Answers

The case study can be answered in various ways and so the outline solution provided below should only be regarded as indicative.

1 (a) The forecast cash flows of Café Crème plc are as follows:

Forecast cash flows for the year ended 31 July

	2006	2007	2008	2009	2010
	£m	£m	£m	£m	£m
Sales	8·8	19·6	29·2	36·5	47·5
Gross profit	5·3	12·2	18·1	23·0	30·9
Variable O/H	(0·9)	(2·2)	(3·2)	(4·0)	(5·7)
Fixed O/H	(3·8)	(7·7)	(12·2)	(14·5)	(21·1)
Op. profit	0·6	2·3	2·7	4·5	4·1
Interest	(0·3)	(0·3)	(0·3)	(0·3)	–
Net profit/(loss)	0·3	2·0	2·4	4·2	4·1
Tax (25%)	–	(0·1)	(0·5)	(0·6)	(1·1)
	0·3	1·9	1·9	3·6	3·0
Add Depr'n*	0·7	1·5	3·0	4·6	5·6
	1·0	3·4	4·9	8·2	8·6
Loan repayment				(5·0)	
Capex	(4·8)	(5·6)	(10·1)	(10·8)	(6·5)
Cash flows	(3·8)	(2·2)	(5·2)	(7·6)	2·1
Opening balance	7·0	3·2	1·0	(4·2)	(11·8)
Closing balance before share capital injections	3·2	1·0	(4·2)	(11·8)	(9·7)
Plutus plc contribution (40%)**			1·7	3·0	

*Depreciation workings are shown below
**40% of the cash deficit occurring in any one year (2008 – 40% of cash balance, 2009 – 40% of cash flows)

Forecast depreciation charges for the year to 31 July

	2006	2007	2008	2009	2010
	£m	£m	£m	£m	£m
Capex	(4·8)	(5·6)	(10·1)	(10·8)	(6·5)
Depr'n (15%)	0·7	0·7	0·7	0·7	0·7
		0·8	0·8	0·8	0·8
			1·5	1·5	1·5
				1·6	1·6
					1·0
	0·7	1·5	3·0	4·6	5·6

(b) (i) The forecast cash flows of Plutus plc are as follows:

Forecast cash flow statement for the year to 31 July

	2006 £m	2007 £m	2008 £m	2009 £m	2010 £m
Sales*	55·8	52·6	49·5	46·1	42·4
Op. profit	3·6	3·2	2·9	2·6	2·2
Interest	(0·3)	(0·3)	(0·3)	(0·3)	(0·3)
Profit before tax	3·3	2·9	2·6	2·3	1·9
Tax paid during year**	(0·9)	(0·8)	(0·7)	(0·7)	(0·6)
	2·4	2·1	1·9	1·6	1·3
Add Depr'n	3·1	3·5	4·6	4·6	4·8
Op. cash flows	5·5	5·6	6·5	6·2	6·1
Dividends***	(0·6)	(0·5)	(0·4)	(0·4)	(0·3)
Capex	(4·3)	(2·5)	(12·2)	(3·4)	(4·6)
Shares in Café Crème	(0·8)	–	(1·7)	(3·0)	–
Cash flows	(0·2)	2·6	(7·8)	(0·6)	1·2
Op. balance	1·0	0·8	3·4	(4·4)	(5·0)
Cl. balance	0·8	3·4	(4·4)	(5·0)	(3·8)

*The effect of the contract with Café Crème plc can be ignored as it has no effect on cash flows or profits.
**Tax is paid in the year following the year in which the profits are made.
***Dividends are paid in the year following the year in which they are announced. (See table below for dividend calculations.)

We can see that additional finance will be required from 2008 onwards.

