
Answers

1 (a) Weighted average cost of capital (WACC) calculation

Cost of equity of KFP Co = $4.0 + (1.2 \times (10.5 - 4.0)) = 4.0 + 7.8 = 11.8\%$ using the capital asset pricing model

To calculate the after-tax cost of debt, linear interpolation is needed

After-tax interest payment = $100 \times 0.07 \times (1 - 0.3) = \4.90

Year	Cash flow	\$	10% discount	PV (\$)	5% discount	PV (\$)
0	Market value	(94.74)	1.000	(94.74)	1.000	(94.74)
1 to 7	Interest	4.9	4.868	23.85	5.786	28.35
7	Redemption	100	0.513	51.30	0.711	71.10
				<u>(19.59)</u>		<u>4.71</u>

After-tax cost of debt = $5 + ((10 - 5) \times 4.71)/(4.71 + 19.59) = 5 + 1.0 = 6.0\%$

Number of shares issued by KFP Co = $\$15m/0.5 = 30$ million shares

Market value of equity = $30m \times 4.2 = \$126$ million

Market value of bonds issued by KFP Co = $15m \times 94.74/100 = \$14.211$ million

Total value of company = $126 + 14.211 = \$140.211$ million

WACC = $((11.8 \times 126) + (6.0 \times 14.211))/140.211 = 11.2\%$

(b) (i) Price/earnings ratio method

Earnings per share of NGN = 80c per share

Price/earnings ratio of KFP Co = 8

Share price of NGN = $80 \times 8 = 640c$ or \$6.40

Number of ordinary shares of NGN = $5/0.5 = 10$ million shares

Value of NGN = $6.40 \times 10m = \$64$ million

However, it can be argued that a reduction in the applied price/earnings ratio is needed as NGN is unlisted and therefore its shares are more difficult to buy and sell than those of a listed company such as KFP Co. If we reduce the applied price/earnings ratio by 10% (other similar percentage reductions would be acceptable), it becomes 7.2 times and the value of NGN would be $(80/100) \times 7.2 \times 10m = \57.6 million

(ii) Dividend growth model

Dividend per share of NGN = $80c \times 0.45 = 36c$ per share

Since the payout ratio has been maintained for several years, recent earnings growth is the same as recent dividend growth, i.e. 4.5%. Assuming that this dividend growth continues in the future, the future dividend growth rate will be 4.5%.

Share price from dividend growth model = $(36 \times 1.045)/(0.12 - 0.045) = 502c$ or \$5.02

Value of NGN = $5.02 \times 10m = \$50.2$ million

(c) A discussion of capital structure could start from recognising that equity is more expensive than debt because of the relative risk of the two sources of finance. Equity is riskier than debt and so equity is more expensive than debt. This does not depend on the tax efficiency of debt, since we can assume that no taxes exist. We can also assume that as a company gears up, it replaces equity with debt. This means that the company's capital base remains constant and its weighted average cost of capital (WACC) is not affected by increasing investment.

The traditional view of capital structure assumes a non-linear relationship between the cost of equity and financial risk. As a company gears up, there is initially very little increase in the cost of equity and the WACC decreases because the cost of debt is less than the cost of equity. A point is reached, however, where the cost of equity rises at a rate that exceeds the reduction effect of cheaper debt and the WACC starts to increase. In the traditional view, therefore, a minimum WACC exists and, as a result, a maximum value of the company arises.

Modigliani and Miller assumed a perfect capital market and a linear relationship between the cost of equity and financial risk. They argued that, as a company geared up, the cost of equity increased at a rate that exactly cancelled out the reduction effect of cheaper debt. WACC was therefore constant at all levels of gearing and no optimal capital structure, where the value of the company was at a maximum, could be found.

It was argued that the no-tax assumption made by Modigliani and Miller was unrealistic, since in the real world interest payments were an allowable expense in calculating taxable profit and so the effective cost of debt was reduced by its tax efficiency. They revised their model to include this tax effect and showed that, as a result, the WACC decreased in a linear fashion as a company geared up. The value of the company increased by the value of the 'tax shield' and an optimal capital structure would result by gearing up as much as possible.

