Answers

1 (a) The owners or shareholders of a business will accept that it needs to engage in some risky activities in order to generate returns in excess of the risk free rate of return. A business will be exposed to differing amounts of business and financial risk depending on the decisions it makes. Business risk depends on the decisions a business makes with respect to the services and products it offers and consists of the variability in its profits. For example, it could be related to the demand for its products, the rate of innovation, actions of competitors, etc. Financial risk relates to the volatility of earnings due to the financial structure of the business and could be related to its gearing, the exchange rate risk it is exposed to, its credit risk, its liquidity risk, etc. A business exposed to high levels of business risk may not be able to take excessive financial risk, and vice versa, as the shareholders or owners may not want to bear risk beyond an acceptable level.

Risk management involves the process of risk identification, of assessing and measuring the risk through the process of predicting, analysing and quantifying it, and then making decisions on which risks to assume, which to avoid, which to retain and which to transfer. As stated above, a business will not aim to avoid all risks, as it will want to generate excess returns. Dependent on factors such as controllability, frequency and severity of the risk, it may decide to eliminate or reduce some risks from the business through risk transfer. Risk mitigation is the process of transferring risks out of a business through, for example, hedging or insurance, or avoiding certain risks altogether. Risk diversification is a process of risk reduction through spreading business activity into different products and services, different geographical areas and/or different industries to minimise being excessively exposed by focusing exclusively on one product/service.

(b) Report to the board of directors (BoD), Morada Co

This report provides a discussion on the estimates of the cost of equity and the cost of capital and the impact on the financial position and the earnings after tax, as a result of the proposals put forward by the first director and the second director. The main assumptions made in drawing up the estimates will also be explained. The report concludes by recommending which of the two directors' proposals, if any, should be adopted.

Discussion

The table below shows the revised figures of the cost of equity and the cost of capital (appendix 1), and the forecast earnings after tax for the coming year (appendix 2), following each proposal from the first and second directors. For comparison purposes, figures before any changes are given as well.

	Cost of equity *Appendix 1*	Cost of capital *Appendix 1*	Earnings after tax *Appendix 2*
Current position	12·2%	10·0%	$28·0 million
Following first director's proposal	11·6%	11·1%	$37·8 million
Following second director's proposal	12·3%	9·8%	$30·8 million

Under the first director's proposal, although the cost of equity falls due to the lower financial risk in Morada Co because of less debt, the cost of capital actually increases. This is because, even though the cost of debt has decreased, the benefit of the tax shield is reduced significantly due to the lower amount of debt borrowing. Added to this is the higher business risk, reflected by the asset beta, of Morada Co just operating in the travel services sector. This higher business risk and reduced tax shield more than override the lower cost of debt resulting in a higher cost of capital.

Under the second director's proposal, the cost of equity is almost unchanged. There has been a significant increase in the cost of debt from 4·7% to 6·2%. However, the cost of capital has not reduced significantly because the benefit of the tax shield is also almost eroded by the increase in the cost of debt.

If no changes are made, then the forecast earnings after tax as a percentage of non-current assets is 10% ($28m/$280m). Under the first director's proposal, this figure almost doubles to 19·3% ($37·8m/$196m), and even if the one-off profit from the sale of non-current assets is excluded, this figure is still higher at 12·9% ($25·2m/$196m). Under the second director's proposal, this figure falls to 8·8% ($30·8m/$350m).

Assumptions

1. It is assumed that the asset beta of Morada Co is a weighted average of the asset betas of the travel services and the maintenance services business units, using non-current assets invested in each business unit as a fair representation of the size of each business unit and therefore the proportion of the business risk which business unit represents within the company.
2. The assumption of the share price not changing after either proposal is not reasonable. It is likely that due to changes in the business and financial risk from implementing either proposal, the risk profile of the company will change. The changes in the risk profile will influence the cost of equity, which in turn will influence the share price.
3. In determining the financial position of Morada Co, it is assumed that the current assets will change due to changes in the profit after tax figure; therefore this is used as the balancing figure for each proposal.