(ii) The financing problem may be resolved by the use of a loan facility. The case study indicates that the gearing ratio must not increase beyond 33%. Assuming that the planned dividends are paid, retained profits for the next five years will be as follows:

	2006 £m	2007 £m	2008 £m	2009 £m	2010 £m
Sales	55·8	52·6	49·5	46·1	42·4
Op. profit	3·6	3·2	2·9	2·6	2·2
Interest	(0·3)	(0·3)	(0·3)	(0·3)	(0·3)
Profit before tax	3·3	2·9	2·6	2·3	1·9
Tax (25%)	(0·8)	(0·7)	(0·7)	(0·6)	(0·5)
Profit after tax	2·5	2·2	1·9	1·7	1·4
Dividends (20%)	0·5	0·4	0·4	0·3	0·3
Retained profits	2·0	1·8	1·5	1·4	1·1

Assuming a loan facility of £5·0m is agreed in 2008, with £4·4m drawn down in 2008 and the balance drawn down in 2009, the equity, loan capital and gearing ratios for the next five years are as follows*:

	2006 £m	2007 £m	2008 £m	2009 £m	2010 £m
Opening equity	23·3	25·3	27·1	28·6	30·0
Retained profits	2·0	1·8	1·5	1·4	1·1
Closing equity	25·3	27·1	28·6	30·0	31·1
Loan capital	6·8	6·8	11·2	11·8	11·8
	32·1	33·9	39·8	41·8	42·9
Gearing ratio	21·2%	20·1%	28·1%	28·2%	27·5%

*Interest on the new loan has been ignored.

This option should be acceptable to the Plutus family.

(c) To calculate the NPV, the following calculations must be made:

- The profit after tax of Café Crème plc for the year to 31 July 2010 is £3·1m (i.e. £4·1m – £4·1m x 25%)
- The total no. of £0·50 shares in issue will be [(£2·0m + £4·2m + £7·6m) x 2] = 27·6m
- The earning per share will be (£3·1m/27·6m) = £0·112
- The no. of shares held by Plutus plc will be (40% x 27·6m) = 11·0m

- Assuming a P/E ratio of 12 times, the selling price per share will be (12 x £0·112) = £1·34
- Flotation costs are 8% of amount received
- The amount received by Plutus plc after five years is, therefore, [(11·0m x £1·34) – 8%(11·0m x £1·34)] = £13·6m

Thus, assuming a P/E ratio of 12 times, the net present value of the investment for Plutus plc will be as follows:

Net present value calculations

	Year 0	1	2	3	4	5
	£m	£m	£m	£m	£m	£m
Cash flows – financing	(0·8)	–	–	(1·7)	(3·0)	13·6
Discount rate (12%)	1·00	0·89	0·80	0·71	0·64	0·57
Present values	(0·8)			(1·2)	(1·9)	7·8
NPV	3·9					

The profitability of the investment is quite sensitive to prediction errors in the P/E ratio. For example, assuming a P/E ratio of 10 times, selling price per share will be £1·12 and the amount received by Plutus plc in five years' time will be: [(11·0m x £1·12) – 8%(11,0m x £1·12)] = £11·3m.

The net present value of the investment for Plutus plc will be as follows:

Net present value calculations

	Year 0	1	2	3	4	5
	£m	£m	£m	£m	£m	£m
Cash flows – financing	(0·8)	–	–	(1·7)	(3·0)	11·3
Discount rate (12%)	1·00	0·89	0·80	0·71	0·64	0·57
Present values	(0·8)			(1·2)	(1·9)	6·4
NPV	2·5					

Thus a 17% fall in the P/E ratio leads to a 36% fall in the net present value of the investment.

(d) The benefits of a joint venture with Maia plc may include:

- sharing the risks involved.
- sharing the burden of ownership and financial commitments.
- achieving economies of scale.
- entering new markets at a lower cost than if done independently.
- sharing complementary resources.

The possible problems of a joint venture with Maia plc include:

- being a 'junior partner' in the venture.
- risk of disputes over efforts and risks incurred in relation to gains received.
- a lack of knowledge of both companies in operating coffee shops.
- restrictions on decision-making ability.

(e) There may be a number of reasons why suspicion and tension exists between executive and non-executive directors. These include the belief among executive directors that:

- non-executive directors are appointed to 'police' them.
- non-executive directors do not really understand the business.
- non-executive directors do not spend sufficient time and effort in getting to know the business or in carrying out their role.

