1 Brady

Marking guide

				Marks
1.1	(a)	Relocation of manufacturing operations	4	
	(b)	Joint venture	4	
	(c)	New ordering system	4	
				12
1.2		Benefits of the IT Director's proposal evaluated		8
1.3		Potential advantages evaluated	5	
		Potential disadvantages evaluated	5	
				10
Total marks				30

1.1

(a) **Possible relocation of own manufacturing to China**

Brady currently manufactures all of its own clothing from its European factories. However, the pressure to cut costs has prompted the directors to look at the possibility of moving some or all of its manufacturing to China.

Scope of change

The proposal to move some or all of its own manufacturing operations to China will represent a significant change to the detailed logistics of Brady's operations, and it will also result in a large number of Brady's existing manufacturing staff being made redundant.

However, it will **not fundamentally change Brady's overall methods** and approaches to clothes production. Brady will still design and manufacture garments in house, and it will still be manufacturing for the same customers. Although this is a major change geographically, it is not such a major change in the overall organisation of the company.

In this respect, the proposal should be seen as a **realignment** rather than a transformation of existing practices.

Nature of change

Moreover, the change is essentially **building on existing methods and approaches** rather than challenging them. So again, despite the major geographical change, the nature of the change could be seen as incremental rather than being a 'Big Bang' change.

However, the trigger for the change is the potential long-term decline in performance which Brady could suffer due to the **threat of low-cost competition from China**. This threat means that significant and rapid change to Brady's operations is necessary.

To this extent, the fact that the trigger for change is the response to the critical problems facing the company means the change is better seen as a **reconstruction** rather than an adaptation.

(b) **Joint venture**

If Brady moves to a joint venture arrangement with LIN not only do the manufacturing operations move geographically from Europe to China, but they move outside Brady's direct control.

Scope of change

In this option, **Brady will cease to be a manufacturing company**, and will become a design and distribution network. Again, it will result in a large number of manufacturing staff in the European factories losing their jobs.

However, the change in the focus of Brady's own competences represents a major **transformational change** to the existing business model. Brady will lose its manufacturing competences, and will rely on the joint venture partner to do its manufacturing for it.

Nature of change

The change from Brady being a manufacturing company to essentially being a design company represents a major change to its methods, processes and cultures.

If Brady pursues this option, it is likely to indicate that the external pressures of the changing competitive environment have forced it to take **decisive and rapid action** to retain its competitive advantage.

Moreover, once Brady has entered the joint venture, and once the new factory in China is built and ready to use, the changes to shift production to China are likely to take place quickly.

Therefore, the changes will be 'Big Bang' change, rather than an incremental change.

Looking at the scope and nature of this proposal together suggest that it is best seen as a revolution: a rapid and wide-ranging response to pressure for change, which leads to a fundamental shift in Brady's business model, and the way the company operates.

(c) **New ordering system**

Scope of change

Building on existing capabilities – Whereas the relocation proposals will lead to the closure of Brady's European manufacturing operations, the IT proposal is more likely to lead to additional systems and processes being added to the existing operations.

So, in effect, the IT proposal is reinforcing Brady's current position.

Brady has historically designed quality designs in the medium to higher price range, and the IT proposal is designed to allow Brady to be able to charge a price premium.

Incremental change – In this respect, the change could be approached as an incremental change because it builds on existing methods. Although the new interactive online design and ordering process offers customers a lot more functionality, it is still building on existing processes rather than radically altering them.

In this respect, the change can be seen as a **realignment** of Brady's existing strategy.

However, the Operations Director's comment that the proposal is trying to shift Brady from a mass production environment to smaller scale batch production, suggests that there could be more far-reaching aspects of the change. If it changes the underlying culture of production, and the production processes this is not an incremental change.

If the existing business model is being challenged – and changed – then the change is more of a **transformation** than a realignment.

Nature of change

Whereas the proposals to move manufacturing operations to China are extensive changes which will lead to the closure of Brady's European manufacturing operations, and will result in large numbers of redundancies, the IT-based proposal will have a smaller scale impact, certainly in the short term.

The IT director's proposal appears to involve **adding the new interactive functionality on top of Brady's existing production methods** and processes.

Therefore, it will involve a gradual change, rather than a sudden one-off change. In this respect, the change is best seen as **incremental**.

1.2

Advantages

Increase margins – By offering customers flexibility, the IT director's proposal should allow Brady to charge a price premium. This should help increase margins, provided that the costs incurred in providing customised designs are lower than the price premiums which can be charged.

As a result the proposal could help address a major threat facing the business – the current reduction in margins resulting from customers trying to force down prices. In effect, the IT director's proposal allows Brady to increase its margins through adopting a differentiation strategy.

Focus on quality manufacturing – Brady has traditionally been a high quality manufacturer. Adopting a differentiation type strategy continues this focus on quality.

Preserve jobs in Europe – This strategy will allow Brady to retain its manufacturing plants in Europe rather than having to relocate them in China. Therefore it will preserve jobs at the European factories.

Disadvantages

Price premium – The IT director's strategy is based on creating a situation in which Brady charges customers a premium price. However, the majority of customers are trying to reduce the price they pay, so the idea of wanting to charge a price premium seems rather contradictory in these market conditions.

This strategy does not make any reference to **reducing costs** which seems to be a critical issue for Brady.

Customer bargaining power – A key factor in the success of the strategy will be the relative bargaining power between Brady and its customers, and therefore Brady's ability to sustain its margins. However, as the trend for moving production to cheaper outlets in China illustrates, the larger customers have very strong bargaining power in the clothing manufacturing industry.

Niche market – The early indications are that ability to have 'custom made' clothing is attractive to smaller or medium sized customers, but there is no indication that Brady's large customers (such as Skyblue) are interested in it.

These large customers are the ones who are exerting the strongest pressure to reduce prices, so it seems unlikely that this proposal alone will help to safeguard Brady's contracts with its existing large customers.

Also, the value which the new proposal generates is likely to be quite small compared to the revenue Brady generates from its 'traditional' sales to its existing customers.

It appears that this proposal targets a niche segment of the market only, rather than being a strategy which Brady can use across its whole market. Even if the 'custom made' facility were to prove successful, there must be a **concern about how scalable it is**.

Uncertainty about returns – Although three potential customers have expressed an interest in the 'custom made' facility, it is not clear how likely any of them are to make firm orders from Brady.

Assuming the customers order the amounts they have indicated at the initial discussions, then the proposal is only profitable if at least two out of the three customers actually commit to it.

	1 customer	2 customers	3 customers
Contribution to profit (£)	114,000	228,000	342,000
Directly attributable fixed costs (£)	200,000	200,000	200,000
Profit/(loss) (£)	(86,000)	28,000	142,000

By contrast, if all three potential customers sign up, the additional profit of £142,000 per year would increase annual pre-tax profit by about 12%. However, it is still debatable whether the revenue from the proposal could replace Brady's business from its existing large customers.

Problems for marketing mix – As the Operations Director commented, this proposal is likely to require Brady to change its production techniques from large scale manufacturing into small scale batch production.

However, it is not clear whether the Operations Director envisages that Brady will continue to fulfil mass production contracts for its existing customers alongside these new customised contracts, or whether he envisages that in time Brady will produce clothes solely under the 'custom made' process.

However, if the intention is to offer the additional functionality alongside Brady's existing production range this could lead to confusion in Brady's marketing mix. On the one hand, Brady would be looking to reduce cost, but on the other it would be looking to create a niche market which charges a price premium.

1.3

Tutorial notes:

The requirement is specifically looking at advantages and disadvantages of using joint ventures as a method of expansion, rather than the advantages/disadvantages of international expansion as such.

Although issues around the accounting for foreign exchange rates would be something that Brady would need to consider if it decides to expand internationally, they are not specifically relevant to the requirement here.

Advantages

Gets into China – The joint venture will provide Brady with a means of getting its clothes produced in China, at the lower cost which its major customers want. However, the joint venture provides Brady with an alternative to having to build a wholly owned manufacturing operation in China.

Speed – Because LIN is already an established clothing manufacturer this should mean the joint venture will allow Brady to source clothes from China more quickly than if it had to establish its own manufacturing operations.

Supply chain networks – An important factor in this will be that LIN will already have pre-existing supply chain networks (for example, suppliers for raw materials such as cotton) whereas if Brady were to set up its own plant it would either have to arrange for its existing suppliers to transfer supply from its European plants to China, or it would have to set up contracts with new suppliers.

Benefit from local knowledge – The alliance with LIN will provide Brady with local knowledge about business cultures and business practices which it would not otherwise have. It will also overcome any potential language problems associated with moving into China. In this way, it could significantly ease Brady's entry route into operating in China.

Share of capital costs – There is likely to be a significant capital investment involved in building a new manufacturing plant in China. Although it is not clear from the proposal how the costs will be split, the joint venture agreement should mean that the capital costs are shared between Brady and LIN, rather than Brady having to fund them all itself.

Offers scope for growth – The Chinese joint venture will build a large, purpose built factory to make Brady's clothes. Because the factory will be modern it should allow Brady to benefit from up to date production technologies and efficiencies, thereby allowing it to obtain low costs.

Low costs on their own are a benefit to Brady, but if the factory increases Brady's **production capacity** it will provide a second benefit by allowing the scope for growth and potentially acquiring new customers – which Brady could acquire by offering to manufacture customers' clothes more cheaply than its rivals.

