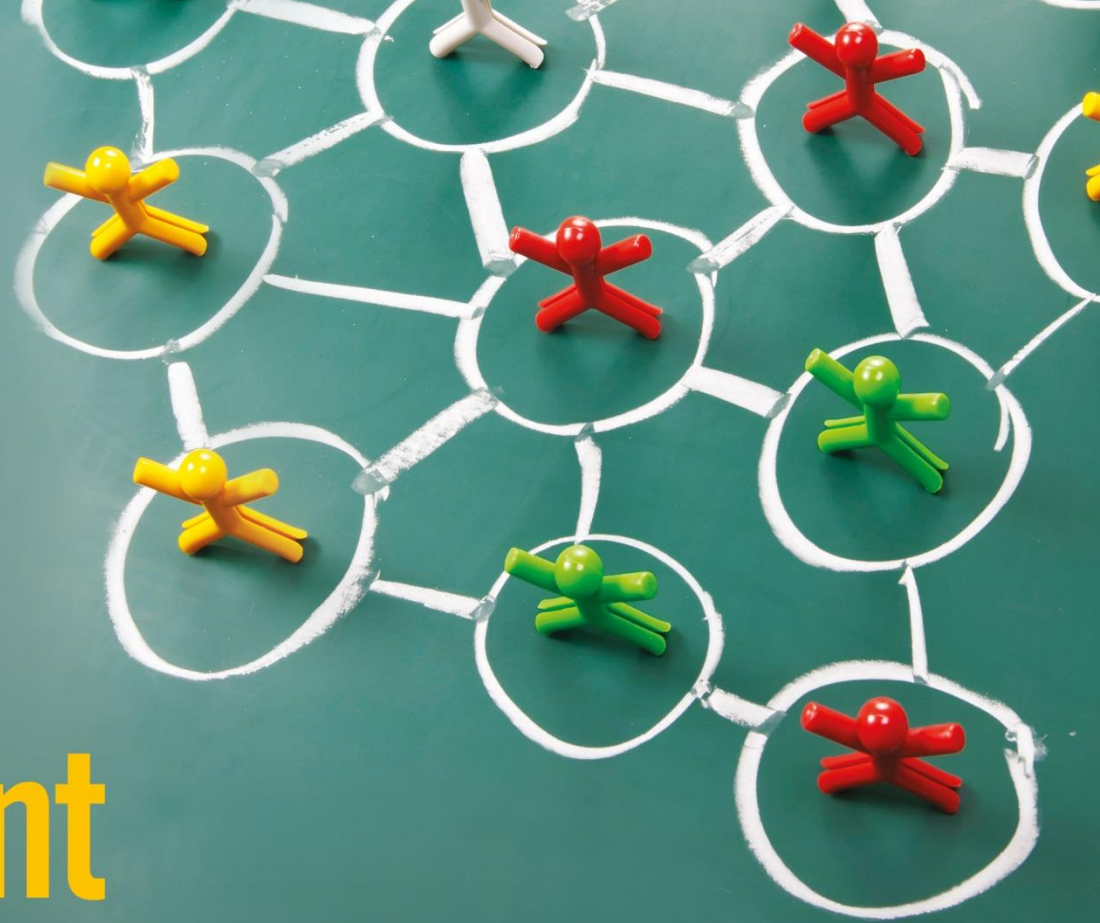


Introduction to  
**Business  
Management**

9<sup>TH</sup> EDITION

CHAPTER 14  
FINANCIAL MANAGEMENT





# Chapter content

- Introduction
- The financial function and financial management
- Concepts in financial management
- Objective and fundamental principles of financial management
- Cost-volume-profit relationships
- The time value of money
- Financial analysis, planning and control



# Chapter content (continued)

- Asset management: The management of current assets
- Asset management: Long-term investment decisions and capital budgeting
- Financing
- Long-term financing
- The cost of capital
- Summary



# Introduction

- Art and science of obtaining enough finance for a business at lowest cost, investing in assets earning greater interest than cost of capital, and managing profitability, liquidity and solvency of the business
- Nature and meaning of financial management and relationship with other functional management areas
- Introduction to basic concepts and techniques
- Goal and fundamental principles discussed
- How to finance a business and evaluate investment decisions



