MAC3702
Application of Financial Management Techniques





Learn without limits.

UNISA college of accounting sciences

Question?

ADVISE…

MERGERS & ACQUISITIONS (12) and BUSINESS VALUATIONS (11)

Buying and selling a business or stake in a business

Merger of two or more businesses

MODEL ANSWER: The 4 valuation models (advise on purchase price)

CAPITAL BUDGETING (6)

Buying a machine or equipment to enhance productivity

Expanding operations (new store, additional capacity or special project)

MODEL ANSWER: NPV, IRR, payback period calculations

SOURCES OF FINANCE (7) & CAPITAL STRUCTURE (4 & 10)

Deciding on the financing instrument to use based on capital structure

Choosing the **cheapest form** of finance (lease, instalment sale, loan, etc.)

MODEL ANSWER: Current vs target capital structure & NPC calculation

FINANCIAL ANALYSIS (8)

Evaluating the performance of a company

(advise whether to invest or not)

MODEL ANSWER: Ratio computation

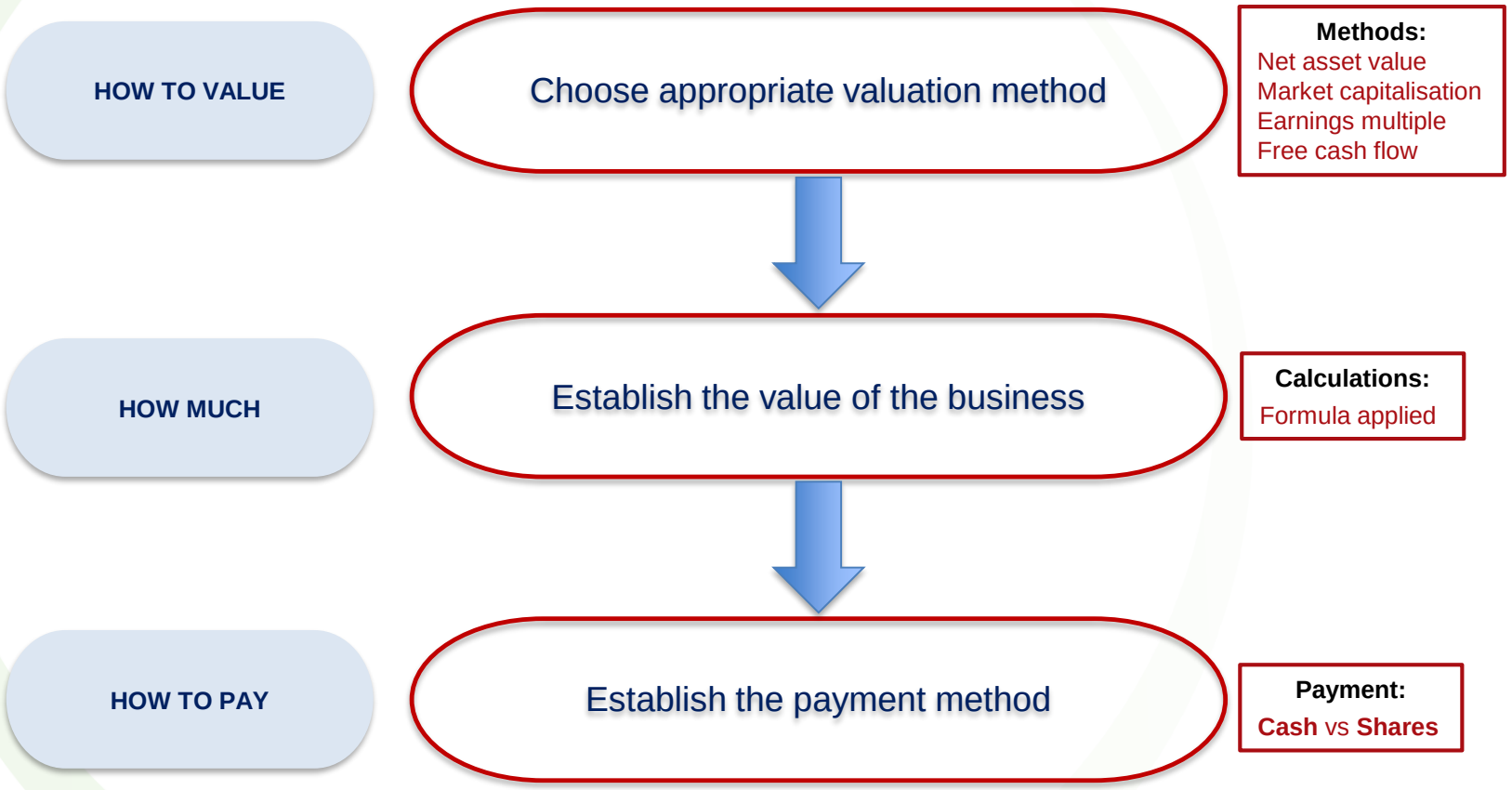
WORKING CAPITAL (9)

Implementing new working capital policy (debtors, creditors & inventory)

Reviewing existing working capital policy

MODEL ANSWER: Compare NEW vs OLD policies and key ratios

Valuations and M&As





Valuation methods…

Net Asset Based Valuation	Market Based Valuation	Cash Flow Valuation	Earnings Based Valuation
Net realisable value of assets less liabilities	*No of shares x Price*	*Discount of future cash flows (CFi / WACC-g)*	*PE ratio x Earnings*
Information Needed: Balance sheet (Assets & Liabilities)	***Information Needed:*** • Share price • No of shares	***Information Needed:*** • Expected future cash flows • WACC • Growth rate	***Information Needed:*** P/E ratio or EY (of similar entity) Net profit (maintainable earnings)

