

MNB102-E

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Financial management function (Page 408)

- Cash inflow

- ***Inflow of funds***



-
-
-

Cash outflow

Outflow of funds

Financial Manager's Tasks

- **Investment decision-making (chapter 18)**
- **Financing decision making (chapter 19)**

Investment

Financing (Pg 410)

Assets

- Land & buildings
- Plant & equipment
- Vehicles

Current assts

- Cash
- Debtors
- Inventory

Long-term funds

- Shareholders interest
- Ordinary share capital
- Preference shares
- Long-term debt

Current liabilities

- Trade creditors
- Bank overdraft
- Arrear expenses

Fundamental principle, basic concepts (chapter 17)

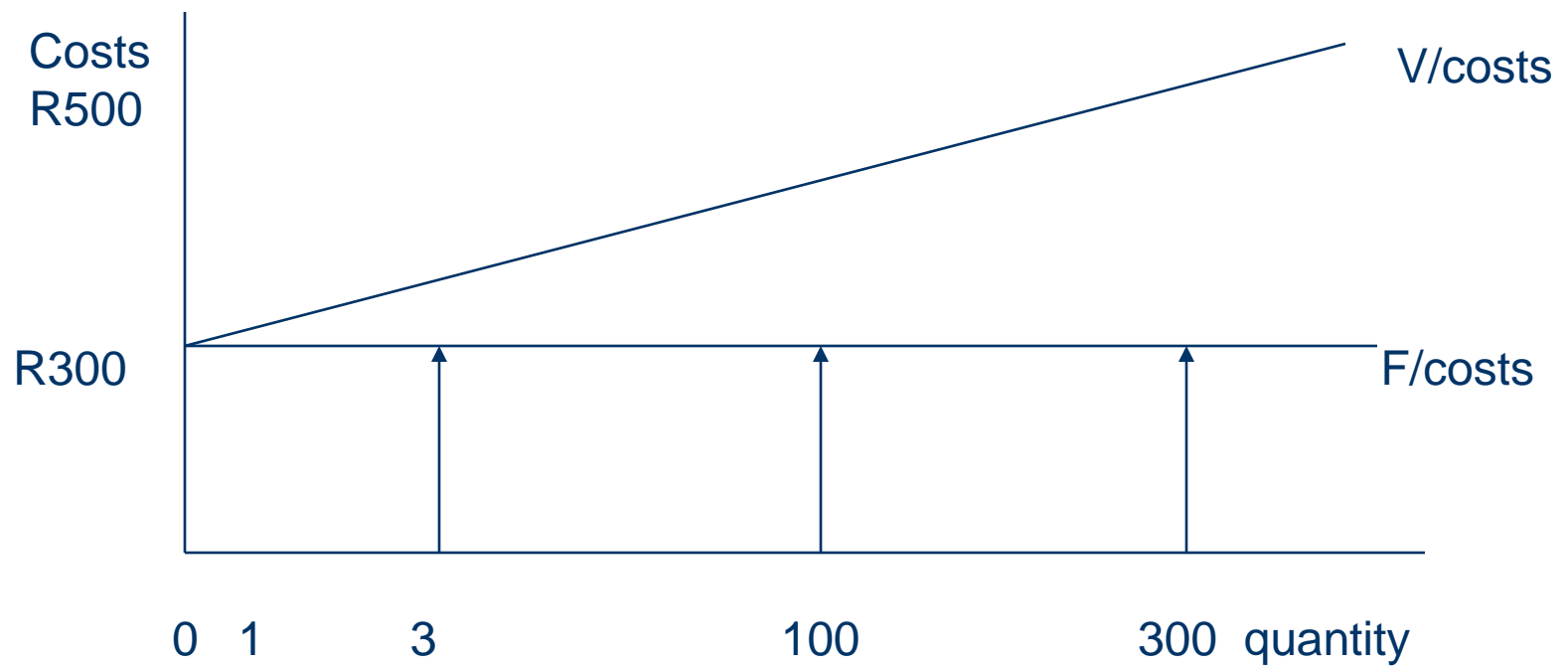
- **BASIC CONCEPTS**

- **Balance sheet**- fixed assets, current assets, shareholders interest, owners equity, long and short-term funds
- **Income statement**- income, costs, profit