Disadvantages

Conflicts of interest – Conflicts of interest between Brady and LIN could potentially be a major disadvantage of the joint venture. Disagreements may arise over profit shares, and the relative shares of the partners have not yet been agreed. There could also be issues with the management of the joint venture – particularly around the quality of the garments produced. Brady will ultimately be responsible to its customers for the quality of the clothes, but they will be produced by LIN.

Unequal interests – One of the main risks with joint venture arrangements is that venture partners can gain **confidential information** about each other which could subsequently be used competitively by one partner against the other.

This could be a risk for Brady here because LIN potentially stands to gain more from the venture. The venture will see Brady design and market the clothes and LIN make them. However, in time if **LIN develops its own design and marketing competences** (through working with Brady) it could eventually by-pass Brady and deal directly with customers itself.

Ultimately the ability to actually make the clothes is crucial. Once Brady has lost its manufacturing capability, there is a risk that LIN can take over the supplier contracts for itself.

Profits shared – Brady will have to share the profits it earns from its clothing contracts with LIN so this will reduce its underlying profit.

Time taken to build new factory – LIN does not have any existing production facilities which can be used to make Brady clothing. The proposed new factory still has to be built. This means it might not be much quicker for Brady to partner with LIN than to build its own factory in China, and will be slower than if Brady decided to simply use existing Chinese clothing manufacturers to produce its clothes for it as they were required.

2 Guestway Hotels

Marking guide

			Marks
2.1	Analysing performance measures	8	
	Potential conflict between objectives	7	
			15
2.2	Identifying basis of competitive strategy	2	
	Extent to which KPIs are consistent with strategy	6	
			8
Total marks			23

2.1 Performance measures for the Sawton hotel

	Per day		Per year	
	20X4	**20X1**	**20X4**	**20X1**
Number of rooms occupied	141	117	51,465	42,705
Revenue (£)	9,165	10,530	3,345,225	3,843,450
Service costs (£)	846	995	308,790	362,993
Promotion & marketing costs (£)	458	790	167,261	288,259
Other operating costs (£) (balancing figure)	6,963	7,724	2,541,342	2,819,383
Net profit margin	9.8%	9.7%	9.8%	9.7%
Net profit (EBIT) (£)	898	1,021	327,832	372,815
Total assets (EBIT/ROI) (£)			2,927,072	3,389,224

Long-term objectives – Guestway's long-term objectives are focused around growth: increasing market share in its home country and then expanding into neighbouring countries.

However, in order to achieve this, it will be important for the reputation of Guestway's hotels (for high quality accommodation and service) to be maintained.

Manager's focus – The example of the Sawton hotel illustrates that managers could be driven by shorter-term goals, such as achieving their annual bonuses. The figures illustrate that occupancy rates and net profit margin in the Sawton hotel have increased between 20X1–20X4, meaning that the new manager is more likely to receive a bonus than the previous one.

Sacrificing long-term objectives – However, the ways in which the manager has increased occupancy rates and the net profit margin (%) do not appear to be aligned with Guestway's longer-term objectives.

Occupancy rates – The manager appears to have increased occupancy rates by significantly discounting the price of the rooms. Although discounting the price of the rooms may increase occupancy in the short term, if it leads to the hotel being perceived more like a budget hotel than a high quality hotel, this could be detrimental to Guestway's brand and reputation in the longer term. In turn, this could hamper Guestway's expansion plans.

Cutting costs – The way the manager appears to have maintained the Sawton hotel's net profit margin (despite the discounted room rates) is by reducing the hotel's running costs. Again, however, this is a short-term approach, which could be detrimental in the longer term – both to the individual hotel and to the Guestway group as a whole.

Customer feedback already suggests that the reduction in the amount spent on servicing and cleaning the guest rooms has led to them becoming dirty. More generally, the overall reduction in operating costs is likely to have contributed to the decline in customer service; for example, if the number of staff has been reduced.

Postponing capital expenditure – The reduction in the value of total assets suggests that the manager has restricted the amount of capital invested on fixtures and fittings; for example, in relation to buying new beds or mattresses for the rooms to replace ones which are getting worn out. Again, customer feedback suggests this lack of expenditure will be damaging to the hotel in the longer term, because guests will not want to stay there again.

Marketing and promotions – The manager also appears to have significantly reduced the amount of expenditure on marketing and promotion. Again, it seems that this has been driven by his desire to boost net profit margins in the short term. However, a failure to promote the hotel is likely to lead to a fall in the number of guests in the longer term, and therefore is not consistent with Guestway's objectives for growth.

Measurement and performance – The decisions taken by the manager of the Sawton hotel seem to illustrate the phrase that 'What gets measured, gets done.' The manager focuses on the elements of performance which he knows will affect his bonus entitlement, but seems to pay little attention to other aspects of the hotel's performance.

The manager knows that his bonus depends on occupancy rates and net profit margin, and accordingly he appears to have focused solely on these aspects of performance. However, while the results for both of these measures have increased under the current manager compared to the old manager, the hotel's performance in other crucial areas (like customer satisfaction) appears to have deteriorated significantly.

Manager's autonomy – The manager's focus on selected aspects of short-term performance highlights a **lack of goal congruence** between his objectives and those of the Guestway group as a whole.

The scope for conflict between managers focusing on short-term performance and the group's overall objectives is increased by the relative autonomy given to the individual hotel managers. For example, there do not appear to be any restrictions on the extent to which managers can adjust room rates. Therefore, a manager has the scope to alter the market position of his hotel by charging room rates which would normally be expected in a budget hotel rather than a high quality hotel.

2.2 **Competitive strategy** – As we noted in 2.1, Guestway appears to be competing on the basis of the **high quality** of its accommodation facilities, and the high quality of the service it offers its guests. In this respect, it appears to be pursuing a **differentiation** strategy, based on quality.

Therefore, ensuring that guests receive the quality of accommodation and service which they expect from a stay in a Guestway hotel is likely to be a **critical success factor** for the group.

Quality measures – However, none of Guestway's performance indicators appear to measure quality, or customers' perception of the quality of their visit to the hotels. For example, Guestway does not appear to measure **customer satisfaction ratings**. Yet these could be a valuable way of monitoring how well the hotels are delivering the levels of quality which customers expect. Moreover, it appears that at least some of Guestway's guests are willing to provide such ratings because they are already doing so through online customer review sites (for example, TripAdvisor).

Focus on cost – By contrast, two of the six performance indicators focus specifically on costs: the servicing costs for rooms; and advertising and promotion costs.

A focus on cost might initially appear to be more suitable for a cost leadership strategy. However, companies which pursue differentiation strategies still need to monitor and control their costs. It is not clear what the cost figures in Guestway's performance indicators are compared against, but, for example, if the costs for room servicing were compared against a target cost per room, this could still be a valuable indicator for a firm pursuing a differentiation strategy.

Maximising profits – Whichever competitive strategy it is pursuing, Guestway will do so with the aim of maximising its profits. In this respect, a potential weakness in the performance indicators is that they only look at net profit margin, without any reference to the net profit figure. As the figures for the Sawton hotel illustrate, the net profit margin increased slightly from 20X1 to 20X4, although the net profit actually fell by 12%. In this respect, it could be useful to also include the actual net profit figure (or an indication of how the net profit compares to prior year) as well as the margin.

Similarly, the current indicators do not make it easy to see how revenue has actually changed. For the Sawton hotel, although occupancy rates have increased, the greater than proportional reduction in room rates mean that total revenue has fallen. In this respect, a performance indicator showing revenue per available room could also be useful.

Return on investment – It seems likely that Guestway will need to upgrade the fixtures and fittings in its hotels regularly to ensure it maintains the high quality of accommodation which its guests expect. However, including 'Return on investment' as a key performance indicator may discourage managers from doing so; because the increase in the cost of assets will lead to a fall in return on investment, even if EBIT remains constant from one year to the next.

Market growth – A key part of Guestway's strategic plan is to expand its market share. In order to monitor how well it is achieving this, Guestway needs to measure its revenues (or the number of rooms booked) in comparison to the total for its country. However, because the current performance indicators focus solely on internal measures of performance, they cannot provide any insight as to how well Guestway is performing relative to the rest of the hotel sector.

Occupancy rates – It is possible that Guestway could be using occupancy rates to help measure its growth. If its hotels regularly have empty rooms, one way in which Guestway could increase its market share is by ensuring it fills all its hotels to maximum capacity. In effect, this could be seen as a market penetration strategy.

Nonetheless, because occupancy rates are only an internal measure of performance, they still don't give any insight into how they are affecting Guestway's market share.

3 Qualserve

Marking guide

		Marks
3.1	Statistical analysis of performance measures	7
	Benchmarking analysis based on perspectives of the Balanced Scorecard	13
		20
3.2	Using Five Forces to identify ways to protect strategic position	8
Total marks		28

3.1

To: Partners, Qualserve Management Consultancy
From: Accountant
Date: [today]
Subject: Qualserve's performance relative to Freeway, and ways to protect Qualserve's performance

This report compares Qualserve's performance against Freeway Consultants Ltd, looking at financial as well as non-financial perspectives of performance. It then highlights some of the potential threats which Qualserve is facing from its external environment, and presents some suggestions for how to protect Qualserve against those threats.