Suspicion and tensions may also arise from the belief among non-executives that the executive directors:

- filter or withhold important information.
- do not provide key information in a timely manner.
- hold informal meetings, from which they are excluded, where important matters are discussed.
- hold non-executive directors in low esteem because of their backgrounds, professionalism, character etc.

Where strong, independent-minded individuals work together, tensions are almost inevitable and, in some cases, may have positive aspects. Tensions between executive and non-executive directors may help prevent board meetings from becoming too comfortable or from proposals being put before the board and 'rubber stamped'. Tensions may lead to robust debate where proposals are given more careful scrutiny and issues are more thoroughly aired. Where tensions are excessive, however, they may be harmful to efficient decision making. They may be eased by dealing with some of the problems identified earlier. Remedies may include:

- ensuring the free flow of information to all directors in a timely manner.
- encouraging open debate where all directors are encouraged to voice their opinions.
- holding induction courses for new non-executive directors to help them understand their role and the nature of the business.
- ensuring that board meetings are well run and focus on strategic issues (rather than operational issues) where non-executive directors can be expected to have an input.

- holding board meetings with sufficient frequency to ensure that key issues are brought before the non-executive directors.
- implementing a rigorous search and appointment process for all directors to ensure that appropriate individuals of the right calibre are appointed.
- monitoring the performance of the directors and dismissing incompetent directors.

(f) Benefits of employing outside risk consultants may include the following:

- they should have a sound understanding of best practice.
- they should have up-to-date knowledge of latest methods of identifying and assessing risks.
- they should be able to help in embedding risk management processes into the newly-formed business.
- they will have contacts with insurance companies, brokers etc, which may be of benefit in managing certain types of risk.

Possible problems may include:

- the cost is likely to be higher than an 'in-house' solution.
- the managers of Café Crème plc may feel that risk management is the responsibility of the consultants and so it does not become part of the management culture of the business.

Criteria for the selection of a firm of risk consultants may include:

- a good understanding of the nature of the business.
- the requisite skills, experience and tools (e.g. models and software) to undertake risk analysis and assessment.
- the capacity to offer the full range of services required.
- the ability to offer their services within an agreed budget and time frame.

(g) Key risks include:

- forecasting risk
- joint-venture risk
- failure to achieve performance targets
- competition risk
- economic slowdown
- cash-flow risk
- liquidity risk
- reputation risk
- failure to recruit and/or retain key staff

Ways of managing each type of risk must be identified. These may involve accepting the risk, eliminating or controlling the risk, or transferring this risk to a third party.

(h) A number of issues concerning the proposal can be raised including:

- the profitability of the proposal
- whether it fits with the overall strategy of Plutus plc
- the problems of operating a joint venture
- whether the proposed joint venture constitutes a 'coalition of the weak'
- the failure of Plutus plc to engage in a systematic search for new proposals
- investing and then selling Café Crème plc after five years through a flotation is more like the behaviour of a venture capitalist than a manufacturer and retailer
- pressure to renew the contract between Plutus plc and Café Crème plc in the run up to flotation

1	**(a)**		Depreciation charges (3 marks), op. profit (3 marks), tax (2 marks), interest (1 mark), capex (1 mark), ord shares (2 marks)	12
	(b)	**(i)**	Op. profit (1 mark), interest (1 mark), tax (1 mark), depr'n (1 mark), div. (1 mark), capex (1 mark), ord. shares (1 mark), format (1 mark)	8
		(ii)	Retained profits (4 marks), equity balance (1 mark), loan cap. (1 mark), gearing ratio (2 marks)	8
	(c)		Selling price (4 marks), other calculations (4 marks), sensitivity analysis (4 marks)	12
	(d)		Benefits (4 marks), problems (4 marks)	8
	(e)		Identifying reasons for suspicions and tensions (7 marks), managing suspicions and tensions (8 marks)	15
	(f)		Benefits (3 marks), problems (3 marks), criteria (4 marks)	10
	(g)		Identification of risk (8 marks), management of risk (12 marks)	20
	(h)		Views (5 marks), decision (2 marks)	7
				100