# The financial function and financial management

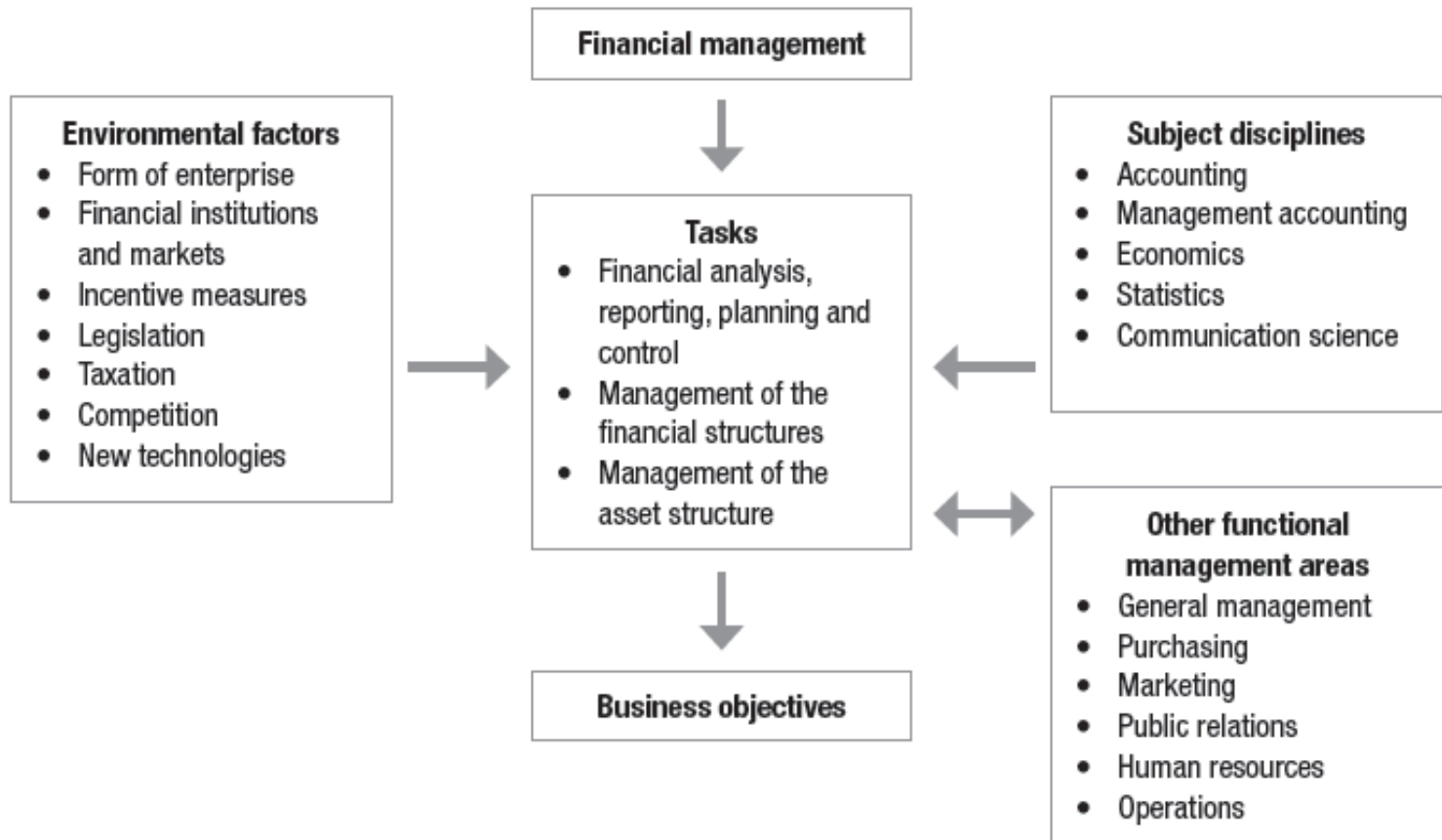
- Concerned with the flow of funds
  - acquisition of funds (financing)
  - application of funds for the acquisition of assets (investment)
  - Cash inflow and cash outflow of the firm
  - administration of, and reporting on, financial matters



# The financial function and financial management (continued)

- Performs following tasks:
  - Financial analysis, reporting, planning and control
  - Management of the application of funds
  - Management of the acquisition of funds.

# The relationship between financial management, other functional management areas, related disciplines and the environment



**Figure 14.1:** The relationship between financial management, other functional management areas, related disciplines and the environment



# Concepts in financial management

- Balance sheet is an instant photo of the financial position of the business
- Asset side reflects all the possessions of the business:
  - Fixed assets
  - Current assets.





# Concepts in financial management (continued)

- Liabilities side reflects the nature and extent of interests in assets:
  - Long-term funds
  - Shareholders' interest
  - Short-term funds.



# Capital

- Accrued power of disposal over products and services used by a business to generate a monetary return or profit
- Capital for investing in fixed assets – the need for fixed capital
- Capital for investing in current assets – the need for working capital



# Income

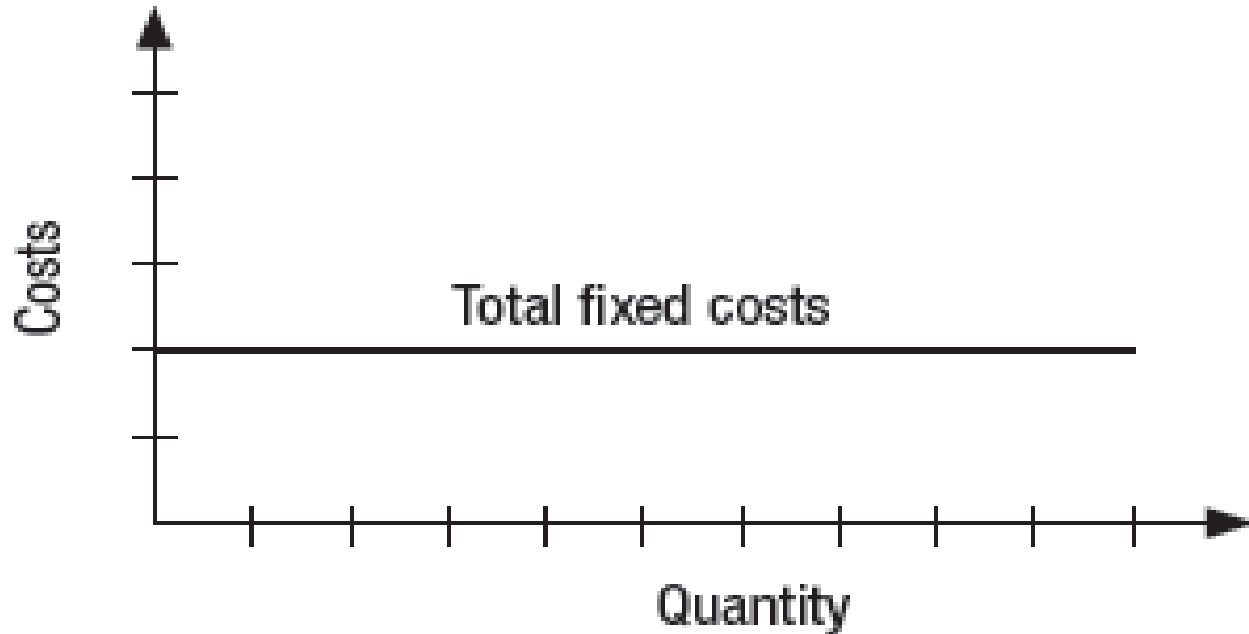
- Receipts resulting from the sale of products and/or services
- $\text{Income} = \text{Units sold} \times \text{Price per unit}$
- Can also be obtained from other sources such as interest on investments