Comparison of Qualserve and Freeway

Financial perspective

We can compare Qualserve's financial performance against Freeway by looking at a number of performance measures:

	Qualserve		Freeway	
	20X9	**20X5**	**20X9**	**20X5**
Fee income per consultant (£'000) (Qualserve: 14 consultants; Freeway: 6)	229	129	250	183
Fee income per employee (£'000) (Qualserve: 25 employees; Freeway: 8)	128	72	188	138
Increase in fee income 20X5–9 (%)	78		37	
Profit (after tax) per employee (£'000)	28	18	50	25
Increase in profit after tax 20X5–9 (%)	56		100	
Return (net profit) on fee income (%)	22	25	27	18
Return (net profit) on net assets (%)	58	45	67	40
Support staff as a % of total	44		25	
Consultants as a % of total staff	56		75	

Efficiency – These calculations illustrate that Freeway generates both a higher fee income per consultant and a higher profit per employee than Qualserve. While this may be partly due to the nature of Freeway's business compared to Qualserve's, it is also likely to be due to the different structures and cultures in the two organisations.

Level of support staff – 75% of Freeway's staff are fee-earning consultants, whereas in Qualserve this figure is only 56%. In effect, Qualserve has nearly one member of support staff for every consultant, whereas Freeway has a ratio of 1:3. Whilst we do not know the remit of the various roles in the different organisations, it is possible that Qualserve may be employing too many support staff for the size of the business.

Growth rates – Between 20X5-9 Qualserve has actually increased its fee income at approximately twice the rate Freeway has (78% vs 37%). However, Freeway's profit has doubled, while Qualserve's has only increased by 56% over the same period. It seems that Qualserve has not been able to translate its growth in fee income into profitability.

The percentage return generated on fee income shows a similar picture. While Freeway's net profit margin has increased from 18% to 27% (20X5–9), Qualserve's has fallen from 25% to 22%. Qualserve needs to investigate the reasons for this. One possible cause is that the business's cost base is too high (and increasing) in which case costs need to be reviewed and brought under control. Alternatively, it may be that Qualserve has been lowering the fees it has been charging clients in order to try to win new business.

Profitability – Ultimately, profitability is a better measure of performance than fee income, and in this respect Freeway is clearly outperforming Qualserve. Freeway's net profit per employee (£50k) is almost double Qualserve's (£28k). This suggests Freeway's business model is more efficient than Qualserve's, although it is possible, that as a specialist provider of IS consultancy, Freeway may be able to charge premium prices for its services.

Customer perspective

Customer service levels – Both firms seem to have good relationships with their customers. Freeway has won two awards for outstanding service levels. Although Qualserve has not won any awards, it has developed a reputation for successful projects and has achieved some client referrals and repeat business.

Project resourcing – However, Qualserve's policy of allocating consultants to projects on a 'first come, first served' basis may prove detrimental to customer service levels and project success. This will be exacerbated if staff turnover continues to increase, meaning that the proportion of less experienced consultants increases.

Innovation and learning perspective

Staff development – Freeway places a significant emphasis on continuing professional development (CPD), and this seems appropriate for professionally qualified consultants. By contrast, it seems that Qualserve does not feel that CPD is important.

While the lack of training and development may be a factor in consultants leaving Qualserve, it could also have more direct consequences for the business. If Qualserve's consultants are not up to date with their technical knowledge, there is a risk they will provide incorrect or obsolete advice to their clients. If clients begin to feel that the consultant's technical knowledge is not at the standard it should be, Qualserve is likely to lose its repeat business and will not gain client referrals.

Knowledge management – Although Qualserve is looking to develop its interest in knowledge management (KM), it does not seem to have much experience in this area, by contrast to Freeway which specialises in information systems and KM solutions. Qualserve's lack of experience in KM again seems to suggest it does not keep up to date with current developments, and this could potentially be a serious problem for a consultancy business.

Moreover, the apparent lack of knowledge sharing within Qualserve could again be a problem, given the way project teams are put together on a 'first come, first served' basis rather than according to relevant experience and skills.

Internal business perspective

Staff turnover – While no staff have left Freeway, Qualserve has seen an increase in staff turnover in recent years. This should be a cause for concern for Qualserve, and the partners should investigate the reasons why consultants are choosing to leave, and address the causes behind this.

Staff development – Qualserve does not feel CPD is important for its staff, and it appears not to have any clear policy for staff development. This should be a particular concern for Qualserve as a professional service organisation, where the knowledge and skills of its consultants are effectively the products it offers its clients.

Moreover, it is a specific problem for Qualserve given that consultants may find themselves engaged in a wide range of projects, and so, to be successful, they will need up to date knowledge in a wide range of areas.

Resource utilisation – Qualserve and Freeway use very different approaches for taking on work and staffing projects. Qualserve appears to work for several different clients at any one time, and the consultants assigned to a client project are those who are available at the time. By contrast, all of Freeway's consultants work as a single team, and Freeway only works on one project at a time so that the whole organisation can be dedicated to each and every client project.

Whilst it may seem Freeway's approach is less efficient than Qualserve's, the relative profit per consultant figures for the two organisations suggest that Freeway's approach is actually working more efficiently.

3.2

Competitive rivalry – Qualserve's high fee growth, accompanied by relatively lower profit margins, may suggest it is competing on the basis of **price** rather than **quality** (differentiation).

However, given that Qualserve offers salaries and benefits which at least match the market rate, it does not seem to be the cost leader. Therefore, if Qualserve does want to compete on the basis of price it will need to assess its cost base carefully – in particular, questioning whether it needs the number of support staff it currently employs.

It will be important to consider the overall generic strategy which Qualserve pursues. Qualserve might be able to reduce its costs to such an extent that it becomes the lowest cost supplier in the industry, and this might increase profitability in the short term. However, you need to consider the trade-off between cost and quality. If cost reductions are achieved at the expense of quality, this may prove counter-productive in the long term, given the nature of the industry in which Qualserve works.

Threat of new entrants – Because Qualserve operates in a service industry, there are unlikely to be many significant barriers to new entrants; for example, the capital costs associated with starting a new business will be relatively low.

One of Qualserve's consultants resigned to set up his own business. While we do not know if this was a rival consultancy business, it indicates one of the potential threats to Qualserve: that its consultants

leave and start their own businesses, taking existing Qualserve clients with them. To guard against this, Qualserve needs to try to improve staff retention among its consultants.

Reputation – One potential barrier to entry, in Qualserve's favour, is its good reputation. However, in order to protect its strategic position, Qualserve needs to ensure its reputation for successful projects is maintained – therefore initiatives such as knowledge sharing/knowledge management within the firm should be encouraged. However, perhaps more importantly, the way consultants are assigned to projects should be reviewed, so that they are allocated on the basis of appropriate skills rather than simply on a 'first come, first served' basis.

Threat of substitutes – A major threat to Qualserve is that its clients employ professional staff or consultants in-house and so no longer need to use external consultancy firms. Two of Qualserve's consultants have already left the practice to join client organisations, and there is a risk that other consultants may do likewise, meaning those clients will no longer need to use Qualserve's services.

In order to protect its strategic position, Qualserve needs to address the reasons why its consultants are choosing to leave it in favour of its clients.

It would also seem beneficial to discuss with the HR department at Qualserve (or to seek legal advice) as to whether it will be possible to insert a clause in the consultants' employment contracts to the effect that if they leave Qualserve, they will not poach client organisations from Qualserve for a given period.

Bargaining power of suppliers – Qualserve's main suppliers are its staff, in particular, its consultants. The increase in the number of consultants leaving Qualserve recently has shown how easy it is for them to leave the practice if they are no longer happy with their jobs and job prospects, or their terms and conditions.

In order to protect its strategic position, Qualserve needs to make it more attractive for its consultants to remain with the practice. For example, you could improve the levels of continuing professional development staff are offered, as well as ensuring that staff work on projects which match their specialist experience or which offer them scope to develop their careers in a beneficial way.

Bargaining power of customers – There appears to be relatively little cost for customers in 'switching' from one consultant to another, or choosing to employ skilled staff in-house instead of using external consultants. This significantly increases the clients' bargaining power in any negotiations with Qualserve.

In order to reduce this bargaining power, Qualserve needs to establish some core competences or other means of differentiation which will give it a unique competitive advantage. The most obvious way Qualserve can demonstrate its competences to its clients is by continuing to deliver successful projects and excellent customer services. Qualserve will have a better chance of doing this if it allocated consultants to projects on the basis of their specialist skills, rather than on a 'first come, first served' basis.

4 Maltis Supermarkets

Marking guide

			Marks
4.1	Analysis of strategies for different types of store	10	
	Evaluation of the extent to which the strategies will generate sustainable competitive advantage	5	
			15
4.2	Impact of proposals on different elements of the mission statement		10
4.3	Impact of proposals on different elements of the value chain		5
Total marks			30

4.1

Tutorial notes:

There are a number of valid points you could have made in this question. For tutorial purposes, we have tried to include a wide range of these. As a result, however, the suggested solution below is longer than you would be expected to produce to earn the 15 marks available.

Choosing a competitive strategy

Porter's generic strategies model suggests that a firm should follow only one of the generic strategies in order to achieve **competitive advantage**. According to Porter, if a firm tries to combine more than one of the strategies it risks becoming '**stuck in the middle**' and losing its competitive advantage.

Maltis's mission statement highlights the group's aim to employ **different generic competitive strategies** (cost leadership; differentiation, or focus) depending on the market segment in which its stores are trading.