It was pointed out that market imperfections associated with high levels of gearing, such as bankruptcy risk and agency costs, would limit the extent to which a company could gear up. In practice, therefore, it appears that companies can reduce their WACC by increasing gearing, while avoiding the financial distress that can arise at high levels of gearing.

It has further been suggested that companies choose the source of finance which, for one reason or another, is easiest for them to access (pecking order theory). This results in an initial preference for retained earnings, followed by a preference for debt before turning to equity. The view suggests that companies may not in practice seek to minimise their WACC (and consequently maximise company value and shareholder wealth).

Turning to the suggestion that debt could be used to finance a cash bid for NGN, the current and post acquisition capital structures and their relative gearing levels should be considered, as well as the amount of debt finance that would be needed. Earlier calculations suggest that at least \$58m would be needed, ignoring any premium paid to persuade target company shareholders to sell their shares. The current debt/equity ratio of KFP Co is 60% (15m/25m). The debt of the company would increase by \$58m in order to finance the bid and by a further \$20m after the acquisition, due to taking on the existing debt of NGN, giving a total of \$93m. Ignoring other factors, the gearing would increase to 372% (93m/25m). KFP Co would need to consider how it could service this dangerously high level of gearing and deal with the significant risk of bankruptcy that it might create. It would also need to consider whether the benefits arising from the acquisition of NGN would compensate for the significant increase in financial risk and bankruptcy risk resulting from using debt finance.

- 2 (a) The key stages in the capital investment decision-making process are identifying investment opportunities, screening investment proposals, analysing and evaluating investment proposals, approving investment proposals, and implementing, monitoring and reviewing investments.

Identifying investment opportunities

Investment opportunities or proposals could arise from analysis of strategic choices, analysis of the business environment, research and development, or legal requirements. The key requirement is that investment proposals should support the achievement of organisational objectives.

Screening investment proposals

In the real world, capital markets are imperfect, so it is usual for companies to be restricted in the amount of finance available for capital investment. Companies therefore need to choose between competing investment proposals and select those with the best strategic fit and the most appropriate use of economic resources.

Analysing and evaluating investment proposals

Candidate investment proposals need to be analysed in depth and evaluated to determine which offer the most attractive opportunities to achieve organisational objectives, for example to increase shareholder wealth. This is the stage where investment appraisal plays a key role, indicating for example which investment proposals have the highest net present value.

Approving investment proposals

The most suitable investment proposals are passed to the relevant level of authority for consideration and approval. Very large proposals may require approval by the board of directors, while smaller proposals may be approved at divisional level, and so on. Once approval has been given, implementation can begin.

Implementing, monitoring and reviewing investments

The time required to implement the investment proposal or project will depend on its size and complexity, and is likely to be several months. Following implementation, the investment project must be monitored to ensure that the expected results are being achieved and the performance is as expected. The whole of the investment decision-making process should also be reviewed in order to facilitate organisational learning and to improve future investment decisions.

- (b) (i) Calculation of NPV

Year	0	1	2	3	4
	\$	\$	\$	\$	\$
Investment	(2,000,000)				
Income		1,236,000	1,485,400	2,622,000	1,012,950
Operating costs		676,000	789,372	1,271,227	620,076
Net cash flow	(2,000,000)	560,000	696,028	1,350,773	392,874
Discount at 10%	1.000	0.909	0.826	0.751	0.683
Present values	(2,000,000)	509,040	574,919	1,014,430	268,333
Net present value	\$366,722				

Workings

Calculation of income

Year	1	2	3	4
Inflated selling price (\$/unit)	20.60	21.22	21.85	22.51
Demand (units/year)	60,000	70,000	120,000	45,000
Income (\$/year)	1,236,000	1,485,400	2,622,000	1,012,950