- **FUNDAMENTAL PRINCIPLES**

- risk-return principle
- cost-benefit principle
- time value of money principle
- analysis of the financial statement

Fixed cost V/S variable cost (TL 101, pg 412-413)



Cost-volume-profit relationships (assignment 4, 5, 9 and 10)

- Break-even analysis
- $N = \text{Total fixed cost} / \text{marginal income per unit}$

Cost Volume Profit Analysis

Suppose you are given the following Information:

Selling price per unit	= R10
Total variable costs	= R600
Fixed cost per unit	= R3
Total fixed costs	= R300

- calculate the number of units sold
- calculate the profit generated
- calculate the number of units to break-even

Time value of money

- Tables will be provided (application of the table is important) Pg 420 and 421
- Cash flows and notice the differences (e.g. table 17.11)
- Financial calculator
- Derivation of the factor

Time value of money

Year	Cash flow
1	R45 000
2	R83 000
3	R75 000

Cost of capital 10%

Calculate the **present** value

Time value of money

Year	Cash flow
1	R45 000
2	R83 000
3	R75 000

Cost of capital 10%

Calculate the **future** value

Analysis of financial statement

- Income statement
- Balance sheet

We use ratios

- Why do we analyze the financial statements
- Define each group of ratios
- Know the equations
- Calculate the ratios
- Calculator allowed (not programmable)
- How one can improve the performance

Reasons for analyses

- Profitability
- Liquidity
- Solvency
- Performance
- Sustainability

Define the ratio

- Liquidity ratio refers to the ability of the business to meet short-term obligation

Calculations (application)

- R
- Cash 124 000
- Debtors 852 000
- Inventory 340 000
- Current liabilities 857 000
- Net fixed assets 2 500 000
- Total liabilities 2 300 000

Interpretation of ratios

- - Current ratio = 1.50
 -
-
- Previous year 10
- Industry average 5
- Competitor 8

Improving the ratio (performance)

- Profitability ratio
- Can be improved by:
 - increasing prices
 - increasing production
 - reducing cost

Objective of the financial Manager

Create value

Investment

Financing

Profitability

Liquidity

Solvency



Investment



Financing



Assets

- Land & buildings
- Plant & equipment
- Vehicles

Current assts

- Cash
- Debtors
- Inventory

Long-term funds

- Owner's equity
- Preference shares
- Shareholders interest
- Long-term debt

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CHAPTER 18

Investment management

- Management of current assets (**define**)
 - Cash management
 - Debtor management
 - Inventory management

Investment in current asset

- OVER-INVESTMENT
 - -cost/risk

- UNDER-INVESTMENT
 - -cost/risk

Cash management

- Motives for holding cash
- Cash cycle
- Cash Budget

Management of debtors

- Consumer credit
- Trade credit



Facets of management of debtors

- credit policy → credit standard
- credit terms
- collection policy

Management of inventory

- Profit objective
 - High stock turnover
 - Low stock
- Operating objective
 - Low stock turnover
 - No interruption in production

Management of fixed assets (capital investment) (capital budgeting)

- Importance of capital investment
- -the amount involved
- -strategic nature
- -long-term nature

Capital budgeting

- CASH FLOWS
 - -initial investment
 - -operating cash flow
 - -terminal cash flow
- **How do we use the cash flows?**
 - -use capital budgeting technique (NPV)

(Question)

NPV TECHNIQUE

- Initial investment of the project is R2000
- Cost of capital is 15%
- Operating cash flows

<i>Year</i>	<i>Inflows</i>	<i>Outflows</i>
● 1	R1 000	R 600
● 2	R1 200	R 800
● 3	R1 600	R1 000
● 4	R2 000	R1 300
● 5	R2 400	R1 600

NPV TECHNIQUE

●	<u>Year Inflows</u>		<u>Outflows</u>		<u>N/flow</u>
●	1	R1 000	-	R 600	= R400
●	2	R1 200	-	R 800	= R400
●	3	R1 600	-	R1 000	= R600
●	4	R2 000	-	R1 300	= R700
●	5	<u>R2 400</u>	-	<u>R1 600</u>	= <u>R800</u>
●		R8 200		R5 300	R2 900