This suggests that Maltis is applying generic strategies at a business unit level (by type of store) rather than for the Group as a whole.

Cost leadership

If Maltis chooses to follow a cost leadership strategy, it must ensure it has the lowest costs across the industry as a whole. If it achieves a lower cost base than its competitors in this way, Maltis could achieve a greater profit than them, even if its sales prices were the same as theirs.

Although this aspect of Porter's strategy focuses primarily on **cost rather than price**, it appears that Maltis's **discount stores** might be pursuing a cost leadership strategy. They are pursuing a high-volume, low-priced strategy.

However, the scenario doesn't indicate anything about the discount stores' **cost base relative to any of its competitors**. Without such information we cannot be certain whether it is pursuing a cost leadership strategy, or how effectively it is pursuing it.

Definition of industry – Another complication is that a cost leadership strategy refers to a company having the lowest costs across an **industry as a whole**. However, this raises questions about what 'the industry' is. If it is only Maltis's discount stores which are pursuing a cost leadership strategy, their industry might be better classified as electrical retailing, whereas Maltis's hypermarkets, for example, have a trade across a wider range of retail markets.

In this respect, the discount stores might better be viewed as pursuing a **cost leadership focus** strategy (being the lowest cost supplier of electronic equipment).

Sustainable competitive advantage – The sustainability of such a strategy will depend on Maltis's ability to buy its inventory more cheaply than any of its rivals. There is no evidence of any specific technologies or supplier relationships which will allow Maltis to sustain a lower cost base than any of its competitors, which might mean that a cost leadership strategy is not sustainable.

Differentiation

If Maltis chooses a differentiation strategy, it must deliver a product or service which is **unique across the industry as a whole**. This uniqueness will allow it to charge its customers a **premium price**.

Maltis's supermarkets and hypermarkets both charge higher prices for their food products and clothing than many of their competitors, because they believe this reflects that their food products in particular are a better quality than their competitors.

Uniqueness – However, it is debatable whether the quality of Maltis's food products by themselves marks them out as being unique. For example, customers could probably buy equally high quality foods (and possibly even higher quality foods) in **specialist shops** such as a butcher or a delicatessen.

Moreover, the hypermarkets selling electrical goods (which could alternatively be bought in the discount stores) might seem to be problematic in the context of a differentiation strategy; because the goods being sold are clearly not unique.

Hypermarkets

Range of products – In this respect, it is more likely that Maltis's hypermarkets actually differentiate themselves from their competitors through the range of products they offer, rather than the quality of any individual items they sell.

In this context, Maltis's hypermarkets are providing value to their customers by making their lives easier, by allowing them to buy a very wide range of (food and non-food) products in one place.

However, Maltis needs to remember that customers still want to achieve the best value for money in their shopping. In this context, it is not clear whether 'convenience' will prove to be a source of sustainable competitive advantage.

Sustainable competitive advantage – One of the potential threats to the hypermarkets could be the growth of online shopping. Customers could order their food shopping from the comfort of their own homes, and browse a range of non-food items from different suppliers before choosing which one to buy and getting their purchases delivered to their homes. It is not clear whether Maltis's supermarkets or hypermarkets currently have any e-commerce capabilities. However, the fact that the hypermarkets offer some intangible items (such as beauty treatments and hair-dressing and opticians services) means they offer additional services which customers could not get if they bought their shopping online.

Supermarkets

Even if Maltis's hypermarkets are able to pursue a differentiation strategy (by virtue of their convenience and product range), its supermarkets seem unlikely to be able to follow a similar strategy.

Maltis's supermarkets still appear to be following a differentiation strategy, selling their food products at higher prices than their competitors because they are better quality products. Equally, if Maltis's supermarkets increase the number of Fair Trade or Organic Products they sell, this could become a point of differentiation between Maltis's supermarkets and the other supermarkets. However, this may not be a source of sustainable competitive strategy, because the rival supermarkets could respond by increasing the number of Fair Trade or Organic Products they offer to customers.

Sustainable competitive advantage – Ultimately, Maltis's supermarkets might be best able to achieve sustainable competitive advantage by providing their customers with a more pleasurable shopping experience than they could get in rival supermarkets. The survey results which suggest that customers value solutions which make their lives easier and more pleasurable would seem to support this approach.

Nevertheless, it is debatable whether it is easier and more pleasurable for customers to visit a supermarket at all, compared to the option of having their shopping delivered to them at home. Again, though, it is not clear whether Maltis has any e-commerce capability which enables customers to order their shopping online, and then either collect it from their local store or have it delivered to their homes.

Convenience stores

Maltis's convenience stores also appear to be pursuing a **differentiation strategy**, in which they are able to charge premium prices due to the convenience of the stores – in relation to their **locations**, and their **opening hours**.

However, the convenience stores offer a much narrower range of products than the hypermarkets or the supermarkets. In this respect, we could suggest that Maltis's convenience stores are following a

differentiation focus strategy. They are not trying to serve the entire food product market, but have focused specifically on a relatively narrow range of goods which are purchased regularly.

Sustainable competitive advantage – The basis of the stores' competitive advantage is their convenience rather than the products they stock. Therefore the sustainability of this competitive advantage depends on whether Maltis's stores can remain better placed in relation to residential areas than their competitors. For example, are there any planning restrictions which would prevent a rival opening a convenience store adjacent to one of Maltis's stores?

Competitive strategy for the 'Maltis' brand

Within its portfolio, Maltis has four different types of store: supermarkets, hypermarkets, discount stores, and convenience stores.

Branding – It is not clear from the scenario whether these different types of store are all branded unilaterally as 'Maltis' stores or whether they have their own sub-brands, to reflect their positioning in different market segments. For example, the convenience stores could be called 'Maltis express' in the same way that Carrefour and Tesco use the 'express' sub-brand for their convenience stores.

Having these different sub-brands is likely to be important for Maltis. If it tries to operate all its stores as a single brand, then the **group as a whole runs the risk of being 'stuck in the middle'** due to the diversity of its strategies.

Porter's generic strategies model suggests that Maltis would be best advised to **run its different types of stores as separate business units**, and to develop marketing strategies which support their individual characteristics and the different market segments they are targeting.

However, the fact that customers on the consumer website are highlighting the dual pricing between Maltis's hypermarkets and its discount stores might suggest that the shops are not as clearly defined as separate business units as they could be. If this lack of clarity remains, there is danger that it will reduce the group's ability to achieve a sustainable competitive advantage.

Tutorial notes:

The multinational nature of the Maltis's business might also suggest a basis for segmentation by geographic territories. However, the scenario doesn't provide sufficient detail to examine this point further.

4.2

Mission statement

Maltis's mission statement highlights the importance of both the economic and environmental aspects of its business, and stresses the importance of sustainability.

Sustainability – It appears that both proposals are intended to help make Maltis's supply chain more sustainable: the commitment to buying more 'Fair Trade' goods will help farmers sustain their livelihoods, while the shift to buying more organic produce should help environmental sustainability; for example by reducing the amount of pesticides and synthetic fertilisers used in growing crops.

In this respect, the proposals link directly to two elements of **triple bottom line** reporting. The shift to buying 'Fair Trade' produce and paying fairer prices to suppliers helps improve **social justice**, while the shift to buying organic crops helps improve **environmental quality**.

Ethical culture – There is no suggestion that Maltis has been acting unethically in relation to its procurement activities, or has been purchasing from suppliers who employ unethical practices. Nonetheless, the proposals designed to increase Maltis's social responsibility could be seen as reinforcing the ethical culture within the organisation.

Customer service and satisfaction – The proposals are unlikely to have any impact on the level of service customers receive from Maltis's staff, so they are likely to be neutral in relation to this element of the mission statement.

High quality goods at a reasonable price – It is likely that the Fair Trade products and the organic products will be broadly the same quality as the existing products which Maltis offers its customers. So, again, in this respect the proposals are likely to be broadly neutral. If it transpires that the new products turn out to be significantly lower in quality than the existing products, then this could potentially lead to a

conflict with Maltis's mission statement, and could create a dilemma for the management team: whether to prioritise the quality of the products they offer their customers, or to offer socially responsible products.

It is possible that the Fair Trade and organic products may be sold at a slightly higher price than Maltis's existing products. However, the Marketing Director's evidence that sales of Fair Trade coffee have increased in the past year, coupled with the surveys which have showed that European customers are choosing to buy Fair Trade products to demonstrate their 'social conscience', suggests that customers will view the slightly higher prices as still being reasonable, despite the Operations Director's concerns to the contrary. Therefore, the proposals remain consistent with the aim of the mission statement: to sell high quality goods at a reasonable price.

Sourcing goods from local suppliers – It is debatable how much impact the proposals will have on this element of the mission statement. For example, it is likely that in the European stores, local organic produce might be selected to replace existing local products. Equally, if Fair Trade coffee is selected to replace non Fair Trade coffee in European stores, neither would ultimately come from local suppliers.

Minimising damage to the natural environment – The proposal to increase the number of organic products should help reduce damage to the environment, due to the reduction in the use of pesticides, synthetic fertilisers etc while the products are being grown. Therefore the shift to organic products will clearly help Maltis achieve this aspect of its mission statement.

Equally, the shift to organic products will also help Maltis enhance its '**reputation for being an environmentally responsible company**'.