# Costs

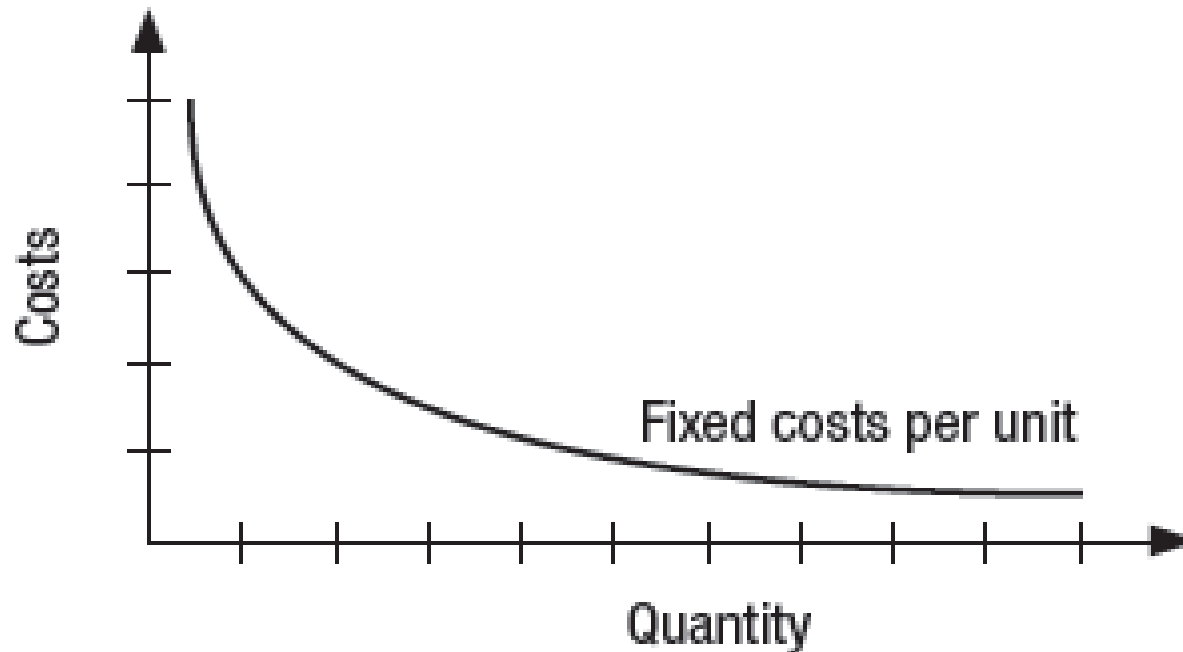
- Monetary value sacrificed in the production of goods and/or services produced for the purpose of resale
- Costs can be subdivided:
  - Direct cost
  - Indirect cost
  - Overhead expenses
  - Fixed costs
  - Variable costs
  - Semi-variable costs
  - Variable cost per unit
  - Total costs.

# A graphical representation of total fixed costs



**Figure 14.4:** A graphical representation of total fixed costs

# A graphical representation of fixed costs per unit



**Figure 14.5:** A graphical representation of fixed costs per unit

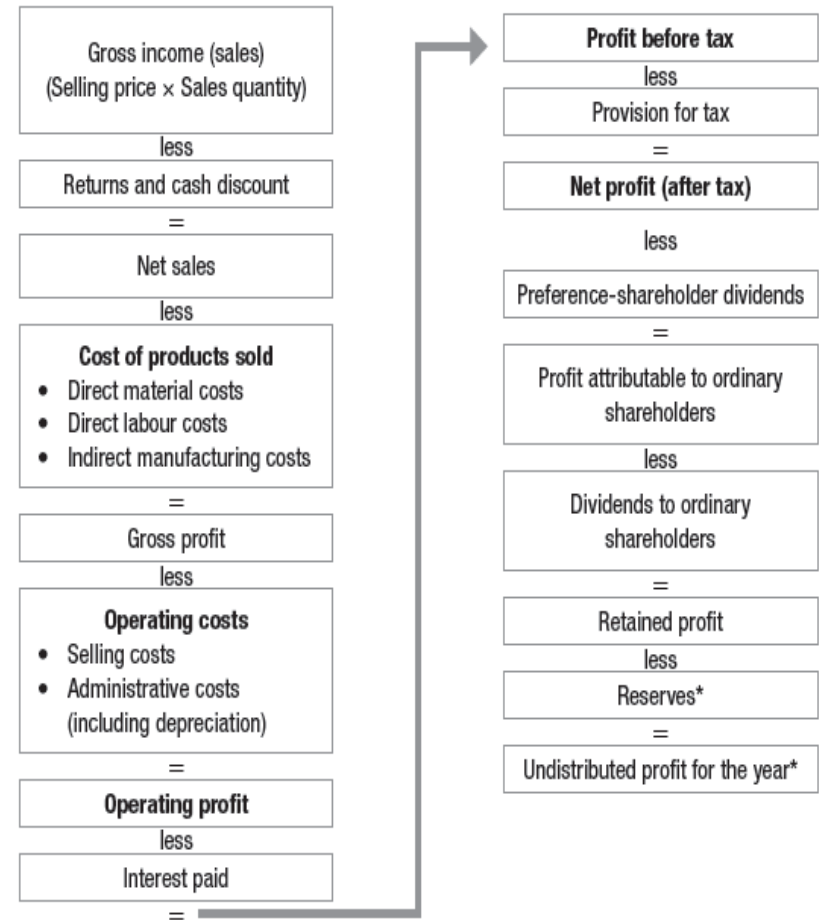


# Profit

- Favourable difference between the income earned during a specific period and the cost incurred to earn that income
- A loss occurs when the cost exceeds the income
- Profit or loss = Income – Cost
- Profit or loss = (Price x Units sold) – Cost

# The income statement

Furnishes details about the manner in which the profit or loss for a particular period was arrived at and how it has been distributed



\*Appears in the liability side of the balance sheet – see section 14.3.1


Figure 14.9: A diagrammatic representation of an income statement of a manufacturing firm





# Objective of financial management

- Long term objective should be to increase the value of the business
- This can be accomplished by:
  - Investing in assets that will add value to the business
  - Keeping the cost of capital as low as possible.
- Short term financial objective should be to ensure the profitability, liquidity and solvency of the business



# Fundamental principles of financial management

- The risk-return principle
- The cost-benefit principle
- The time value of money principle