Recommendation

It is recommended that neither the first director's proposal nor the second director's proposal should be adopted. The second director's proposal results in a lower return on investment and a virtually unchanged cost of capital. So there will not be a

meaningful benefit for Morada Co. The first director's proposal does increase the return on investment but results in a higher cost of capital. If the reason for adopting either proposal is to reduce risk, then this is not achieved. The main caveat here is that where the assumptions made in the calculations are not reasonable, they will reduce the usefulness of the analysis.

Report compiled by:

Date:

(Note: Credit will be given for alternative and relevant points)

Appendix 1: Estimates of cost of equity and cost of capital

Before either proposal is implemented

Cost of equity (Ke) = 3·8% + 1·2 x 7% = 12·2%
Cost of debt (Kd) = 3·8% + 0·9% = 4·7%

Market value of equity (MV_e) = \$2·88 x 125 million shares = \$360m

Market value of debt (MV_d)
Per \$100 \$6·20 x $1·047^{-1}$ + \$6·20 x $1·047^{-2}$ + \$6·20 x $1·047^{-3}$ + \$106·20 x $1·047^{-4}$ = \$105·36
Total MV_d = \$105·36/\$100 x \$120m = \$126·4m

Cost of capital = (12·2% x \$360m + 4·7% x 0·8 x \$126·4m)/\$486·4m = 10·0%

If the first director's proposal is implemented

MV_e = \$360m
BV_d = \$120m x 0·2 = \$24m
Kd = 4·4%

MV_d per \$100 \$6·20 x $1·044^{-1}$ + \$6·20 x $1·044^{-2}$ + \$6·20 x $1·044^{-3}$ + \$106·20 x $1·044^{-4}$ = \$106·47
Total MV_d = 106·47/\$100 x \$24 = \$25·6m

Morada Co, asset beta
1·2 x \$360m/(\$360m + \$126·4m x 0·8) = 0·94
Asset beta of travel services = [0·94 – (0·65 x 30%)]/70% = 1·06
Equity beta of travel services = 1·06 x (\$360m + \$25·6m x 0·8)/\$360m = 1·12

Ke = 3·8% + 1·12 x 7% = 11·6%
Cost of capital = (11·6% x \$360m + 4·4% x 0·8 x \$25·6m)/\$385·6 = 11·1%

If the second director's proposal is implemented

MV_e = \$360m
The basis points for the Ca3 rated bond is 240 basis points higher than the risk free-free rate of interest, giving a cost of debt of 6·2%, therefore:
$MV_d = BV_d$ = \$190m

Equity beta of the new, larger company = 1·21

Ke = 3·8% + 1·21 x 7% = 12·3%
Cost of capital = (12·3% x \$360m + 6·2% x 0·8 x \$190m)/\$550m = 9·8%

Appendix 2: Estimates of forecast after-tax earnings and forecast financial position

Morada Co, extracts from the forecast after-tax earnings for the coming year
(Amounts in \$ 000s)

	Current forecast	Forecast: first director proposal	Forecast: second director proposal
Current forecast after-tax earnings	28,000	28,000	28,000
Interest saved due to lower borrowing (\$96m x 6·2% x 0·8)		4,762	
Interest payable on additional borrowing (\$70m x 6·2% x 0·8)			(3,472)
Reduction in earnings due to lower investment (9% x \$84m)		(7,560)	
Additional earnings due to higher investment (9% x \$70m)			6,300
Profit on sale of non-current assets (15% x \$84m)		12,600	
Revised forecast after-tax earnings	28,000	37,802	30,828
Increase in after-tax earnings		9,802	2,828

Morada Co, extracts from the forecast financial position for the coming year
(Amounts in $ 000s)

	Current forecast	Forecast: first director proposal	Forecast: second director proposal
Non-current assets	280,000	196,000	350,000
Current assets (balancing figure)	48,000	43,702	57,828
Total assets	328,000	239,702	407,828
Equity and liabilities			
Share capital (40c/share)	50,000	50,000	50,000
Retained earnings**	137,000	146,802	139,828
Total equity	187,000	196,802	189,828
Non-current liabilities (6·2% redeemable bonds)	120,000	24,000	190,000
Current liabilities	21,000	18,900	28,000
Total liabilities	141,000	42,900	218,000
Total liabilities and capital	328,000	239,702	407,828

** **Note:** With the two directors' proposals, the retained earnings amount is adjusted to reflect the revised forecast after-tax earnings.