Calculation of operating costs

Year	1	2	3	4
Inflated variable cost (\$/unit)	8.32	8.65	9.00	9.36
Demand (units/year)	60,000	70,000	120,000	45,000
Variable costs (\$/year)	499,200	605,500	1,080,000	421,200
Inflated fixed costs (\$/year)	176,800	183,872	191,227	198,876
Operating costs (\$/year)	<u>676,000</u>	<u>789,372</u>	<u>1,271,227</u>	<u>620,076</u>

Alternative calculation of operating costs

Year	1	2	3	4
Variable cost (\$/unit)	8	8	8	8
Demand (units/year)	60,000	70,000	120,000	45,000
Variable costs (\$/year)	480,000	560,000	960,000	360,000
Fixed costs (\$/year)	170,000	170,000	170,000	170,000
Operating costs (\$/year)	<u>650,000</u>	<u>730,000</u>	<u>1,130,000</u>	<u>530,000</u>
Inflated costs (\$/year)	676,000	789,568	1,271,096	620,025

(ii) Calculation of internal rate of return

Year	0	1	2	3	4
	\$	\$	\$	\$	\$
Net cash flow	(2,000,000)	560,000	696,028	1,350,773	392,874
Discount at 20%	1.000	0.833	0.694	0.579	0.482
Present values	<u>(2,000,000)</u>	<u>466,480</u>	<u>483,043</u>	<u>782,098</u>	<u>189,365</u>
Net present value		(\$79,014)			

$$\text{Internal rate of return} = 10 + ((20 - 10) \times 366,722) / (366,722 + 79,014) = 10 + 8.2 = 18.2\%$$

(iii) Calculation of return on capital employed

$$\text{Total cash inflow} = 560,000 + 696,028 + 1,350,773 + 392,874 = \$2,999,675$$

Total depreciation and initial investment are same, as there is no scrap value

$$\text{Total accounting profit} = 2,999,675 - 2,000,000 = \$999,675$$

$$\text{Average annual accounting profit} = 999,675 / 4 = \$249,919$$

$$\text{Average investment} = 2,000,000 / 2 = \$1,000,000$$

$$\text{Return on capital employed} = 100 \times 249,919 / 1,000,000 = 25\%$$

(iv) Calculation of discounted payback

Year	0	1	2	3	4
	\$	\$	\$	\$	\$
PV of cash flows	(2,000,000)	509,040	574,919	1,014,430	268,333
Cumulative PV	(2,000,000)	(1,490,960)	(916,041)	98,389	366,722

$$\text{Discounted payback period} = 2 + (916,041 / 1,014,430) = 2 + 0.9 = 2.9 \text{ years}$$

- (c) The investment proposal has a positive net present value (NPV) of \$366,722 and is therefore financially acceptable. The results of the other investment appraisal methods do not alter this financial acceptability, as the NPV decision rule will always offer the correct investment advice.

The internal rate of return (IRR) method also recommends accepting the investment proposal, since the IRR of 18.2% is greater than the 10% return required by PV Co. If the advice offered by the IRR method differed from that offered by the NPV method, the advice offered by the NPV method would be preferred.

The calculated return on capital employed of 25% is less than the target return of 30%, but as indicated earlier, the investment proposal is financially acceptable as it has a positive NPV. The reason why PV Co has a target return on capital employed of 30% should be investigated. This may be an out-of-date hurdle rate that has not been updated for changed economic circumstances.

The discounted payback period of 2.9 years is a significant proportion of the forecast life of the investment proposal of four years, a time period which the information provided suggests is limited by technological change. The sensitivity of the investment proposal to changes in demand and life-cycle period should be analysed, since an earlier onset of technological obsolescence may have a significant impact on its financial acceptability.

- 3 (a) When considering the financing of working capital, it is useful to divide current assets into fluctuating current assets and permanent current assets. Fluctuating current assets represent changes in the level of current assets due to the unpredictability of business activity. Permanent current assets represent the core level of investment in current assets needed to support a given level of turnover or business activity. As turnover or level of business activity increases, the level of permanent current assets will also increase. This relationship can be measured by the ratio of turnover to net current assets.