# Cost–volume–profit relationships

- Profitability is determined by the unit selling price of a product, the cost of the product and the level of activity of the business
- Change in one of these three components will result in a change in the total profit earned
- Each of these components have to be viewed in conjunction with one another
- A break-even point is reached, where total costs are equal to total income
- A change in one of the variables will result in the break-even point changing



# Break-even analysis

$$N = \frac{F}{(SP - V)}$$

N = the number of units (volume)

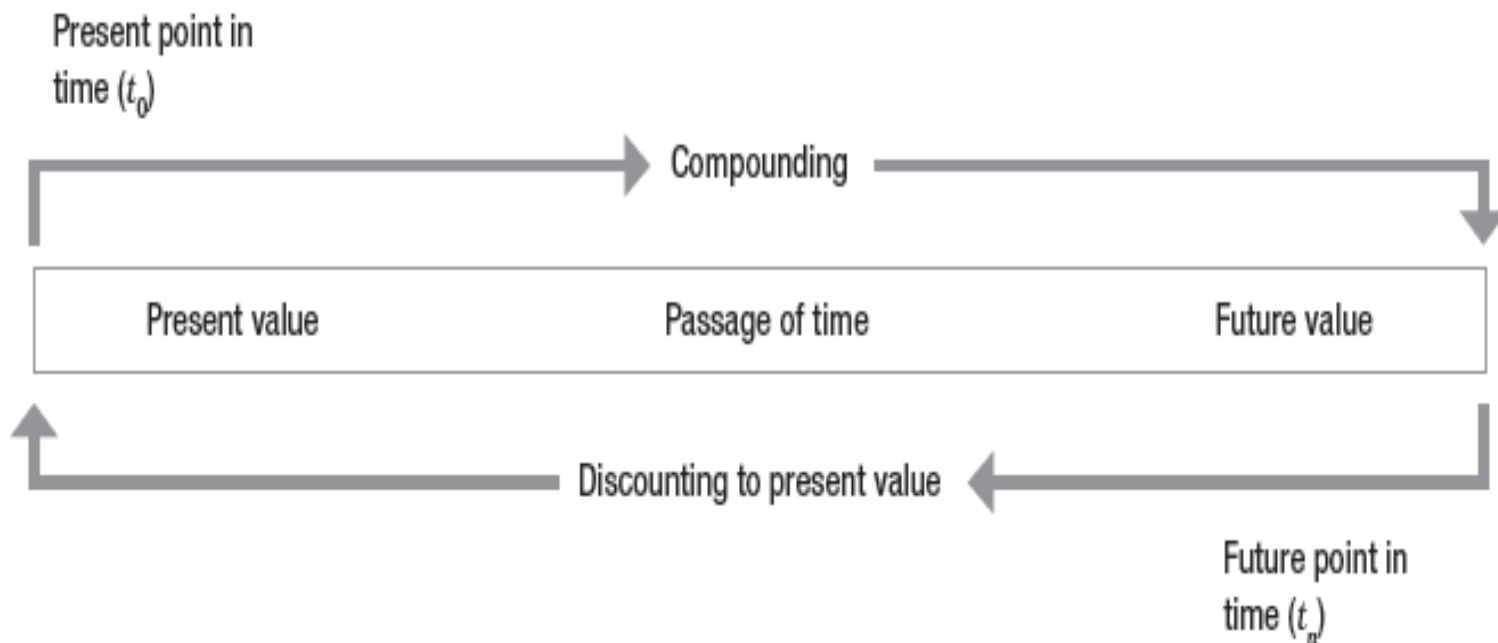
(SP – V) = the marginal income or variable profit



# The time value of money

- Considers the combined effect of both interest and time
- Can be approached from two perspectives:
  - The calculation of the future value of some given present value
  - The calculation of the present value of some expected future amount.

# The relationship between present value and future value




**Figure 14.11:** The relationship between present value and future value



# The future value of a single amount

- Future value of an initial investment or principle is determined by means of compounding
- Amount of interest earned in each successive period is added to the amount of the investment at the end of the preceding period
- Interest is therefore earned on capital and interest in each successive period
- The formula for calculating the future value of an original investment is:

$$FV_n = PV (1 + i)^n$$




# The present value of a single amount

- Present value of a future value is the monetary amount which can be invested today at a given interest rate ( $i$ ) per period in order to grow to the same future amount after  $n$  periods
- Discounting process is the reciprocal of the compounding process
- The formula for calculating the present value of a future single amount is:

$$PV = FV_n \frac{1}{(1 + i)^n}$$





# Financial analysis, planning and control

- Financial analysis necessary to monitor the general financial position of a business and to limit the risk of financial failure of the business as far as possible
- Financial managers have a number of tools at their disposal to conduct financial analyses:
  - The income statement
  - The balance sheet
  - The funds-flow statement
  - Financial ratios.

# The income statement

**Table 14.10:** An example of an abridged income statement (rand values)

Abridged income statement of ABC Limited for the year ended 28 February 2013		
Net sales		R3 000 000
Less cost of sales (cost of products sold)		2 250 000
• Direct labour costs	1 000 000	
• Direct material costs	900 000	
• Indirect manufacturing costs	350 000	
Gross profit		750 000
Less operating costs		400 000
• Selling expenses	150 000	
• Depreciation	80 000	
• Administrative costs	170 000	
Operating profit		350 000
Less interest paid		30 000
Profit before tax		320 000
Tax (29%)		92 800
Net profit after tax		227 200
Less dividends to preference shareholders		5 000
Profit attributable to ordinary shareholders		222 200
Less dividends to ordinary shareholders		75 000
Retained profit (earnings)		147 200
Less reserves		—
Undistributed profit for the year		147 200