Shareholders for consistent growth in share price – It is not clear what impact, if any, the proposals will have on the company's share price. It is possible that, if Maltis is seen as a socially responsible company, it will become more desirable to ethical investors and this could increase its share price slightly.

However, Maltis's share price is more likely to depend on its financial results, and on the markets' reaction to any results or strategies the Board announces. If the decision to increase the range of Fair Trade and organic products proves popular with customers, this could have a beneficial impact on Maltis's financial results and, in turn, increase its share price. However, there is no guarantee this will happen.

4.3

Value chain

The value chain represents the sequence of activities by which value, from the perspective of the end user, is added to the products or services produced by an entity.

However, Porter's value chain also highlights that the ultimate value created is the **amount customers are willing to pay** above the cost of carrying out different value activities.

Price and margin – In this case, if customers are prepared to pay higher prices for Fair Trade products compared to non-Fair Trade, then this will either allow Maltis to increase the margin it makes from selling Fair Trade products, or else a share of this higher price will be distributed back to the other players in the value chain (for example, the farmers, and distributors).

Maltis's value chain – One of the underlying principles behind the 'Fair Trade' movement is that it allows producers to receive a better price for the products they supply. In this respect, we might expect Maltis to pay a higher price to its suppliers (or for any importers/exporters and distributors acting on their behalf) for Fair Trade products than it otherwise would. Consequently, the decision to increase the number of Fair Trade products could have an impact on the **procurement activities** in Maltis's value chain.

HR management – A change in procurement activities could have an impact on HR Management. When training its procurement staff, Maltis will need to ensure they are aware of the need to consider ethical issues and social responsibility issues (such as buying organic and Fair Trade produce) within the procurement decision-making process.

Sales and marketing – Maltis will also need to inform its customers about the increased product range, to encourage them to buy the Fair Trade products. Any related advertising or promotional activities would be represented as marketing activities in the value chain.

Other value activities – However, the decision to increase the number of Fair Trade products is unlikely to have any significant impact on any other activities in Maltis's value chain. For example, Maltis's

inbound logistics processes are unlikely to be affected if produce is coming from a Fair Trade supplier as opposed to a non-Fair Trade supplier.

5 Bryant & Watson Advertising

Marking guide

			Marks
5.1	Discussion of overall performance of the offices	2	
	Discussion of performance of each office	8	
			10
5.2	Evaluation of net income as a performance measure	3	
	Identification and justification of other suitable methods (particularly in relation to controllability and responsibility)	7	
			10
5.3	Evaluation of current remuneration packages	5	
	Suggested improvements to current packages	5	
			10
Total marks			30

5.1 **Performance of the three regional offices**

Overall performance

All three offices generate a positive net income and a positive cash flow. Similarly, all three offices generate positive Residual Incomes (RI), and achieve Returns on Capital Employed (ROCE) of around 50% or above.

At a summary level, the figures suggest all three offices are doing well.

	Central £m	South £m	North £m
Net Income	21	71	80
Net cash flow in year	26	95	51

Performance measures

Indicators such as RI and ROCE are less effective for measuring performance in a service company, like BWA, than in a manufacturing company, due to the intangible nature of many of BWA's assets and the services it provides.

By contrast, measures such as **customer satisfaction** and **customer retention** are likely to be very important for BWA. Given that competition is fierce, and likely to remain so as a result of the economic downturn, it will be important for BWA to retain as many of its existing customers as it can.

However, the data extracted from the management accounts (Appendices 1 & 2) concentrate solely on financial performance, so we cannot comment on the offices' performance in relation to these important non-financial performance indicators.

Financial performance of different offices

Although the overall financial position of BWA's offices seems favourable, there are some noticeable variations in the performance and the growth prospects of the individual offices.

Central Office

The Central region's revenues have declined slightly for the last two years; with revenue falling by 1.8% in the last year.

As a result, despite the Central region's cost of sales and wage costs remaining relatively constant as a proportion of revenue, its operating profit and net income have both fallen in the last year.

The Central region now has the lowest operating profit margin (%) of the three regional offices.

South Office

The South Office currently appears to have only limited opportunities for growth, with revenue increasing 1% per year for both of the last 2 years.

Importantly, although its revenues have only grown slightly, the South Office has enjoyed the fastest growth of the three offices in terms of operating profit and net income. Operating profit has increased around 8% per year for the last 2 years, reflecting the fact that the South office has managed to reduce its cost of sales over the same period.

Nonetheless, the South Office has the lowest net income margin (%) due to the level of head office costs which are allocated to it.

North Office

The North Office's revenue growth is significantly higher than the other two offices (9.0% in the last year). It also generates the highest operating profit margin (over 20%).

This combination of revenue growth and high margins may suggest that economic conditions in the North of Ostland are more favourable than in the other regions.

Capital expenditure – The North Office's capital expenditure was significantly greater in 20X3 than capital expenditure in the other two offices. This helps to explain the North Office's relatively low net cash flow, compared to the South Office. However, the level of capital expenditure appears consistent with an office which is growing.

Working capital management – The North Office's growth appears to have had an adverse impact on its working capital, with the increase in receivable days (up to 93 days) being a particular cause for concern. The increase in receivable days may also help explain the relatively low net cash flow.

5.2 **Performance measures**

The discussions in the last Board meeting highlighted the importance of considering controllability and responsibility when measuring performance.

Allocated costs – In this context, it is important to highlight that the net income for each division is stated after deducting the **share of head office costs** which are allocated to that division. However, the head office costs – and the share allocated to each department – are **outside the divisional manager's control**.

Therefore, net income is not an appropriate measure for analysing the divisional managers' performance. For example, the South Office has the lowest net income margin, but this is due, in part, to the fact it receives nearly 60% of the re-allocated Head Office costs.

Operating profit – In this respect, operating profit would be a better measure to use, because it more accurately reflects the performance of each office itself, and doesn't include costs which have been re-allocated from head office. Given the Board's concern around 'controllability', it seems more appropriate to exclude head office costs when measuring the performance of the regional managers. Head office costs, and the way they are allocated, are outside the managers' control.

Office v managerial performance – It is important not to overlook head office costs altogether, because BWA needs to ensure that the operating profits generated by the regional offices are sufficient to cover the agency's head office costs. Therefore, while it may be appropriate to use operating profit to measure the regional managers' performance, it may still be appropriate to use net income to measure the offices' performance as a whole.

Service business – It is also important to remember that performance measures which look at income generated in relation to the amount of capital employed (such as ROCE and Residual income) are less relevant for BWA than they would be for a manufacturing business. For example, the level of tangible assets which BWA holds is likely to be significantly lower than for a manufacturing company with similar revenues to BWA.

Of the two measures (ROCE and RI), RI has the advantage that BWA could apply different costs of capital for the different offices. This would seem appropriate given the apparent differences between the environment in which the North office is operating and the other two. The North's higher capital expenditure suggests it may be taking more risks (for example, if it is investing in new design technology) but equally there appears to be scope for higher returns in the North than the other regions.

Staff as key assets – In this respect, revenue growth could be a key measure for BWA. However, it is also crucial for BWA, as a service company, to recognise the importance of its staff as key

assets and revenue drivers. Therefore, it would be appropriate to include some performance measures which relate staff costs to revenue; for example, staff costs as a percentage of revenue, or revenue generated per full time equivalent member of staff.

Alternative measures

The Board has already suggested the idea of using different key measures for each office, and this seems appropriate given the different issues which each office is facing.

Central – A key issue in the Central region would appear to be turning around the decline in revenue. Therefore, **revenue growth** would be an appropriate target for this region.

However, the Central region's revenue may be declining because the regional market as a whole is shrinking. Therefore, BWA should also look to measure **market share**, to gauge how well it is performing against other agencies in the region.

Whilst revenue growth is important for the Central region, it is also important that the office targets **profitable growth**. For example, the office could reduce prices in order to attract new customers, but if it reduces prices too far the new business it gains may not be profitable. Therefore, **operating profit margin (%)** would also be an appropriate measure to use here.

South – Although the South office's revenue appears stable, there appear to be limited opportunities for revenue growth. Therefore, the focus here should be on maximising profits by controlling costs as efficiently as possible. Therefore **operating profit margin** will be a key measure for the South office.

Importantly, whilst the South office has the lowest cost of sales, it has the highest staff costs (37% compared to 31% in the North). Therefore, a key performance measure for the South would seem to be **staff costs as a percentage of revenue**.

The South's staff costs may reflect economic differences between the regions; for example, if the South is the most affluent area of Ostland, the market rates paid to staff may be higher there than in other parts of the country. Here again, it could be useful to compare the South office's staff costs against those of other agencies in the region.

North – It is important that the North office continues its growth, and that it does so profitably, by achieving the best operating margins it can. Therefore, revenue growth and operating profit margin would both be appropriate measures to use here.

However, the key issue facing the North office appears to be working capital management. In particular, **receivable days** should be a key performance measure, because this figure needs to be reduced. Similarly, the North should monitor its **current ratio**, because the recent increase in this figure also reflects the increase in the level of receivables.

Operating profit

Overall, operating profit would appear to be the most important performance measure for the regional offices, with revenue growth as a subsidiary indicator. Individual measures (such as staff costs or receivable days) should then be tailored for each office to address the specific issues they are facing.

However, alongside these internal performance measures, it would also be appropriate to include some **external measures**. In particular, BWA should measure the **market share** of each of its offices. This will help provide some context for BWA's own revenue growth figures.