The financing choice as far as working capital is concerned is between short-term and long-term finance. Short-term finance is more flexible than long-term finance: an overdraft, for example, is used by a business organisation as the need arises and variable interest is charged on the outstanding balance. Short-term finance is also more risky than long-term finance: an overdraft facility may be withdrawn, or a short-term loan may be renewed on less favourable terms. In terms of cost, the term structure of interest rates suggests that short-term debt finance has a lower cost than long-term debt finance.

The matching principle suggests that long-term finance should be used for long-term investment. Applying this principle to working capital financing, long-term finance should be matched with permanent current assets and non-current assets. A financing policy with this objective is called a 'matching policy'. HGR Co is not using this financing policy, since of the \$16,935,000 of current assets, \$14,000,000 or 83% is financed from short-term sources (overdraft and trade payables) and only \$2,935,000 or 17% is financed from a long-term source, in this case equity finance (shareholders' funds) or traded bonds.

The financing policy or approach taken by HGR Co towards the financing of working capital, where short-term finance is preferred, is called an aggressive policy. Reliance on short-term finance makes this riskier than a matching approach, but also more profitable due to the lower cost of short-term finance. Following an aggressive approach to financing can lead to overtrading (undercapitalisation) and the possibility of liquidity problems.

(b) Bank balance in three months' time if no action is taken:

Month	1	2	3
	\$000	\$000	\$000
Receipts	4,220	4,350	3,808
Payments	(3,950)	(4,100)	(3,750)
Interest on bonds		(200)	
Overdraft interest	(19)	(18)	(18)
Capital investment			(2,000)
Net cash flow	251	32	(1,960)
Opening balance	(3,800)	(3,549)	(3,517)
Closing balance	(3,549)	(3,517)	(5,477)

Bank balance in three months' time if the finance director's proposals are implemented:

Month	1	2	3
	\$000	\$000	\$000
Receipts	4,220	4,350	3,808
Payments	(3,950)	(4,100)	(3,750)
Interest on bonds		(200)	
Overdraft interest	(19)	(15)	(13)
Capital investment			(2,000)
Accounts receivable	270	270	270
Inventory	204	204	204
Net cash flow	725	509	(1,481)
Opening balance	(3,800)	(3,075)	(2,566)
Closing balance	(3,075)	(2,566)	(4,047)

Workings:

Reduction in accounts receivable days

Current accounts receivable days = $(8,775/49,275) \times 365 = 65$ days

Reduction in days over six months = $65 - 53 = 12$ days

Monthly reduction = $12/6 = 2$ days

Each receivables day is equivalent to $8,775,000/65 = \$135,000$

(Alternatively, each receivables day is equivalent to $49,275,000/365 = \$135,000$)

Monthly reduction in accounts receivable = $2 \times 135,000 = \$270,000$

Reduction in inventory days

Current inventory days = $(8,160/37,230) \times 365 = 80$ days

Each inventory day is equivalent to $8,160,000/80 = \$102,000$

(Alternatively, each inventory day = $37,230,000/365 = \$102,000$)

Monthly reduction in inventory = $102,000 \times 2 = \$204,000$

Overdraft interest calculations

Monthly overdraft interest rate = $1.0617^{1/12} = 1.005$ or 0.5%

If no action is taken: Period 1 interest = $3,800,000 \times 0.005 = \$19,000$

Period 2 interest = $3,549,000 \times 0.005 = \$17,745$ or $\$18,000$

Period 3 interest = $3,517,000 \times 0.005 = \$17,585$ or $\$18,000$

If action is taken: Period 1 interest = $3,800,000 \times 0.005 = \$19,000$
 Period 2 interest = $3,075,000 \times 0.005 = \$15,375$ or $\$15,000$
 Period 3 interest = $2,566,000 \times 0.005 = \$12,830$ or $\$13,000$

Discussion

If no action is taken, the cash flow forecast shows that HGR Co will exceed its overdraft limit of \$4 million by \$1.48 million in three months' time. If the finance director's proposals are implemented, there is a positive effect on the bank balance, but the overdraft limit is still exceeded in three months' time, although only by \$47,000 rather than by \$1.47 million.