Information you are looking for in the scenario

Valuation methods…

Working example:

Boxer Cash & Carry (Pty) Ltd

1. Net asset value method

Formula:

Fair market value of assets	xxxx
Less: Liabilities	(xxx)
Less Other related costs	(x)
= Net asset value	xxx

2. Market based method (market cap)

Formula:

Value = Share price x number of shares

3. Discounted cash flow method

Formula:

$$Value = \frac{Cash\ Flow\ 1}{WACC - g}$$

3. Earnings based method

Formula:

Value = P/E ratio x *sustainable earnings*

Industry P/E ratio	20
Good business prospects	+
Business & financial risks	-
Adjusted P/E ratio	18

Headline earnings
Establish trend

Adjust for control premium
Adjust for marketibility discount

“Gordon’s Growth Model”

Market value of ordinary shares

Market value of preference shares
(non-redeemable)

Market value of loans/debentures
(using market yield)

Used mainly for perpetuity calculation

Expected Dividend in year 1

$$P = \frac{D_1}{r - g}$$

Compounded Rate of return

Numerator (D1) represents Dividend, Interest or Cash flows in a year’s time

Denominator (r) represents cost of capital (k_d, k_p, k_e or WACC)

Growth (g) is only considered if there is relevant growth in numerator above

Present value of future cash flows

Market value of a company
(given dividends & interest)
Page 100 of Skae et al.

Market value of a company
(given EBIT)

Application…

Market value of ordinary shares

$$P = \frac{D1}{r - g}$$

Company A has just declared a dividend of R6 per share. The dividend growth is 8% per annum. The expected shareholder's return is 18,8%. There are 1 million shares in issue. Calculate the market value of equity.

(Assignment 2 question 1a adapted)

Market value of preference shares
(non-redeemable)

$$MV_p = \frac{Dividend}{Yield}$$

Company B issued 200 000 preference shares at a par value of R100 each five years ago. A dividend of 15% is paid annually. The preference shares are not redeemable and similar shares currently carry a dividend payout of 16,3%. Calculate the market value of these preference shares.

(Page 110 of Skae et al adapted)

Market value of loans/debentures
(using market yield)

$$MV_d = \frac{Interest}{Market\ interest\ \%}$$

The R1 000 debentures carry a fixed interest rate of 10,5% per annum and the current market yield on comparable debentures is 10,4% p.a. The tax rate is 30%. Calculate the market value of these debentures assuming there are 5 000 in issue.

(Refer to formula on page 100 of Skae et al)

Application (cont.)…

Present value of future cash flows

$$Value = \frac{Cash\ Flow\ 1}{WACC}$$

Company C is currently generating cash profits of R281 500 per annum. The company is expecting to maintain these earnings for an indefinite period. The WACC rate is 20%. Calculate the value of the business.

(May 2015 Exam question 4 adapted)

Present value of future cash flows
(with growth)

$$Value = \frac{Cash\ Flow\ 1}{WACC - g}$$

Company C has generated cash profits of R281 500 for the year that just ended. The company is growing at 14% and the expected rate of return is 20%. Calculate the value of the business.

(May 2015 Exam question 4 adapted)

Market value of a company

$$Value = \frac{Annual\ EBIT\ x\ (1 - tax\ rate)}{WACC}$$

Company D generates an EBIT of R13 125 million per annum. WACC is 17,28% and tax rate is 28%. Calculate the value of the Company D.

(Oct 2015 Exam question 1a adapted. Refer page 100 of Skae et al)

Valuations Additional Practice Questions

- Boxer Cash & Carry (2017-S2 Question Bank)
- Bolt & Nut Engineering (2017-S2 Question Bank)
- Lion Brands Limited (2017-S2 Question Bank)
- Ice Cool (Pty) Ltd (2015-S1 Question 4)

Capital Budgeting

BASIC principles

- **Discount** all cash flows received after a year
- Use **WACC** rate to discount cash flows
- Treat the **financing and investing** decisions separately
- If choosing between **two options**, treat each option separately (avoid incremental approach)

Capital Budgeting

Net Present Value (NPV)	**Mutually exclusive projects** with different lives, use: NPV to ∞ (infinity) OR Equivalent Annual Income (EAI)
Net Present Value Index (NPVI)	**Divisible projects** **OR** **Same capital outlay**
Payback Period	**Discounted Payback Period** **v** **Payback Period**
Internal rate of return (IRR)	**IRR is the cost of capital where NPV = 0**

Capital Budgeting

CHECKLIST/GUIDE:

a) Initial investment/cost – *usually Year 0*

b) Working capital – *reversed at end, yearly movements*

c) Sales & costs/expense – *consider profit margins*

d) Relevant costs – *sunk, opportunity costs, etc.*

e) Sale of asset – *usually at end of project*

f) Taxation table – *prefer to show separately*

g) Taxation – *W&T, recoupment & scrapping*

h) Discount factors – *steps shown if financial calculator*

Capital Budgeting Practice Questions

- Mr. Kumalo: Question 6-1 (page 220 of 7th ed. by Skae)
- Photo Flawless Limited (class example)
- African Fish & Chips – part D (class example)

Thank **you**

Learn without limits.

UNISA | college of accounting sciences