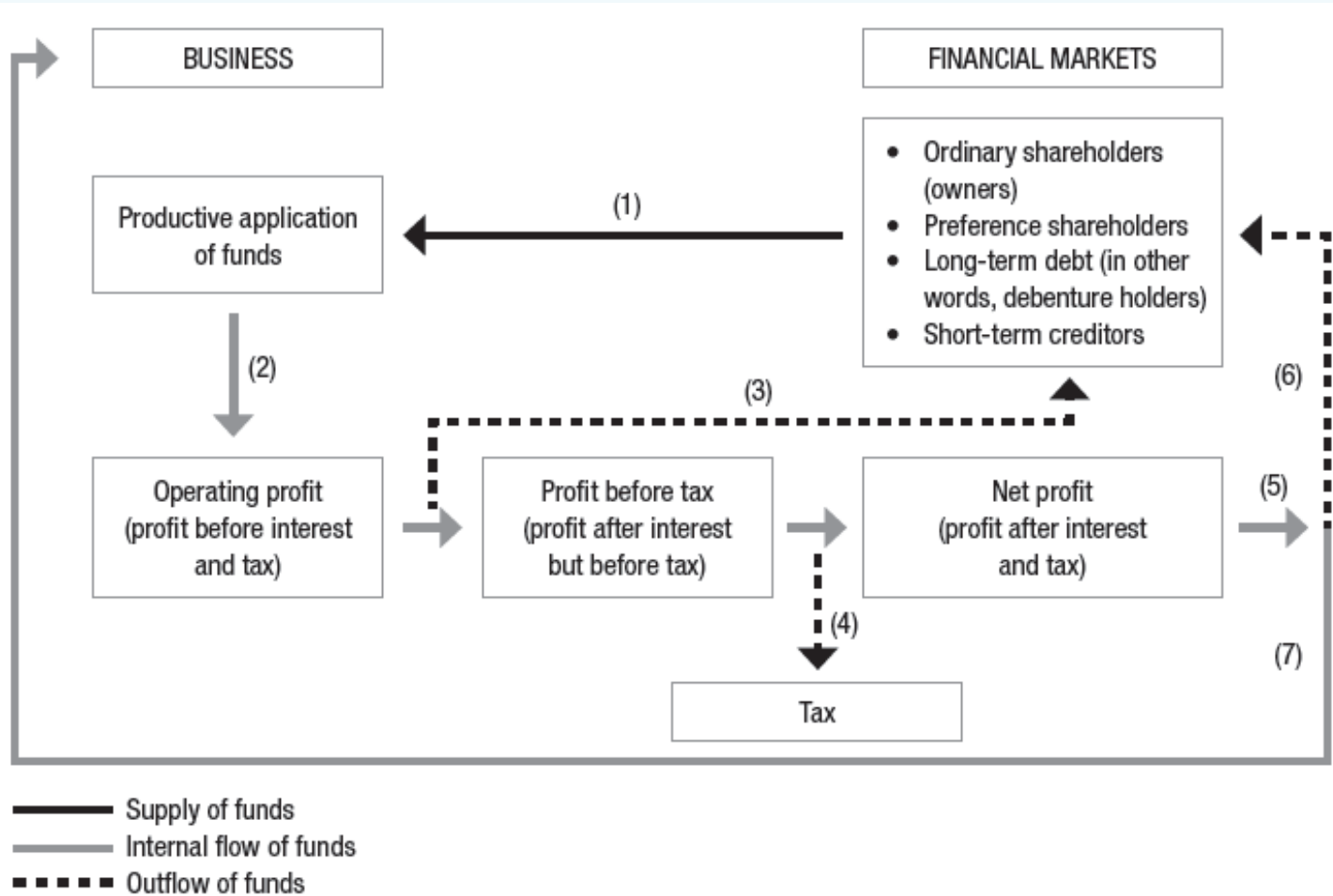
# The balance sheet

Table 14.11: An example of a company balance sheet

Balance sheet of ABC Limited at 28 February 2013

Assets (Employment of capital)			Equity and liabilities (Capital employed)		
		R			R
<b>Fixed assets</b>			800 000	<b>Shareholder's capital</b>	
Land and buildings (cost price)		200 000		Authorised and issued — ordinary shares (200 000 at R1 each)	200 000
Plant and equipment (cost price)	1 200 000			<b>Distributable reserves</b>	
<i>Less</i>				Capital reserves	300 000
Accumulated depreciation	600 000	600 000		Undistributed profit	350 000
					650 000
<b>Other assets</b>				<i>Owners' equity</i>	850 000
Investments			—	Preference-share capital	50 000
Total long-term assets			800 000	<i>Shareholders' interest</i>	900 000
<b>Current assets</b>			550 000	<b>Long-term debt</b>	
Cash		60 000		Debentures	200 000
Marketable securities		30 000		<i>Total long-term liabilities</i>	1 100 000
Debtors (net)		220 000		<b>Current liabilities</b>	250 000
Inventory		200 000		Trade creditors	100 000
Pre-paid expenses		40 000		Bank overdraft	100 000
				Arrear expenses	50 000
			1 350 000		1 350 000

# The flow of funds in a business



**Figure 14.14:** A simplified diagrammatical representation of the flow of funds of a business



# The funds-flow statement

- Helps with the analysis of the changes in the financial position of the business between two consecutive balance-sheet dates
- Reflects the net effect of all transactions for a specific period on the financial position of the business
- Two approaches for drawing up a funds-flow statement:
  - According to changes in the net working capital
  - According to changes in the cash position.



# Financial ratios

- Financial ratio gives the relationship between two items (or groups of items) in the financial statements
- Serves as a performance criterion to point out potential strengths and weaknesses of the business



# Financial ratios (continued)

- Four types of ratios:
  - Liquidity ratios
  - Solvency ratios
  - Profitability, rate of return or yield ratios
  - Measure of economic value.