In each of the three months following that, the continuing reduction in accounts receivable days will improve the bank balance by \$270,000 per month. Without further information on operating receipts and payments, it cannot be forecast whether the bank balance will return to less than the limit, or even continue to improve.

The main reason for the problem with the bank balance is the \$2 million capital expenditure. Purchase of non-current assets should not be financed by an overdraft, but a long-term source of finance such as equity or bonds. If the capital expenditure were removed from the area of working capital management, the overdraft balance at the end of three months would be \$3.48 million if no action were taken and \$2.05 million if the finance director's proposals were implemented. Given that HGR Co has almost \$50 million of non-current assets that could possibly be used as security, raising long-term debt through either a bank loan or a bond issue appears to be sensible. Assuming a bond interest rate of 10% per year, current long-term debt in the form of traded bonds is approximately $(\$200m \times 2) / 0.1 = \$4m$, which is much less than the amount of non-current assets.

A suitable course of action for HGR Co to follow would therefore be, firstly, to implement the finance director's proposals and, secondly, to finance the capital expenditure from a long-term source. Consideration could also be given to using some long-term debt finance to reduce the overdraft and to reduce the level of accounts payable, currently standing at 100 days.

- (c) When credit is granted to foreign customers, two problems may become especially significant. First, the longer distances over which trade takes place and the more complex nature of trade transactions and their elements means foreign accounts receivable need more investment than their domestic counterparts. Longer transaction times increase accounts receivable balances and hence the level of financing and financing costs. Second, the risk of bad debts is higher with foreign accounts receivable than with their domestic counterparts. In order to manage and reduce credit risks, therefore, exporters seek to reduce the risk of bad debt and to reduce the level of investment in foreign accounts receivable.

Many foreign transactions are on 'open account', which is an agreement to settle the amount outstanding on a predetermined date. Open account reflects a good business relationship between importer and exporter. It also carries the highest risk of non-payment.

One way to reduce investment in foreign accounts receivable is to agree early payment with an importer, for example by payment in advance, payment on shipment, or cash on delivery. These terms of trade are unlikely to be competitive, however, and it is more likely that an exporter will seek to receive cash in advance of payment being made by the customer.

One way to accelerate cash receipts is to use bill finance. Bills of exchange with a signed agreement to pay the exporter on an agreed future date, supported by a documentary letter of credit, can be discounted by a bank to give immediate funds. This discounting is without recourse if bills of exchange have been countersigned by the importer's bank.

Documentary letters of credit are a payment guarantee backed by one or more banks. They carry almost no risk, provided the exporter complies with the terms and conditions contained in the letter of credit. The exporter must present the documents stated in the letter, such as bills of lading, shipping documents, bills of exchange, and so on, when seeking payment. As each supporting document relates to a key aspect of the overall transaction, letters of credit give security to the importer as well as the exporter.

Companies can also manage and reduce risk by gathering appropriate information with which to assess the creditworthiness of new customers, such as bank references and credit reports.

Insurance can also be used to cover some of the risks associated with giving credit to foreign customers. This would avoid the cost of seeking to recover cash due from foreign accounts receivable through a foreign legal system, where the exporter could be at a disadvantage due to a lack of local or specialist knowledge.

Export factoring can also be considered, where the exporter pays for the specialist expertise of the factor as a way of reducing investment in foreign accounts receivable and reducing the incidence of bad debts.