(c) [**Note:** *This is an open-ended question and a variety of relevant answers can be given by candidates depending on how the question requirement is interpreted. The following answer is just one possible approach which could be taken. Credit will be given for alternative, but valid, interpretations and answers therein.*]

According to the third director, risk management involves more than just risk mitigation or risk diversification as proposed by the first and second directors. The proposals suggested by the first and the second directors are likely to change the make-up of the company, and cause uncertainty amongst the company's owners or clientele. This in turn may cause unnecessary fluctuations in the share price. She suggests that these changes are fundamental and more than just risk management tools.

Instead, it seems that she is suggesting that Morada Co should follow the risk management process suggested in part (a) above, where risks should be identified, assessed and then mitigated according to the company's risk appetite.

The risk management process should be undertaken with a view to increasing shareholder wealth, and therefore the company should consider what drives this value and what are the risks associated with these drivers of value. Morada Co may assess that some of these risks are controllable and some not controllable. It may assess that some are severe and others less so, and it may assess some are likely to occur more frequently than others.

Morada Co may take the view that the non-controllable, severe and/or frequent risks should be eliminated (or not accepted). On the other hand, where Morada Co is of the opinion that it has a comparative advantage or superior knowledge of risks, and therefore is better able to manage them, it may come to the conclusion that it should accept these. For example, it may take the view that it is able to manage events such as flight delays or hotel standards, but would hedge against currency fluctuations and insure against natural disasters due to their severity or non-controllability.

Theory suggests that undertaking risk management may increase the value of a company if the benefits accruing from the risk management activity are more than the costs involved in managing the risks. For example, smoothing the volatility of profits may make it easier for Morada Co to plan and match long-term funding with future projects, it may make it easier for Morada Co to take advantage of market imperfections by reducing the amount of taxation payable, or it may reduce the costs involved with incidences of financial distress. In each case though, the benefits accrued should be assessed against the costs involved.

Therefore, a risk management process is more than just mitigating risk through reducing financial risk as the first director is suggesting or risk diversification as the second director is suggesting. Instead it is a process of risk analysis and then about judgement of which risks to hedge or mitigate, and finally, which risk-reduction mechanisms to employ, depending on the type of risk, the cost of the risk analysis and mitigation, and the benefits accruing from the mitigation.

2 (a)

	0	1	2	3	4
	$000	$000	$000	$000	$000
Sales revenue (W1)		13,250	16,695	22,789	23,928
Variable costs (W2)		(5,788)	(7,292)	(9,954)	(10,452)
Contribution		7,462	9,403	12,835	13,476
Marketing expenditure		(1,500)			
Fixed costs		(900)	(945)	(992)	(1,042)
Tax-allowable depreciation (W3)		(3,200)	(2,560)	(2,048)	(8,192)
Taxable profits/(losses)		1,862	5,898	9,795	4,242
Taxation (25%)		(466)	(1,475)	(2,449)	(1,061)
Add back tax-allowable depreciation		3,200	2,560	2,048	8,192
Cash flows after tax		4,596	6,983	9,394	11,373
Initial investment	(16,000)				
Working capital	(1,025)	(41)	(53)	(56)	1,175
Cash flows	(17,025)	4,555	6,930	9,338	12,548
Discount factor	1·000	0·901	0·812	0·731	0·659
Present values	(17,025)	4,104	5,627	6,826	8,269
Net present value	7,801				

The NPV is positive, which indicates the project should be undertaken.