# Liquidity ratios

Indicate the ability of a business to meet its short-term obligations as they become due without curtailing or ceasing normal activities

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

$$\text{Acid-test ratio} = \frac{\text{Current assets less inventory}}{\text{Current liabilities}}$$






# Solvency ratios

Indicate the ability of a business to repay its debts from the sale of the assets on cessation of its activities

$$\text{Debt ratio} = \frac{\text{Debt}}{\text{Assets}} \times \frac{100}{1}$$

$$\text{Gearing ratio} = \frac{\text{Owners' equity}}{\text{Debt}}$$



# Profitability, rate of return or yield ratios

Gross profit margin

$$= \frac{\text{Gross profit}}{\text{Sales}} \times \frac{100}{1}$$

Net profit margin

$$= \frac{\text{Net income}}{\text{Sales}} \times \frac{100}{1}$$

Return on total capital (after tax)

$$= \frac{\text{Operating profit less tax}}{\text{Total assets}} \times \frac{100}{1}$$

Return on shareholders' interest

$$= \frac{\text{Net profit after tax}}{\text{Shareholders' interest}} \times \frac{100}{1}$$

Return on owners' equity

$$= \frac{\text{Net income}}{\text{Owners' equity}} \times \frac{100}{1}$$



# Measures of economic value

- Measures of economic value are the economic value added (EVA) and market value added (MVA)
- $EVA = EBIT (1 - T) - \text{cost of capital}$  expressed in Rand
- EBIT = earnings before interest and tax
- $T = \text{tax rate}$



# Financial planning and control

- Integral part of the strategic planning of the business
- Done in most businesses or organisations by means of budgets



# An integrated budgeting system

- Operating budgets
  - Cost budgets
  - Income budgets
  - Profit plan or profit budget
- Financial budgets
  - Capital expenditure budget
  - The cash budget
  - Financing budget
  - The balance sheet budget

# The integrated budget system

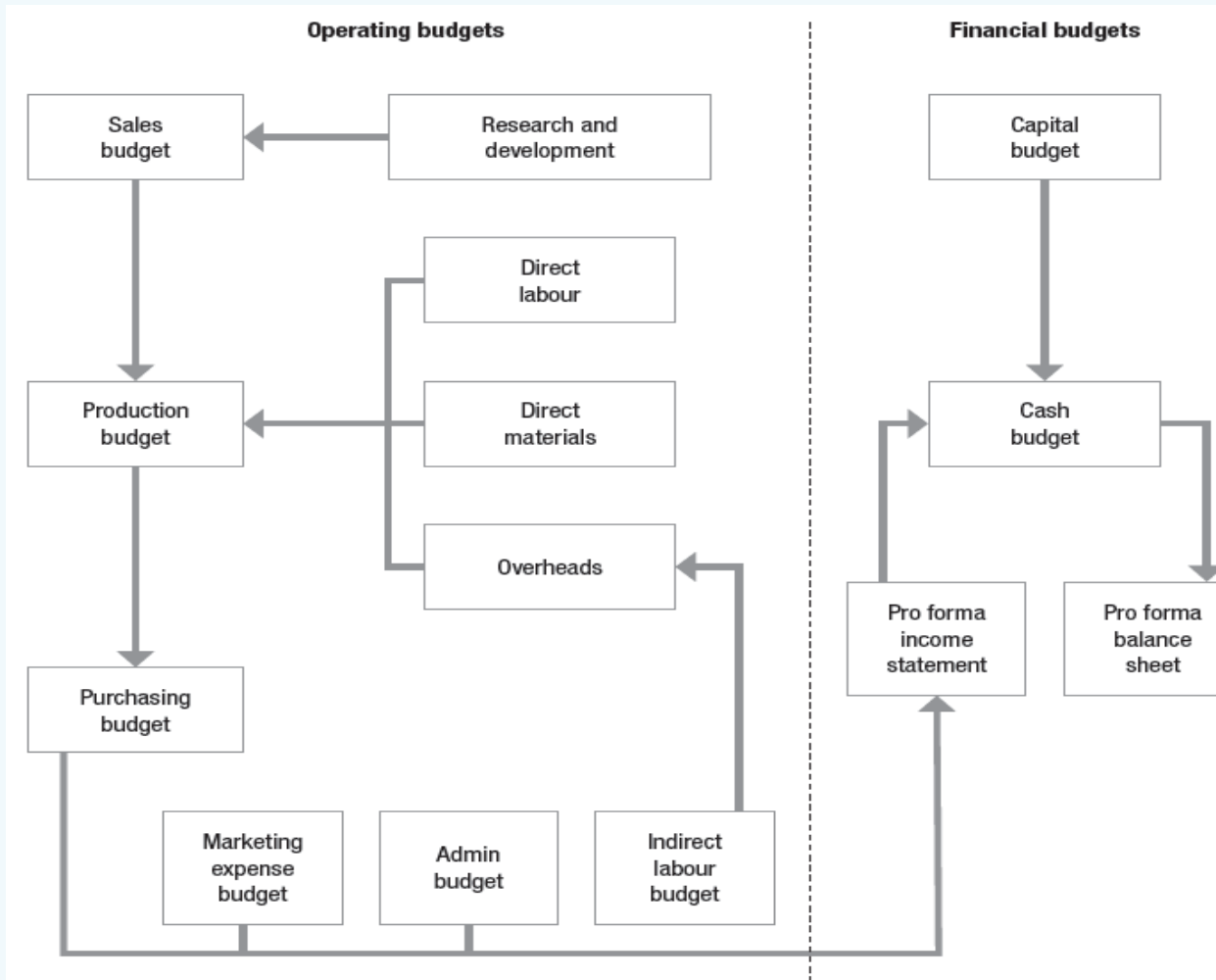


Figure 14.15: The operating and financial components of an integrated budgeting system



# Traditional budgeting

- Using the actual income and expenditure of the previous year as a basis and making adjustments for expected changes in circumstances



# Zero-base budgeting

- Enables the business to look at its activities and priorities afresh on an annual basis because historical results are not taken as a basis for the next budgeting period





# The management of current assets

- Current assets include items such as cash, marketable securities, debtors and inventory
- Current assets are needed to ensure the smooth and continuous functioning of the business



# The management of cash and marketable securities

- Costs of holding cash:
  - Loss of interest
  - Loss of purchasing power.
- Costs of little or no cash:
  - Loss of goodwill
  - Loss of opportunities
  - Inability to claim discounts
  - Cost of borrowing.



# Marketable securities

- Investment instruments on which a business earns a fixed interest income
- Three reasons to have a certain amount of cash available:
  - The transaction motive
  - The precautionary motive
  - The speculative motive.



# The cash budget

- Determining the cash needs of a business is crucially important
- Cash budget is a detailed plan of future cash flows for a specific period
- Composed of three elements:
  - Cash receipts
  - Cash disbursements
  - Net changes in cash.