4 (a) *Financial Analysis*

	2008	2007	2006	2005
Turnover (\$m)	28.0	24.0	19.1	16.8
Turnover growth	17%	26%	14%	
Geometric average growth: 18.6%				
Profit before interest and tax (\$m)	9.8	8.5	7.5	6.8
PBIT growth	15%	13%	10%	
Geometric average growth: 13.0%				
Earnings (\$m)	5.5	4.7	4.1	3.6
Earnings per share (cents)	100	85	75	66
EPS growth	18%	13%	14%	
Geometric average growth: 14.9%				
Dividends (\$m)	2.2	1.9	1.6	1.6
Dividends per share (cents)	40	35	29	29
DPS growth	14%	21%	nil	
Geometric average growth: 11.3%				
Ordinary shares (\$m)	5.5	5.5	5.5	5.5
Reserves (\$m)	13.7	10.4	7.6	5.1
Shareholders' funds (\$)	19.2	15.9	13.1	10.6
8% Bonds, redeemable 2015 (\$m)	20	20	20	20
Capital employed (\$m)	39.2	35.9	33.1	30.6
Profit before interest and tax (\$m)	9.8	8.5	7.5	6.8
Return on capital employed	25%	24%	23%	22%
Earnings (\$m)	5.5	4.7	4.1	3.6
Return on shareholders' funds	29%	30%	31%	34%
8% Bonds, redeemable 2015 (\$m)	20	20	20	20
Market value of equity (\$m)	47.5	31.6	18.4	14.7
Debt/equity ratio (market value)	42%	63%	109%	136%
Share price (cents)	864	574	335	267
Dividends per share (cents)	40	35	29	
Total shareholder return	58%	82%	36%	

Achievement of corporate objectives

JJG Co has shareholder wealth maximisation as an objective. The wealth of shareholders is increased by dividends received and capital gains on shares owned. Total shareholder return compares the sum of the dividend received and the capital gain with the opening share price. The shareholders of JJG Co had a return of 58% in 2008, compared with a return predicted by the capital asset pricing model of 14%. The lowest return shareholders have received was 21% and the highest return was 82%. On this basis, the shareholders of the company have experienced a significant increase in wealth. It is debatable whether this has been as a result of the actions of the company, however. Share prices may increase irrespective of the actions and decisions of managers, or even despite them. In fact, looking at the dividend per share history of the company, there was one year (2006) where dividends were constant, even though earnings per share increased. It is also difficult to know when wealth has been maximised.

Another objective of the company was to achieve a continuous increase in earnings per share. Analysis shows that earnings per share increased every year, with an average increase of 14.9%. This objective appears to have been achieved.

Comment on financial performance

Return on capital employed (ROCE) has been growing towards the sector average of 25% on a year-by-year basis from 22% in 2005. This steady growth in the primary accounting ratio can be contrasted with irregular growth in turnover, the reasons for which are unknown.

Return on shareholders' funds has been consistently higher than the average for the sector. This may be due more to the capital structure of JJG Co than to good performance by the company, however, in the sense that shareholders' funds are smaller on a book value basis than the long-term debt capital. In every previous year but 2008 the gearing of the company was higher than the sector average.

(b) *Calculation of theoretical ex rights per share*

Current share price = \$8.64 per share

Current number of shares = 5.5 million shares

Finance to be raised = \$15m

Rights issue price = \$7.50 per share

Number of shares issued = $15m / 7.50 = 2$ million shares

Theoretical ex rights price per share = $((5.5m \times 8.64) + (2m \times 7.50)) / 7.5m = \8.34 per share

The share price would fall from \$8.64 to \$8.34 per share

However, there would be no effect on shareholder wealth

Effect of rights issue on earnings per share

Current EPS = 100 cents per share

Revised EPS = $100 \times 5.5\text{m}/7.5\text{m} = 73$ cents per share

The EPS would fall from 100 cents per share to 73 cents per share

However, as mentioned earlier, there would be no effect on shareholder wealth

Effect of rights issue on the debt/equity ratio

Current debt/equity ratio = $100 \times 20/47.5 = 42\%$

Revised market value of equity = $7.5\text{m} \times 8.34 = \62.55 million

Revised debt/equity ratio = $100 \times 20/62.55 = 32\%$

The debt/equity ratio would fall from 42% to 32%, which is well below the sector average value and would signal a reduction in financial risk

- (c) The current debt/equity ratio of JJG Co is 42% (20/47.5). Although this is less than the sector average value of 50%, it is more useful from a financial risk perspective to look at the extent to which interest payments are covered by profits.