Workings

W1: Sales revenue

Year		$000
1	132,500 x 100	13,250
2	132,500 x 100 x 1·05 x 1·2	16,695
3	132,500 x 100 x $1·05^2$ x 1·2 x 1·3	22,789
4	132,500 x 100 x $1·05^3$ x 1·2 x 1·3	23,928

W2: Variable costs

Year		$m
1	132,500 x 43·68	5,788
2	132,500 x 43·68 x 1·05 x 1·2	7,292
3	132,500 x 43·68 x $1·05^2$ x 1·2 x 1·3	9,954
4	132,500 x 43·68 x $1·05^3$ x 1·2 x 1·3	10,452

W3: Tax allowable depreciation

Year		$000
		16,000
1	Tax-allowable depreciation	(3,200)
		12,800
2	Tax-allowable depreciation	(2,560)
		10,240
3	Tax-allowable depreciation	(2,048)
		8,192
4	Balancing allowance	(8,192)
		0

Duration

Year	1	2	3	4
Present value $000	4,104	5,627	6,826	8,269
Percentage of total PV	16·5%	22·7%	27·5%	33·3%

Duration = (1 x 0·165) + (2 x 0·227) + (3 x 0·275) + (4 x 0·333) = 2·78 years

The result indicates that it will take approximately 2·78 years to recover half the present value of the project. Duration considers the time value of money and all of the cash flows of a project.

(b) Reduction in selling price

Discounted revenue cash flows = (13,250 x 0·75 x 0·901) + (16,695 x 0·75 x 0·812) + (22,789 x 0·75 x 0·731) + (23,928 x 0·75 x 0·659) = $43,441,000

Reduction in selling price = 7,801/43,441 = 18·0%

Fernhurst Co would appear to have some scope to reduce the price in order to guarantee the success of the product launch. It would be useful to know whether the finance director's views on the success of the product would change if the product was launched at a lower price. There may be scope to launch at a price which is more than 18·0% lower than the planned launch price, and increase the sales price subsequently by more than the rate of inflation if the launch is a success.

If the directors are unwilling to reduce the price, then their decision will depend on whether they are willing to consider other ways of mitigating a failed launch or take a chance that the product will make a loss and be abandoned. They will take into account both the probability (15%) of the loss and the magnitude (at least $1,000,000 but possibly higher).

Presumably the finance director's assessment of the probability of a loss is based more on doubts about the demand level rather than the level of costs, as costs should be controllable. Possibly Fernhurst Co's directors may consider a smaller scale launch to test the market, but then Fernhurst Co would still be left with expensive facilities if the product were abandoned. The decision may therefore depend on what alternative uses could be made of the new facilities.

(c) The non-executive director has highlighted the importance of long-term maximisation of shareholders' wealth. The net present value is the most important indicator of whether an investment is likely to do that. However, the assessment of investments using net present value has to be modified if the company is undertaking a number of different investments and capital is rationed. It is not necessarily the case that the investments with the highest net present value will be chosen, as account has to be taken of the amount of capital invested as well.

However, investors are not necessarily concerned solely with the long term. They are also concerned about short-term indicators, such as the annual dividend which the company can sustain. They may be concerned if the company's investment portfolio is weighted towards projects which will produce good long-term returns, but limited returns in the near future.

Risk will also influence shareholders' views. They may prefer investments where a higher proportion of returns are made in the shorter term, if they feel that longer term returns are much more uncertain. The NPV calculation itself discounts longer term cash flows more than shorter term cash flows.

The payback method shows how long an investment will take to generate enough returns to pay back its investment. It favours investments which pay back quickly, although it fails to take into account longer term cash flows after the payback period. Duration is a better measure of the distribution of cash flows, although it may be less easy for shareholders to understand.

3 (a) Dividend payout ratio

	Chithurst Co	Eartham Co	Iping Co
	%	%	%
2012	42·9	40·0	46·7
2013	41·3	(150·0)	19·3
2014	35·1	40·0	33·1
2015	34·0	40·0	31·8

Residual profit (after-tax profit for the year – dividend – new investment)

	Chithurst Co	Eartham Co	Iping Co
	$m	$m	$m
2012	26	27	3
2013	18	(40)	7
2014	38	24	4
2015	43	43	6

Chithurst Co's policy

Benefits

Chithurst Co's policy provides shareholders with a stable, predictable income each year. As profits have grown consistently, dividend cover has increased, which suggests that, for now, dividend levels are sustainable. These are positive signals to the stock market.