# The cash cycle

- Investing cash in raw materials
- Converting the raw materials to finished products
- Selling the finished products on credit
- Ending the cycle by collecting cash



Figure 14.17: The cash cycle in a business



# The management of debtors

- Debtors arise when a business sells on credit.
- Credit granted to individuals is referred to as consumer credit
- Credit extended to businesses is known as trade credit



# The management of debtors (continued)

- Three most important facets of the management of debtor accounts are:
  - The credit policy
  - The credit terms
  - The collection policy.



# The credit policy

- Credit policy contains information on how decisions are made about who to grant credit to and how much
- The four Cs of credit:
  - Character: The customer's willingness to pay
  - Capacity: The customer's ability to pay
  - Capital: The customer's financial resources
  - Conditions: Current economic or business conditions.






# The credit terms

- Credit terms define the credit period and any discount offered for early payment
- Discount is usually offered for early payment
- Where early payment is not made, no discount is applicable and the full amount becomes due



# The collection policy

- Collection policy concerns the guidelines for collection of debtor accounts that have not been paid by due dates
- Costs of granting credit include the following:
  - Loss of interest
  - Costs associated with determining customer's creditworthiness
  - Administration and record-keeping costs
  - Bad debts.



# The management of stock (inventory)

- Conflict between profit objective and operating objective
- Costs of holding stock:
  - Lost interest
  - Storage cost
  - Insurance costs
  - Obsolescence.




# The management of stock (inventory) (continued)

- Costs of holding little or no stocks:
  - The loss of customer goodwill
  - Production interruption dislocation
  - Loss of flexibility
  - Re-order costs.



# Long-term investment decisions and capital budgeting

- Capital investment involves the use of funds of a business to acquire fixed assets such as land, the benefits of which accrue over periods longer than one year
- Importance of capital investment projects:
  - Relative magnitude of the amounts involved
  - Long-term nature of capital investment decisions
  - Strategic nature of capital investment projects.



# The evaluation of investment projects

- Basic principle underlying the evaluation of investment decision-making is cost benefit analysis – cost of each project is compared to its benefits
- Two additional factors require further consideration when comparing benefits and costs:
  - Benefits and costs occur at different times
  - Costs and benefits are accounting concepts that do not necessarily reflect the timing and amount of payments to the business.



# Cash-flow concepts

- Cash flow represents cash transactions
- Three cash-flow components used for capital budgeting:
  - Initial investment
  - Expected annual cash flows over the life of the project
  - Expected terminal cash flow, related to the termination of the project.
- Annual net cash flows are calculated as the earnings before interest and tax, plus any non-cash cost items such as depreciation minus cash outflows for particular year



# Cash-flow concepts (continued)

- Concepts to understand:
  - Initial investment ( $C_0$ )
  - Annual net cash flows ( $CF_t$ )
  - Life of the project ( $n$ )
  - Terminal cash flow (TCF)





# The net present value method

- The formula used to calculate NPV is:
  - $NPV = \text{present value of net cash inflows} - \text{initial investment}$
- The application of NPV involves:
  - Forecasting the three components of project cash flows as accurately as possible
  - Deciding on an appropriate discounting rate
  - Calculating the present values of the three project cash flow components for a project
  - Accepting all projects with a positive NPV and rejecting all those with a negative NPV, in accordance with NPV decision criteria.



# Decision criteria for the NPV

- Accept all independent projects with a positive NPV ( $NPV > 0$ )
- Reject all independent projects with a negative NPV ( $NPV < 0$ )
- Projects with  $NPV = 0$  make no contribution to value and are usually rejected



# Risk and uncertainty

- Risk is defined as any deviation from the expected outcome
- Risks may or may not occur
- Uncertainty describes a situation where the managers are simply unable to identify the various deviations and are unable to assess the likelihood of their occurrence
- Sensitivity analysis is a method that can be used to take risk into account in capital investment decisions



# Financial markets

- Financial markets and financial institutions play an important role in the financing of businesses
  - Financial markets are channels through which holders of surplus funds make funds available to those who require additional finance
  - Financial institutions act as intermediaries on financial markets between savers and those with a shortage of funds
  - Financial intermediation is the process in which financial institutions pool funds from savers and make these funds available to those requiring finance



# Money and capital markets

- Money market is the market for financial instruments with a short-term maturity
  - Funds are borrowed and lent for periods of one day or for a few months
- Funds required for long-term investment are raised and traded by investors on the capital market
  - Mostly takes place on the Johannesburg Securities Exchange (JSE)
  - Long-term investment transactions of this nature can also be done privately



# Types of institutions

- Financial institutions divided into two broad categories:
  - Deposit-taking institutions
  - Non-deposit institutions



# Types of institutions (continued)

- Deposit-taking institutions
  - Private-sector bank, such as ABSA, Nedbank, FNB, Standard Bank and Investec
- Non-deposit-taking institutions
  - Short-term insurers, such as Outsurance, Santam and Mutual & Federal
  - Life assurers, such as Old Mutual and Sanlam
  - Pension funds
  - Provident funds



# Short-term financing

- Common forms of short-term financing:
  - Trade credit
  - Accruals
  - Bank overdrafts
  - Factoring.





# Short-term financing

- Trade credit
  - Occurs mainly in the form of suppliers' credit
  - Prompt payment is often secured in the form of rebates
  - Advantages of trade credit:
    - Readily available to businesses that pay their suppliers regularly
    - It is informal
    - It is more flexible than other forms of short-term financing.