	2008	2007	2006	2005
Profit before interest and tax (\$m)	9.8	8.5	7.5	6.8
Bond interest (\$m)	1.6	1.6	1.6	1.6
Interest coverage ratio (times)	6.1	5.3	4.7	4.3

The interest on the bond issue is \$1.6 million (8% of \$20m), giving an interest coverage ratio of 6.1 times. If JJG Co has overdraft finance, the interest coverage ratio will be lower than this, but there is insufficient information to determine if an overdraft exists. The interest coverage ratio is not only below the sector average, it is also low enough to be a cause for concern. While the ratio shows an upward trend over the period under consideration, it still indicates that an issue of further debt would be unwise.

A placing, or any issue of new shares such as a rights issue or a public offer, would decrease gearing. If the expansion of business results in an increase in profit before interest and tax, the interest coverage ratio will increase and financial risk will fall. Given the current financial position of JJG Co, a decrease in financial risk is certainly preferable to an increase.

A placing will dilute ownership and control, providing the new equity issue is taken up by new institutional shareholders, while a rights issue will not dilute ownership and control, providing existing shareholders take up their rights. A bond issue does not have ownership and control implications, although restrictive or negative covenants in bond issue documents can limit the actions of a company and its managers.

All three financing choices are long-term sources of finance and so are appropriate for a long-term investment such as the proposed expansion of existing business.

Equity issues such as a placing and a rights issue do not require security. No information is provided on the non-current assets of JJG Co, but it is likely that the existing bond issue is secured. If a new bond issue was being considered, JJG Co would need to consider whether it had sufficient non-current assets to offer as security, although it is likely that new non-current assets would be bought as part of the business expansion.

**Fundamentals Level – Skills Module, Paper F9
Financial Management**

June 2009 Marking Scheme

	<i>Marks</i>	<i>Marks</i>
1 (a) Cost of equity calculation	2	
Correct use of taxation rate	1	
Cost of debt calculation	3	
Market value of equity	1	
Market value of debt	1	
WACC calculation	<u>2</u>	
		10
(b) Price/earnings ratio value of company	2	
Current dividend per share	1	
Dividend growth model value of company	<u>3</u>	
		6
(c) Traditional view of capital structure	1–2	
Miller and Modigliani and capital structure	2–3	
Market imperfections	1–2	
Other relevant discussion	1–2	
Comment on debt finance for cash offer	<u>2–3</u>	
	Maximum	<u>9</u>
		<u>25</u>
2 (a) Identification of decision-making stages	1–2	
Explanation of decision-making stages	4–6	
Role of investment appraisal	<u>1–2</u>	
	Maximum	7
(b) Inflated income	2	
Inflated operating costs	2	
Discount factors	1	
Net present value	1	
Internal rate of return	3	
Return on capital employed	2	
Discounted payback	<u>2</u>	
		13
(c) Discussion of investment appraisal findings	4	
Advice on acceptability of project	<u>1</u>	
		<u>5</u>
		<u>25</u>

	<i>Marks</i>	<i>Marks</i>
3 (a) Analysis of current assets	1-2	
Short-term and long-term finance	2-3	
Matching principle	1-2	
Financing approach used by company	<u>1-2</u>	
	Maximum	7
(b) Bank balance if no action is taken	2	
Bank balance if action is taken	5	
Working capital management implications	1-2	
Advice on course of action	<u>1-2</u>	
	Maximum	10
(c) Relevant discussion		<u>8</u>
		<u>25</u>
4 (a) Relevant financial analysis	6-7	
Shareholder wealth discussion	2-3	
Earnings per share growth discussion	2-3	
Comment on financial performance	<u>1-2</u>	
	Maximum	12
(b) Share price calculation and comment	2-3	
Earnings per share calculation and comment	2-3	
Debt/equity ratio calculation and comment	<u>1-2</u>	
	Maximum	6
(c) Financial analysis	1-2	
Discussion of rights issue and placing	2-3	
Discussion of bond issue	<u>2-3</u>	
	Maximum	<u>7</u>
		<u>25</u>