5.3 **Remuneration policy**

Benchmarking to industry norms – BWA's underlying policy of paying market rates should help ensure that staff are broadly happy with their remuneration. However, because BWA's policy only matches the industry norm, it is unlikely to provide the agency with any competitive advantage over its rivals. For example, because the policy matches the industry norm (rather than exceeding the norm) the policy is unlikely to motivate staff to outperform their peers in other agencies.

Senior management – As we have already noted, the fact that the senior managers' basic salaries reflect industry norms should keep them amenable to working for the agency, but the bonus could help motivate their performance further.

Controllability – It is not clear what the net income of each office is measured against in order to determine the managers' bonuses (for example, against budget, or against prior year). Importantly, though, the net income of the office is likely to be affected by external conditions which the

managers cannot control. For example, if the economic downturn worsens, this is likely to adversely affect the performance of an office compared to prior year.

However, these external factors do not appear to be taken into account when determining the bonus, which could serve to de-motivate managers. For example, if the economic conditions in the Central region are less favourable than the North, it will be harder for the Central office to perform well than the North office, regardless of the efforts of the Central office's own managers. Managers in the Central office could become de-motivated because they know they cannot achieve results as favourable as those in the North. Equally, though, managers in the North may work below their optimal level, thinking that the favourable external conditions will enable them to still get a bonus.

Moreover, because the bonus is dependent on net income, it could also be affected by the level of head office costs which are re-allocated to the manager's office.

This issue, and the potential impact of external factors, both highlight the importance of controllability, which the Board has already been discussing.

It is important that the managers' bonus (or at least part of it) is dependent on factors they can control. In this respect, it may be beneficial to base the bonus on operating profit rather than net income. However, it could also be worthwhile for BWA to try to benchmark the performance of each office against regional competitors, such that bonuses are dependent on the office's performance relative to its competitors. The potential problem with this approach will be the difficulty of obtaining detailed information about competitors' performance.

Creative staff – Because BWA offers packages which reflect the market norms, this should help it attract good quality creative staff. However, there appear to be two main problems with the current policy:

- Some creative staff receive a fixed salary only, whilst others receive a salary and a bonus. Depending on the level of the bonus, this discrepancy could lead to resentment between staff on the different pay arrangements.

- The bonus elements of the creatives' packages are based on their office's revenue, rather than its profit, for example. Therefore there is an incentive simply to introduce new ideas (because doing so will increase revenue) rather than to introduce new ideas which will also be cost effective to implement and therefore profitable.

The individual nature of the creative staff's work suggests it may be appropriate for them to continue to have individual packages to an extent. However, it would seem beneficial to standardise the overall structure; for example, so that the remuneration package for all the 'creatives' includes a fixed element plus a bonus element.

Equally, it is important that the factors used to determine the bonus are ones which the creatives can **control**, and ones which will **motivate** them towards achieving BWA's objectives. So, for example, two criteria which could be used to judge performance in relation to bonus entitlements could be: the number of tender competitions the creative wins; and the number of industry awards their campaigns win.

The detailed objectives for each creative (which the staff will then be assessed against to determine their bonus entitlement) should be agreed between the staff members and their line managers.

Buying staff – The idea to base the buyers' bonuses on the prices they pay for advertising space seems appropriate because the bonuses are thereby linked to the key aspect of their job.

However, the reliability of the budget as a basis for assessing performance could be a more problematic aspect of the bonus calculation. The budgets were set by the finance team, seemingly without any input from the buying staff or regional offices. As the finance team is based in the South office and may lack detailed knowledge about local market conditions for the other two offices, the budget they have set may not be reliable or realistic.

In this respect there could be two ways to improve the fairness of the buyers' package. One would be to involve some of the senior buyers in the budgeting process. The other would be to increase the buyer's fixed salary, but reduce the bonus element of their package. Given that the budget may still be unreliable despite the involvement of the senior buyers, it may be wise for BWA to adopt the second of these options.

Account management – It seems surprising that the account managers' remuneration packages are based on a fixed salary alone, with no bonus element.

The competitive market environment in Ostland suggests it is likely that account management will become an increasingly important activity for BWA. Therefore, it would seem appropriate for account management staff to be eligible for bonuses in the same way that creative or buying staff are eligible for them.

Moreover, it would seem relatively simple to measure the performance of the account management staff against key metrics such as client retention rates and the value of new business won. Therefore, it would be appropriate for a relatively high proportion of their remuneration to be performance-related, rather than based on a fixed salary. Measures such as the number of clients and total client revenues could also be used to determine the level of bonus staff are entitled to.

Administration staff – The administration staff are likely to be the most junior grade of staff, so there may be less market pressure for them to receive bonuses compared to more senior or more specialist staff.

However, it may help to sustain motivation and loyalty among the administration staff if they were also eligible for a small bonus based either on the profitability of their office or even on the overall profitability of BWA as an entity.

It seems appropriate to base the administration staff's bonus on overall profitability, because, unlike buyers or account managers, for example, their roles are not directly linked to specific value activities within the business.

6 Tony Rossi

Marking guide

		Marks
(1)	Identifying trends in revenue and profit, and determining underlying causal factors	7
	Interpreting data and communicating an understandable explanation for owner	9
(2)	Determining costs and revenues from accepting contract	4
	Analysing wider benefits and risks of accepting the contract	8
Total marks		28

(1) **Performance analysis**

The figures below illustrate how sales and profitability have changed over the period 20X3–20X6.

Data analysis

	20X3	20X4	20X5	20X6
Gross profit %	36.9	32.1	26.3	24.0
Operating profit (PBIT) %	13.8	12.0	9.2	6.8
Growth in sales (%)		33.3	35.7	31.6
Growth in gross profit (%)		16.1	11.1	20.0
Growth in operating profit (%)		15.5	4.5	–2.9
Growth in PBT (%)		–8.6	–5.7	–8.0
ROCE (PBIT/Net assets) %	15.4	11.6	11.4	10.8
Marketing/sales %	10.0	8.8	7.1	6.5
Distribution/sales %	11.9	10.4	8.8	8.7
Admin/sales %	1.2	1.0	1.2	2.0

Operating ratios

Sales/suppliers £000s	420	280	190	125
Sales/customers £000s	21.0	18.7	16.9	15.4
Sales/products £000s	210.0	160.0	126.7	111.1

Analysis of data

Sales growth

Sales revenue has grown very significantly by over 30% each year. As prices have remained constant, this revenue growth must have arisen from volume growth.

The volume growth in sales appears to have two key drivers: the number of **customers** and the number of **products**.

Number of customers

The number of customers has grown from 200 in 20X3 to 650 in 20X6 (225% over the period). The increase in the number of customers has been even more rapid than the growth in sales (138%), with the result that sales revenue per customer has fallen substantially from £21,000 to £15,400.

Distribution costs – Whilst the increase in the number of IFI's customers has been beneficial in terms of increasing sales volume it is also likely to have caused distribution costs to increase.

The policy of widening the distribution area from 100 kilometres to 150 kilometres will also have increased distribution costs. However, distribution costs have only risen by 74%, which is far lower than the growth in sales or in the number of customers. The explanation may rest in greater economies of scope from increased volumes of goods distributed, giving more common routes and larger delivery quantities in any given geographical area.

Number of products

The number of products being sold has increased significantly; by 350% over the period 20X3–20X6. This may have contributed to the increase in administrative costs (through having to control more

product lines), but equally it could explain sales growth in terms of the greater variety of products available and the increased appeal to customers from new innovations in products.

More analysis of the marginal contribution earned from the incremental product lines is needed in order to assess their overall contribution to IFI's profit, but more information is needed in order to be able to do this.

Costs and profits

Gross profit has increased in absolute terms, but at a lower rate than revenue. Cost of sales has increased at a faster rate than revenue, meaning that gross margin in 20X6 is 24% compared to almost 37% in 20X3. Nevertheless gross profits have continued to expand, and from 20X5-20X6, the amount of gross profit earned grew at a healthy rate of 20%.

Operating profit (PBIT) margins have also declined each year. Growth in absolute operating profit has been slower than that in gross profit, and operating profit fell by 2.9% in absolute terms between 20X5–20X6. The reduction in operating profit has been due to increases in marketing, distribution and administration costs for the reasons already noted.

However, the poorest performance has been in terms of **profit before tax** (PBT) which has declined each year since the business was established, even though sales have increased. The primary cause of the decline in PBT has been the increased borrowing to finance growth, because increased borrowing has led to higher interest charges.

ROCE

An alternative perspective on the company's financial performance can be seen in the decline in ROCE. This shows that operating profit (PBIT) has not increased in line with the growth in assets of the business being used to generate sales and profits.

The business is expanding by investing in new assets, using borrowed money, to enable it to sell more products to more customers. However, the return on those assets at the margin has not been as great as the return on the original asset base when the business was smaller. Indeed, in terms of return to equity holders in profit before tax, there is less profit being made on a larger net asset base.

Exchange rate movements

Tony noted that, in 20X6, the £ strengthened against the euro. As a result, costs incurred in euros in Italy were relatively lower once they were translated into sterling.

However, in efficient currency markets, this should be regarded as fortuitous, unsustainable and not part of the underlying performance of the business. If the exchange gains are stripped out, then the operating performance in 20X6 becomes even less favourable.