NPV TECHNIQUE

- | <u>Year</u> | <u>Net flows</u> | | <u>PVF</u> | | <u>PV</u> |
|-------------|---|---|------------|---|-------------|
| • 1 | R400 | X | 0,8696 | = | R348 |
| • 2 | R800 | X | 0,7561 | = | R302 |
| • 3 | R600 | X | 0,6575 | = | R395 |
| • 4 | R700 | X | 0,5718 | = | R400 |
| • 5 | <u>R800</u> | X | 0,4972 | = | <u>R398</u> |
| • | R2 900 | | | | R1 843 |
| • | NPV = PV cash flow - initial investment | | | | |
| • | NPV = R1 843 - R2 000 = -R153 | | | | |

Investment



Financing



Assets

- Land & buildings
- Plant & equipment
- Vehicles

Current assts

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Long-term funds

- Owner's equity
- Preference shares
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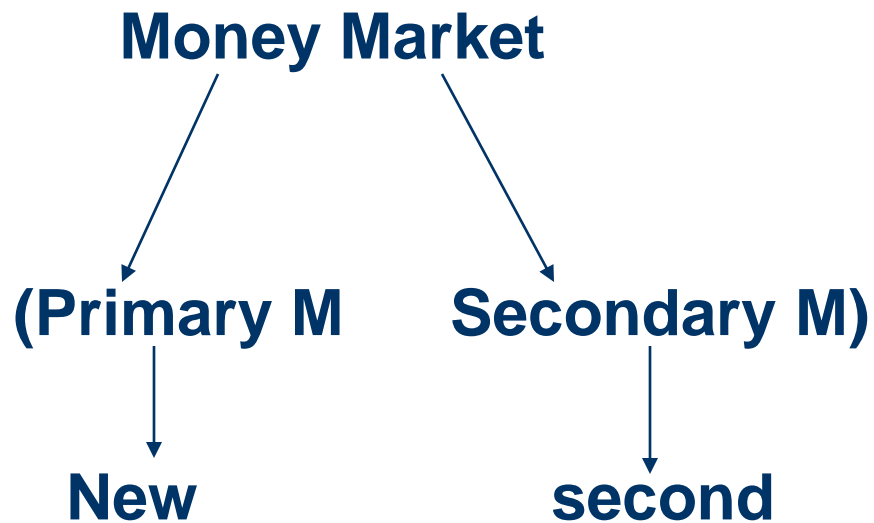
Chapter 19

Financing decision

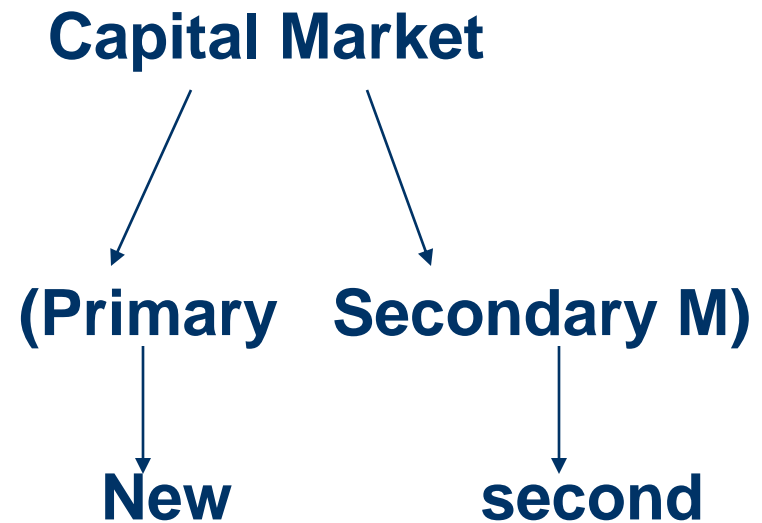
- FINANCIAL MARKETS
- FINANCIAL INSTITUTIONS
- FINANCIAL ASSETS

Financial Markets (**define**)

Short-term



Long-term to maturity



Short-financing decision-making

- Risk/cost

Short-financing decision-making

- Trade credit
- Accruals
- Bank overdraft
- Factoring


Financing strategies

- Matching approach
- Conservative approach
- Aggressive Approach

Matching Approach

- Fixed assets → Long-term funds
- Permanent current assets → Long-term funds
- Temporary current assets → Short-term funds