Drawbacks

Chithurst Co's dividend policy is unpopular with some of its shareholders. They have indicated a preference for dividend levels to bear a greater relation to profit levels. Although they are still in a minority and cannot force the directors to pay more dividends, they are now possibly a significant minority. Ultimately, Chithurst Co's share price could fall significantly if enough shareholders sell their shares because they dislike the dividend policy.

The dividend policy may also have been established to meet the financial needs of the shareholders when Chithurst Co was unquoted. However, it is now difficult to see how it fits into Chithurst Co's overall financial strategy. The greater proportion of funds retained does not appear to be linked to the levels of investment Chithurst Co is undertaking. Chithurst Co's shareholders may be concerned that best use is not being made of the funds available. If there are profitable investments which Chithurst Co could be making but is not doing so, then Chithurst Co may find it more difficult in future to sustain the levels of profit growth. Alternatively, if profitable investments do not exist, some shareholders may prefer to have funds returned in the form of a special dividend or share repurchase.

Eartham Co

Benefits

For three out of four years, Eartham Co has been paying out dividends at a stable payout ratio. This may be attractive to some investors, who have expectations that the company's profits will keep increasing in the longer term and wish to share directly in increases in profitability.

The year when Eartham Co's dividend payout ratio differed from the others was 2013, when Eartham Co made a loss. A dividend of $15 million was paid in 2013, which may be a guaranteed minimum. This limits the downside risk of the dividend payout policy to shareholders, as they know they will receive this minimum amount in such a year.

Drawbacks

Although shareholders are guaranteed a minimum dividend each year, dividends have been variable. Eartham Co's shareholders may prefer dividends to increase at a steady rate which is sustainable over time, even if this rate is lower than the rate of increase in some years under the current policy.

If Eartham Co had another poor year of trading like 2013, shareholders' expectations that they will be paid a minimum dividend may mean that cash has to be earmarked to pay the minimum dividend, rather than for other, maybe better, uses in the business.

Having a 'normal' dividend policy results in expectations about what the level of dividend will be. Over time Eartham Co's managers may be reluctant to change to a lower payout ratio because they fear that this will give shareholders an adverse signal. Even if its directors maintain a constant ratio normally, shareholders may question whether the proportion of funds being retained is appropriate or whether a higher proportion could be paid out as dividends.

Eartham Co appears to be linking investment and dividend policy by its normal policy of allocating a constant proportion of funds for dividends and therefore a constant proportion of funds to invest. However, the actual level of new investments does not seem to bear much relation to the proportion of funds put aside for investment. When deciding on investments, the directors would also take into account the need to take advantage of opportunities as they arise and the overall amount of surplus funds built up over the years, together with the other sources of external finance available.

Iping Co

Benefits

Iping Co seems to have adopted a residual dividend policy, which links investment and dividend decisions. The strategy appears to be to make investments if they offer sufficient return to increase long-term company value and only pay dividends if there are no more profitable investments. They are assuming that internal funds are cheaper than external funds, or maybe Iping Co cannot raise the funds required from external sources.

The policy is likely to appeal to shareholders who are more concerned with capital growth than short-term income.

Drawbacks

Dividend payments are totally unpredictable, as they depend on the investment choices. Shareholders cannot rely on having any dividend income in a particular year.

Many shareholders may be prepared to sacrifice dividends for a while in order for funds to be available for investment for growth. However, at some point they may consider that Iping Co is well established enough to be able to maintain a consistent dividend policy as well as invest sufficiently for future growth.

(b) Use of dividend valuation model

Chithurst Co

Valuation = 33/0·11 = $300m

Chithurst Co's market capitalisation of $608m is considerably in excess of the valuation suggested by the dividend valuation model. This may suggest that investors have some positive expectations about the company and the lower cost of equity compared with the other two companies suggests it is regarded as a more stable investment. Investors could also be valuing the company using earnings growth rather than dividend growth. However, the lower market capitalisation compared with the other two companies and the smaller increase in share price suggest that investors have higher expectations of long-term growth from Eartham Co and Iping Co.