In the draft figures, cost of sales for 20X6 were £7.6 million. Of this £300,000 relates to depreciation on the two warehouses. However, the remaining costs of sales relate to wages and ingredients in Italy, which are paid in euros.

Given that £ was valued 5% higher than the euro in 20X6, compared with the previous year, if this appreciation was reversed, the euro-based cost of sales would have been £7.3 million × 1.05 = £7,665,000.

Under this basis, IFI's income statement for 20X6 would have been:

	£'000
Revenue	10,000
Cost of sales (7,665 + 300)	(7,965)
Marketing	(650)
Distribution	(870)
Administration	(200)
Interest	(220)
Profit before tax	95

Using these revised figures, gross profit margin is reduced to 20.3%, and operating profit is 3.15%; both of which are significant decreases from the actual results for the year.

For the future, there is a risk that if exchange rates move against IFI, this could reduce profits further.

Other factors affecting profit margins

Five-year promise – IFI's price promise commits it not to increase selling prices for five years after a customer's first order. However, IFI's costs are likely to increase during this time, either as a result of inflation or through exchange rate movements. This will inevitably lead to IFI's gross profit margin becoming lower all the time price remains fixed.

Low prices policy – The effect of the five-year promise will also be exacerbated by IFI's policy to sell at the same price to every customer. If the prices paid by new customers are fixed for five years, the standardised pricing policy means that the prices paid by existing customers must also remain fixed for five years.

In effect, IFI's price promise means that all the time it is acquiring new customers, it will be unable to raise its prices at all. And, as noted above, in the context of rising prices, this is likely to be a major contributing factor to the reduction in gross profit margins between 20X3–20X6.

New products – Although IFI is increasing the number of products it sells, it is not clear how the gross profit margin on new products differs from the margins earned on existing products. If IFI earns lower margins on new products, this could also be contributing to the reduction in margins.

Again, though, more information will be needed in order to analyse the marginal contribution earned from the incremental product lines, and to assess their overall contribution to IFI's profit.

Suppliers

The increase in the number of suppliers could be a result of the wider product range which has generated more sales and more choice for customers. It could also be due to acquiring more suppliers of the same products to secure the supply chain and create competition among suppliers.

Equally, the increase in administration costs could, in part, be due to dealing with and controlling the greater number of suppliers.

New supplier deals – In addition, it is not clear whether the deals Tony was able to secure with his suppliers were more favourable when he was only using a small number of suppliers. For example, if Rossi Trading (and subsequently IFI) purchased a higher volume of ingredients from a supplier they might be able to negotiate a more favourable price than if they are buying a lower volume of ingredients from a supplier. The movement in the 'Sales per supplier' ratio suggests that IFI's average purchases per supplier will be substantially lower in 20X6 than they were in 20X3.

Wastage

The increased demand for IFI's products has meant that its operating capability cannot cope with the volumes demanded at peak times. As a result, it seems that IFI is having to increase the length of time products are held in store. This could lead to higher wastage of perishable products, which could also have a detrimental impact on gross profit margins.

Similarly, the increased range of products supplied means that it could be more difficult for IFI to match its inventory levels to customer demand as accurately as it could with a smaller product range. Again, this could lead to increased levels of wastage.

(2) **Supermarket contract**

Fixed price

The contract with BetterBuys is at a fixed price. A significant risk therefore arises to IFI from volatility in costs (eg, from inflation or foreign currency changes) over the two-year period of the contract, given that IFI has no scope to reflect any increases in product costs in the price it charges BetterBuys.

Moreover, the minimum quantity clause means that IFI may have to continue supplying large quantities of sausages to BetterBuys even if volatility in costs mean it is making a loss from supplying them.

Contribution from contract

Nonetheless, using the minimum annual sales quantity (700,000 kilos per year) and basing costs on current expectations for the next two years, the contract generates a positive contribution as follows:

First year

	£
Sales (700,000 × £3)	2,100,000
Costs (700,000 × £2.60)	1,820,000

Fixed costs	200,000
Contribution	80,000

Second year

	£
Sales (700,000 × £3)	2,100,000
Costs (700,000 × £2.70)	1,890,000
Fixed costs	215,000
Contribution	(5,000)

In terms of a simple financial analysis, the contract generates a positive contribution of £75,000 over the 2 years.

Additional benefits

There could also be additional benefits arising from the contract:

- The 700,000 volume is a minimum, and sales to BetterBuys may be much higher, with perhaps no incremental fixed costs being incurred.
- Other supermarkets may offer similar contracts to IFI, if it can show it can satisfy BetterBuys' needs.
- BetterBuys may renew their contract on better terms after two years.

Risks and strategic issues

However, there could be a number of risks attached to the contract:

- **Strategic risks** – The price which IFI is charging BetterBuys is significantly lower than the prices it is currently charging its existing restaurant customers for sausages. This directly contradicts IFI's policy to sell at the same price to every customer.
- If IFI's other customers become aware that BetterBuys has been offered a different, lower price, this could cause significant reputational damage for IFI (unless all the customers are offered the lower price). In effect, IFI has offered BetterBuys a discount, even though it has a policy of 'no discounts'.
- Alternatively, if IFI offers the lower price to all its customers, this will further reduce its gross profit margin.
- The BetterBuys contract could also cause further damage to its reputation as a high-quality provider, if it becomes known that IFI is supplying its products to a low cost supermarket.
- Supplying products to a supermarket also contradicts the essence of IFI's marketing slogan – 'from Italy to restaurant table...' If IFI is going to expand the types of customer it serves (and no longer supply only restaurants) it will need to consider the impact this could have on its marketing mix more generally.
- **Costs** – There is a risk that volatility in costs may create a negative contribution as the margin is thin. Over the 2 years of the deal, the current forecast suggests that the contract will generate a contribution margin of 1.8% (£75,000/£4.2m).
- Moreover, it may be the case that BetterBuys may demand large quantities from IFI thereby magnifying any negative contribution (particularly in the second year of the contract).
- **Currency risk** is also a key factor given the low profit margins involved in the contract, and the fact that costs are denominated in euro while revenues are fixed in £s. A weakening of sterling against the euro could easily make the contract unprofitable.

Advice – Although the revenue from the contract is worth roughly 20% of IFI's current sales, the relatively low margin on the contract coupled with the risks (both financial and reputational) associated with it suggest that IFI should be advised not to accept the current proposal from BetterBuys.

7 Taywell

Marking guide

			Marks
7.1	Evaluation of current and planned importance of IS at Taywell	4	
	Reasons why investment decision is strategic	5	
			9
7.2	Benefits of developing an e-business strategy	4	
	Problems with developing an e-business strategy	4	
			8
7.3	Relevant applications recommended (up to 4 marks per application)		8
Total marks			25

7.1 **Strategic importance of information systems**

Current position – It appears that, to date, Taywell has not considered its information systems (IS) as being strategically important to the business. For example, the website is currently not integrated with the estate agency software, and Taywell doesn't have a database to record customer information.

Future position – The absence of an e-business strategy and the fact that the Managing Director sees developing the website as a distraction from 'what we do', suggests that the majority of the directors are likely to continue to view IS as having little strategic importance in the future.

However, it seems that the Marketing Director **has** realised the strategic importance of IS and is going to try to convince the other directors of this. Web 2.0 technologies and the mobile phone applications which the Marketing Director has researched suggest that IS could become increasingly important to Taywell in the future, especially as other estate agencies are already making use of them.

Moreover, the lack of integration between the estate agency software package and the website, and the problems which arise from this suggest that Taywell's IS are actually already significantly more important for the effective running of the business than the directors appear to realise.

Similarly, the lack of a customer database could already be a significant issue, since it may prevent Taywell from contacting customers when a property which might be of interest comes onto the market.

Reasons why investment in IS should be a strategic decision

Importance to competitive position – despite the Board thinking that the decline in the number of Taywell's property sales is due to the current economic downturn, it seems likely that its lack of investment in information systems has also contributed to this decline. If Taywell continues not to invest in its information systems, this could have a long-term detrimental impact on the business, in terms of customer numbers and property sales, and in turn, revenue and profits.

If the number of properties Taywell sells continues to decline (because house buyers and sellers are using estate agents which are more up to date technologically) this could ultimately threaten the survival of the business.

IS as a basis of competitive advantage – it appears that some aspects of the IS investment at Taywell will be required simply to remove current inefficiencies and to enable it to offer services to customers which other estate agencies are already offering them (for example, up to date property information on the website).

In effect, these elements of the investment will provide Taywell with a threshold level of competence. However, Taywell also needs to find a way of differentiating itself from its competitors, in order to develop a competitive advantage over them. (For example, if Taywell introduces the mobile phone application and no other estate agents offer customers a similar app, this could be a source of differentiation for Taywell.)

The potential ability of information systems to be a source of competitive advantage means that decisions surrounding investment in IS should be an important part of the strategic decision-making process, rather than, for example, being taken as ad hoc decisions.

Technological developments – the introduction of mobile phone apps and the range of Web 2.0 technologies which the Marketing Director has identified, indicates that there are a range of technological developments which could affect the estate agency market. Therefore it is important for Taywell to monitor its own information systems in relation to the systems available to ensure that it remains competitive.

Home buyers are increasingly using information systems to help in their property search, which reinforces the need for Taywell to consider investment in such systems as a strategic decision.