# Short-term financing

- Accruals

- Accruals are a source of spontaneous finance
  - Accrued wages represent money that a business owes its employees (wages or salaries)
  - Accrued tax is a form of financing which is determined by the amount of tax payable and the frequency with which it is paid



# Short-term financing

- Bank overdrafts
  - Overdraft facility allows the business to make payments from a cheque account in excess of the balance in the account
  - Bridges the gap between cash income and cash expenses
  - Interest charged on overdraft is negotiable and is related to the borrower's risk profile
  - Interest is charged daily on the outstanding balance

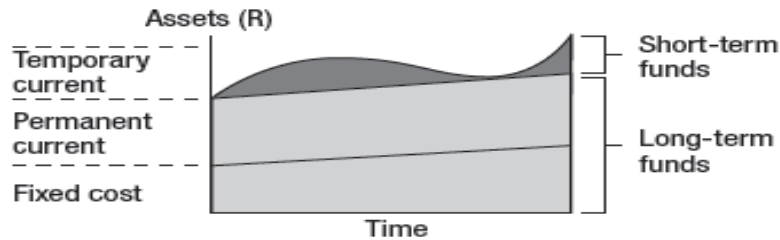


# Short-term financing

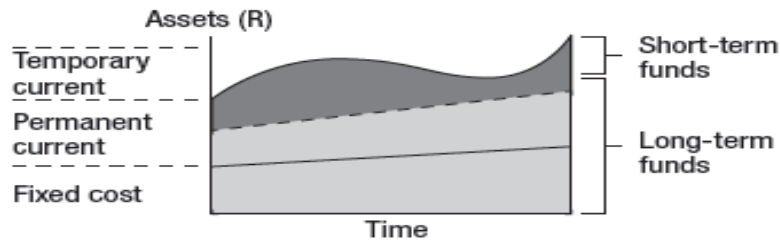
- Debtor finance
  - Involves the sale of debtors to a debtor-financing company:
    - Invoice discounting is the sale of existing debtors and future credit sales to a debtor financing company
    - Factoring is similar to invoice discounting, except the financier undertakes to administer and control the collection of debt.

# Short-term financing plans

## (a) The matching approach



## (b) The aggressive approach



## (c) The conservative approach

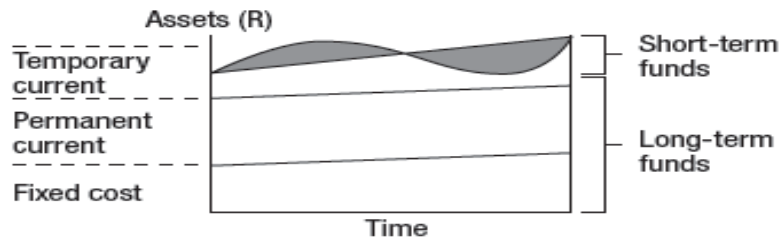


Figure 14.22: Short-term financing plans



# Shareholders' interest

- Shareholders' interest in a company is subdivided into owners' equity and preference shareholders' capital
- Owners' equity consists of funds made directly available by the legal owners in the form of share capital
- Preference-shareholder capital falls between debentures and ordinary shares in terms of risk



# Owners' equity

- Ordinary shareholders are true owners of a business
- Two types of ordinary shares:
  - Par value shares
  - Non-par value shares.
- A co-owner of the business, the ordinary shareholder, has a claim to profits



# Owners' equity

- Important characteristics of the ordinary share:
  - Liability of ordinary shareholders is limited to the amount of share capital they contributed to the business
  - No certainty that money paid for shares will be recouped
  - Ordinary shares in listed company are tradable on stock exchange
  - Ordinary shareholders are owners of the business and usually have full control of it
  - Business has no legal obligation to reward ordinary shareholders for their investment in shares
  - Share capital is available to the business for an unlimited period.





# Preference-shareholders' capital

- Two types of preference shares:
  - Ordinary preference share
  - Cumulative preference share.
- Characteristics of preference shares:
  - Have a preferential claim over ordinary shares on profit after tax
  - Have a preferential claim over ordinary shares on the assets of the business in the case of liquidation
  - The term of availability is unlimited
  - Authority can vary between full voting rights and no voting rights at all.

# Sources and forms of long-term financing

**Table 14.23:** Sources and forms of long-term financing for a business in the form of a company

	Source	Balance-sheet classification	Form
1	Owners or ordinary shareholders	Owner's equity or own capital	<ul style="list-style-type: none"> <li>• Ordinary shares</li> <li>• Reserves</li> <li>• Undistributed profit</li> <li>• Preference shares</li> </ul>
2	Preference shareholders	Preference-shareholders' capital	
1 + 2	Share capital	Shareholders' interest	Total of the above
3	Suppliers of debt capital/credit suppliers	Long-term or borrowed capital over a long-term period	<ul style="list-style-type: none"> <li>• Debentures</li> <li>• Bonds</li> <li>• Registered term loans</li> <li>• Financial leases</li> </ul>
1 + 2 + 3		Total long-term capital	

**Notes:**


The sources and forms of long-term financing for other forms of businesses differ only in some respects from those for a company:

1. Other forms of business do not have any preference shareholders, and therefore there are no preference shares and no preference-shareholders' capital.
2. The own capital or owner's equity comprises funds that the owner/s contribute to the business, as well as profits that are not withdrawn by the owners. The owners' equity is included in a capital account in the balance sheet.
3. Other forms of business do not make use of debentures.



# Long-term debt

- Refers to debt that will mature in a year or more
- Usually obtained in two ways:
  - Loans
    - Debentures
    - Bonds
    - Registered term loans
  - Financial leasing (credit)
    - Direct financial leasing
    - Leaseback agreements



# Sources of financing for small businesses

- Personal funds
- Loans from relatives and friends
- Trade credit
- Loans or credit from equipment sellers
- Mortgage loans
- Commercial bank loans
- Small-business loans
- Taking in partners
- Selling capital shares
- Venture-capital funding



# The cost of capital

- Financial management should ensure that only the necessary amount of capital is obtained
- Cost and risk should be kept to a minimum
- In capital investment decisions, cost of capital serves as a benchmark for investment proposals
- In financing decisions, various types of capital earmarked for financing investments of a business should be combined so that the cost of capital to the business is kept to a minimum



# Risk

- For an investor, risk consists of two components:
  - Possible loss of the principal sum (the original amount invested)
  - Possibility that no compensation will be paid for the use of the capital (no interest or dividend payments).



# Summary

- Nature of financial function and task of financial management
- Concepts and techniques in financial management
- Goals and principles of financial management
- Financial analysis, planning and control
- Management of the asset structure including investments



# Summary

- Guidelines and techniques for short- and long-term investments
- Nature and characteristics of long-term capital
- Factors involved in determining cost of capital
- Risk involved