Eartham Co

One-year growth rate = (48/44) – 1 = 9·1%
Valuation using one-year growth rate = 48 (1 + 0·091)/(0·14 – 0·091) = $1,068·7m

Three-year growth rate = $\sqrt[3]{(48/38)} - 1 = 8{\cdot}1\%$
Valuation using three-year growth rate = 48 (1 + 0·081)/(0·14 – 0·081) = $879m

Eartham Co's market capitalisation is closer to the valuation suggested by the dividend growth model using the one-year growth rate between 2014 and 2015 rather than the three-year growth rate between 2012 and 2015. This, together with the recent increase in share price, suggests that Eartham Co's shareholders have an optimistic view of its ability to sustain the profit growth and hence the dividend growth of the last two years, although its higher cost of equity than the other companies suggests that they are more wary about the risks of investing in Eartham Co. It indicates confidence in the directors' strategy, including the investments they have made.

Iping Co

One-year growth rate = (42/39) – 1 = 7·7%
Valuation using one-year growth rate = 42 (1 + 0·077)/(0·12 – 0·077) = $1,052·0m

Three-year growth rate = $\sqrt[3]{}$(42/35) – 1 = 6·3%
Valuation using three-year growth rate = 42 (1 + 0·063)/(0·12 – 0·063) = $783·3m

The market capitalisation of Iping Co is higher than is suggested by the dividend valuation model, but the dividend valuation model may not provide a realistic valuation because dividends payable are dependent on investment opportunities.

The larger increase in share price compared with the other two companies suggests that Iping Co's investors expect its investments to produce high long-term returns and hence are presumably satisfied with its dividend policy.

4 (a) (i) Gross amount of annual interest paid by Pault Co to Millbridge Bank = 4·847% x $400m = $19·39m.

Gross amounts of annual interest receivable by Pault Co from Millbridge Bank, based on Year 1 spot rates and Years 2–4 forward rates:

Year

1	0·0350 x $400m = $14m
2	0·0460 x $400m = $18·4m
3	0·0541 x $400m = $21·64m
4	0·0611 x $400m = $24·44m

Working

Year 2 forward rate: ($1·0425^2$/1·037) – 1 = 4·80%
Year 3 forward rate: ($1·0470^3$/$1·0425^2$) – 1 = 5·61%
Year 4 forward rate: ($1·0510^4$/$1·0470^3$) – 1 = 6·31%

Rates are reduced by 20 basis points in calculation.

At the start of the swap, Pault will expect to pay or receive the following net amounts at each of the next four years:

Year

1	$14m – $19·39m = $(5·39m) payment
2	$18·4m – $19·39m = $(0·99m) payment
3	$21·64m – $19·39m = $2·25m receipt
4	$24·44m – $19·39m = $5·05m receipt

(ii) Interest payment liability

	Impact %	Yield interest 2·9% $m	Yield interest 4·5% $m
Borrow at yield interest + 50 bp	(Yield + 0·5)	(13·60)	(20·00)
Receive yield – 20 bp	Yield – 0·2	10·80	17·20
Pay fixed 4·847%	(4·847)	(19·39)	(19·39)
Bank fee – 25 bp	(0·25)	(1·00)	(1·00)
	(5·797)	(23·19)	(23·19)

The interest payment liability will be $23·19m, whatever the yield interest, as the receipt and payment are based on the yield curve net of interest rate fluctuations.

(b) At the start of the contract, the value of the swap will be zero. The terms offered by Millbridge Bank equate the discounted value of the fixed rate payments by Pault Co with the variable rate payments by Millbridge Bank.

However, the value of the swap will not remain at zero. If interest rates increase more than expected, Pault Co will benefit from having to pay a fixed rate and the value of the swap will increase. The value of the swap will also change as the swap approaches maturity, with fewer receipts and payments left.

(c) Disadvantages of swap arrangement

The swap represents a long-term commitment at a time when interest rates appear uncertain. It may be that interest rates rises are lower than expected. In this case, Pault Co will be committed to a higher interest rate and its finance costs may be higher than if it had not taken out the finance arrangements. Pault Co may not be able to take action to relieve this commitment if it becomes clear that the swap was unnecessary.