Aggressive Approach

- Fixed assets —————> Long-term funds
- Permanent current assets  Long-term funds
Short-term funds
- Temporary current assets —————> Short-term funds

Conservative Approach

- Fixed assets → Long-term funds
- Permanent current assets → Long-term funds
- Temporary current assets → Long-term funds

SOURCE OF LONG TERM FUNDS

- Ordinary shares
- Preference share
- Debt
- -loan
- -credit
- *(Ensure that you understand the characteristics)*

Cost of long term funds

- Weighted average cost of capital (WACC)

- | <u>Form</u> | <u>Amount</u> | <u>Weight</u> | <u>Cost</u> |
|-------------|---------------|---------------|-------------|
|-------------|---------------|---------------|-------------|

- | | | | |
|----------|---------|--|-----|
| Ordinary | R1 400m | | 20% |
|----------|---------|--|-----|

- | | | | |
|------------|-----------|--|-----|
| Preference | R3 00 000 | | 10% |
|------------|-----------|--|-----|

- | | | | |
|-----------|--|--|--|
| Long-term | | | |
|-----------|--|--|--|

- | | | | |
|------|-----------|--|----|
| debt | R 500 000 | | 9% |
|------|-----------|--|----|

- NB: 9% after-tax

Answer

- | <u>Component</u> | <u>Amount</u> | <u>Cost</u> | <u>Weight</u> | <u>Weighted cost</u> |
|----------------------|---------------|-------------|---------------|----------------------|
| Owners`
equity | 1 400 | 20% | X 63,6 | = 12,72% |
| Preference
Shares | 300 | 10% | X 13,6 | = 1,36% |
| Debt | <u>500</u> | 9% | <u>X 22,8</u> | = <u>2.05%</u> |
| | 2 200 | | | |
| | | | WACC | 16.13 |

Cost Volume Profit Analysis

$$R300/R3 = 100 \text{ units}$$

$$S - C = P$$

$$R10 \times 100 \text{ units} - (R300 + R600) = R100$$

number of units to break-even

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

$$\begin{aligned} N &= \frac{R300}{(R10 - R6)} \\ &= 75 \text{ units} \end{aligned}$$

Time Value of Money

- Assuming you are the bank manager of Easifin Bank. On 1 January 2001 your client deposited R15,000 into a fixed deposit account that pays 10 percent interest per year. On 1 January 2002 he deposited a further R2,000 into the account. On 31 December 2004, he closed the account and deposited the money into another account that pays a higher interest rate of 15 percent per year. How much will the client have in his account on 1 January 2009?

Solution

-15 000 PV

4 N

10 I

COMP FV: R21 961.50

- 2000 PV

3 N

10 I

COMP FV: R2 662.00

Add totals: R21 961.50 + R2 662.00 = R24 623.50

Compute FV of Total amount:

-24 623.50 PV

4 N

15 I

COMP FV

R43 066.66

Time Value of Money

Calculate the NPV of project that has the following projected cash flows.
The discount rate is 10 percent

Year	Cash flows
0	(R65 000)
1	R45 000
2	R83 000
3	R75 000

Solution

$$\text{NPV} = -\text{R}65\,000 + \text{PV}$$

$$\text{PV} = \text{R}45\,000 \times 0.9091 + \text{R}83\,000 \times 0.826$$

$$+ \text{R}75\,000 \times 0.751$$

$$= \text{R}40\,909.50 + \text{R}68\,558 + \text{R}56\,325$$

$$= \text{R}165\,792.50$$

$$\text{NPV} = -\text{R}65\,000 + \text{R}165\,792.50$$

$$= \text{R}100\,792.50$$

Weighted Average Cost of Capital

Alpha Pharmaceuticals has a marginal tax rate of 30%, and a required return of 19% for owners' equity. You have also been given the following book values for its capital structure:

Capital Components	
Owners equity	R500 000
10% preference shares	R200 000
Long term debt[13.5% debentures]	R300 000
Total	R1 000 000

Weighted Average Cost of Capital

1	2	3	4	5
Capital Components	Amount	Proportion	Component cost Of capital (after tax)	Weighted Cost
Owners equity	R500 000	0.5	0.19	0.095
10% preference shares	R200 000	0.2	0.1	0.02
Long term debt[13.5% debentures]	R300 000	0.3	0.0945	0.02835
Total	R1 000 000			0.14335

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