On the basis of the expected forward rates, Pault Co will not start benefiting from the swap until Year 3. Particularly during Year 1, the extra commitment to interest payments may be an important burden at a time when Pault Co will have significant development and launch costs.

Pault Co will be liable for an arrangement fee. However, other methods of hedging which could be used will have a cost built into them as well.

Advantages of swap arrangement

The swap means that the annual interest payment liability will be fixed at $23·19m over the next four years. This is a certain figure which can be used in budgeting. Having a fixed figure may help planning, particularly as a number of other costs associated with the investment are uncertain.

The directors will be concerned not just about the probability that floating rates will result in a higher commitment than under the swap, but also be concerned about how high this commitment could be. The directors may feel that rates may possibly rise to a level which would give Pault Co problems in meeting its commitments and regard that as unacceptable.

Any criticism after the end of the loan period will be based on hindsight. What appeared to be the cheapest choice at that stage may not have been what appeared most likely to be the cheapest choice when the loan was taken out. In addition, criticism of the directors for not choosing the cheapest option fails to consider risk. The cheapest option may be the most risky. The directors may reasonably take the view that the saving in cost is not worth the risks incurred.

The swap is for a shorter period than the loan and thus allows Pault Co to reconsider the position in four years' time. It may choose to take out another swap then on different terms, or let the arrangement lapse and pay floating rate interest on the loan, depending on the expectations at that time of future interest rates.

				Marks
1	**(a)**	Relationship between business and financial risk		3
		Risk mitigation and risk diversification as part of a company's risk management strategy		3
				6
	(b)	**(i)** [Appendix 1]		
		Prior to implementation of any proposal		
		Cost of equity		1
		Cost of debt		1
		Market value of equity		1
		Market value of debt		2
		Cost of capital		1
		After implementing the first director's proposal		
		Market value of debt		2
		Morada Co, asset beta		1
		Asset beta of travel services only		1
		Equity beta of travel services only		1
		Cost of equity		1
		Cost of capital		1
		After implementing the second director's proposal		
		Market value of debt		2
		Cost of equity		1
		Cost of capital		1
				17
		(ii) [Appendix 2]		
		Adjusted earnings, first director's proposal		2
		Financial position, first director's proposal		2
		Adjusted earnings, second director's proposal		2
		Financial position, second director's proposal		1
				7
		(iii) Discussion		5–6
		Assumptions		2–3
		Reasoned recommendation		1–2
		(Note: Maximum 8 marks if no recommendation given)	**Max**	**9**
		Professional marks for part (b)		
		Report format		1
		Structure and presentation of the report		3
				4
	(c)	1–2 marks per point	**Max**	**7**
			Total	**50**

				Marks
2	**(a)**	Sales revenue		2
		Variable costs		2
		Fixed costs		1
		Tax-allowable depreciation		2
		Tax payable		1
		Working capital		2
		NPV of project		1
		Comment on NPV		1
		Duration calculation		2
		Comment on duration		1
				15
	(b)	Reduction in selling price		3
		Discussion		2–3
			Max	**5**
	(c)	Significance of net present value		1–2
		Shareholders' attitude to the longer and shorter term		2–3
		Timeframe measures		1–2
			Max	**5**
			Total	**25**
3	**(a)**	Benefits of dividend policy – 1–2 marks for each company	**Max**	5
		Drawbacks of dividend policy – 2–3 marks for each company	**Max**	7
		Calculations – Dividend payout ratios – 1 mark per company		3
		Other calculations		2
			Max	**15**
	(b)	Comments on valuation of each company, max 4 marks per company (max 5 marks for valuation calculation(s))	**Max**	**10**
			Total	**25**
4	**(a)**	**(i)** Gross amount payable by Pault Co		1
		Calculation of forward rates		3
		Basis point reduction		1
		Net amounts receivable or payable each year		1
				6
		(ii) Yield interest calculations		5
		Comment on interest payment liability		1
				6
	(b)	Up to 2 marks per point	**Max**	**4**
	(c)	Advantages (up to 2 marks per relevant point)	**Max**	5
		Disadvantages (up to 2 marks per relevant point)	**Max**	5
			Max	**9**
			Total	**25**