Levels of investment – the investment in IS/IT required is likely to involve significant expenditure for Taywell. In itself, the level of expenditure suggests that the investment decision should be a strategic decision; for example, Taywell will need to assess whether it has sufficient funding available to support any proposed expenditure.

The potential risk attached to IS/IT projects also reinforces this point. It will be important for Taywell to select its IS/IT carefully so that they help it to meet customers' needs more effectively, rather than becoming a costly mistake.

Complexity – any new information systems introduced at Taywell are likely to be complex, and will affect many different areas of the business: estate agency software, customer and property databases, the website, and internal office communication. Therefore any new systems need to be carefully planned before they are introduced to ensure they are all compatible.

Equally, Taywell will need to consider whether the managers and staff have the necessary expertise to manage any new systems, and, for example, how much training they may require in using the new systems.

7.2 **Benefits**

Strategic importance – internet technologies are likely to become increasingly important to Taywell's survival. Developing an e-business strategy will highlight the importance of e-business to the organisation, and will make staff and management realise how significant IS/IT are to the business.

Moreover, if Taywell's competitors are already making use of e-business strategies, developing a similar strategy of its own should prevent Taywell finding itself at a competitive disadvantage to its competitors. As the absence of an e-business strategy appears to be contributing to the decline in the number of property sales Taywell has made, introducing an e-business strategy could help reverse that decline.

Customer needs – Taywell's Managing Director has correctly recognised the importance of meeting customer needs and requirements. However, he would seem to be mistaken in his argument that developing a website will be detrimental to customer requirements.

By contrast, developing an e-business strategy should enable Taywell to be more responsive to customer needs. For example, having a more sophisticated website would enable customers to view the detailed property information online as and when they want to, rather than having to request Taywell to send them a printed version each time they want to look at the details of a property.

Customer database – equally, an e-business strategy could help Taywell understand its customers and their requirements better; particularly through developing a customer database, based on the property searches customers have made on the website. This kind of database would enable Taywell to be pro-active and send customers details of similar properties they might be interested in, rather than relying on customers to search for properties themselves. In this respect, the e-business strategy should help Taywell in its customer relationship management.

Social media – e-business would enable greater interaction between Taywell and its customers – for example, through emails, blogs, and social networking sites. Interactivity between suppliers and customers is a key feature of e-business and Web 2.0 technologies, and the feedback which Taywell could gain from its customers could be useful in helping it know how to market the properties it has for sale more effectively.

Geographical expansion – e-business could offer opportunities to expand into new geographical markets; for example, advertising and selling properties in foreign countries. For example, potential

customers from foreign countries who are looking to buy a house in England, could look at the details of possible properties on the website; but this kind of expansion is unlikely to be possible if Taywell continues to focus only on face to face customer service.

Problems

Loss of personal contact – the directors believe that Taywell's main source of competitive advantage comes from the high quality, face to face customer service it offers its customers. If all of the other estate agents focus increasingly on e-business and online media, then offering personal service in this way could actually be a source of differentiation for Taywell. In particular, this could be valued by Taywell's customers because it is dealing with 'high value, exclusive' properties. Equally, it could be valued by more elderly customers who might prefer this face to face contact to the remote interactions which would be involved in e-business.

Technology focus rather than customer focus – moreover, if Taywell's management become focused on technology and technology developments, they may prioritise these at the expense of customer service, which could lead to it losing more customers as a result of its e-business strategy rather than gaining them.

Resistance to change – if Taywell's staff feel that the business' focus should be on direct customer service, they are likely to resist a change which they will feel is sacrificing that customer service for technology. This resistance to change could also be increased if the staff don't have experience of using e-business, or if they feel that the increased use of technology could threaten their jobs.

Lack of experience – it is not clear how many of Taywell's management team or staff have previous experience of e-business, but from the Board's attitude it appears that there is little e-business experience or expertise within the company.

This lack of experience could also introduce the risks associated with developing an e-business strategy; for example, if the IS/IT implemented is poorly designed and doesn't prove attractive or reliable for potential customers to use. In addition, the 'look and feel' of Taywell's online services will need to be consistent with its niche position as a specialist estate agent dealing in high value, exclusive properties. If Taywell fails to achieve this, there is a danger it will incur the cost of developing its e-business systems, without gaining the intended benefits of increased customers and property sales.

Taywell's internal lack of experience is also likely to increase the cost of developing its e-business strategy because it will need to use external consultants to advise it; for example, in relation to designing and installing new IT systems.

Cost – there will inevitably be costs involved in the IS/IT infrastructure needed to implement e-business. However, since Taywell already has a website, and uses some technology with its estate agency software and email system, it is not clear how far its existing systems can be upgraded to support its e-business strategy, or whether new systems will be required.

7.3 Web 2.0 technologies

Web 2.0 technologies – Web 2.0 technologies enable internet users no longer to be simply recipients of information, but to participate in the creation, sharing and evaluation of content. Web 2.0 technologies can help marketers and sales staff to develop better insights into markets and customers, and also develop greater interaction more with their customers.

Mash-ups

A 'mash-up' is a web publication that combines data from more than one source into a single web page to increase the amount of information available to people using that page.

'Mash-ups' could be particularly useful for Taywell by enabling the details of individual properties to be combined with a map of the surrounding area, as well as information about the local area – for example, links to local facilities and amenities (eg, schools, restaurants, health care services), local crime statistics, or local planning portals.

Moreover, because 'mash-ups' would enable Taywell to make use of links to existing websites or information sources, rather than having to create and embed information on its own web pages, they would provide it with a cost-effective way of providing valuable information to potential customers.

Blogs

Blogs provide an easy way for users to publish content, and they could be useful to Taywell in both an internal and external content.

Internal blogs – internal blogs can only be viewed by the employees of an organisation, and can provide an effective means of sharing information within that organisation. At Taywell, internal blogs could be used by senior management to share information with staff across the 12 different offices, thereby reducing the need for meetings or numerous emails. For example, the Marketing Director could publish a blog describing any new marketing initiatives which Taywell's offices should be following; or outlining how well sales figures are performing against target, and any steps which are being taken to improve performance.

External blogs – external blogs are publicly available, and would provide Taywell's staff an opportunity to share information with customers. For example, Taywell could post blogs on its website describing new properties when they come on to the market; or to announce new sales incentives or promotional campaigns which it may be running. Equally, it could use its blog to comment on wider issues, such as perceived changes in the housing market in England and the impact they could have on sales of exclusive residential properties.

In effect, Taywell could use its blogs in the way that companies have traditionally used press releases. Moreover, if more people are attracted to Taywell's website to read a blog posting, the hope will be that they also view some of the properties listed for sale on it.

Microblogs – in addition to full blogs, Taywell could also use the micro-blogging site, Twitter, as a medium for publishing short messages. This could be particularly useful for alerting potential customers to a new property coming on to the market, especially if customers 'follow' Taywell on Twitter.

Tutorial notes:

Although the requirement only asked for two different applications of Web 2.0 technologies, there are various other suitable applications you could have recommended here:

Social media – Taywell might be able to use **social media** (such as Facebook) to advertise its properties and its services. For example, it could set up a Facebook page which it could use to promote particularly exciting new properties becoming available. In addition, potential customers could leave messages for Taywell through its Facebook page.

Although we have included Twitter (micro-blogging) in our recommendation for blogging, you could also have recommended Twitter as a social media application.

Instant messaging (such as Skype or Facetime) could also be appropriate: for example, if a customer sees a property details, they could then 'talk' to one of Taywell's sales agents through an instant messaging service, to find out more information about the property.

Syndication – Taywell could allow companies which offer property-related services (eg, architects, interior designers, solicitors, builders, or removal companies) to advertise on its website.

In this way, Taywell could earn additional revenue from the advertising links. Equally, however, the ease of being able to find the majority of services they need to move house via a single source (Taywell's website) could be appealing to customers, and could encourage additional users to visit the website.

8 Martigate

Marking guide

			Marks
8.1	Logic of ESOSs and principal-agency debate	3	
	Impact of ESOS on attitude to risk	3	
			6
8.2	Impact of ESOS scheme on directors' behaviour		6
8.3	Potential advantages evaluated	4	
	Potential disadvantages evaluated	4	
			8

8.1 **Logic of Executive Share Option Schemes (ESOSs)**

ESOSs are designed to provide incentives for directors to manage a company in a way that ensures its **share price increases.** If the share price exceeds the option exercise price at the date the options can be exercised, then directors can buy shares at less than market price. The directors can either then realise an immediate capital gain, or retain the shares in the hope that share prices will increase further.

Directors will only face an **upside risk**, because if the share price is less than the exercise price when the option expires, they will not suffer any losses.

Agency

An ESOS is a way of **aligning shareholder and manager goals.** Shareholder goals are often **focused around share price**, whereas management will often focus on **maximising their remuneration and benefits**. ESOSs should help overcome the agency problem of having different owners and managers (directors), because the managers would enjoy the **benefits of ownership**.

Impact on risk-taking

Efficient investors should have a diversified portfolio. They should therefore be most concerned about the link between the **risk and return** of the investments the company makes. However directors may be more **risk-averse** than investors, as they are in Martigate. Directors may be excessively concerned with the **downside risk** of projects, fearing that they will be blamed if a project fails and they will lose their jobs.

Consequently, directors may evaluate projects at **higher implicit rates of return** than shareholders, leading them to reject projects that shareholders would regard as acceptable. Therefore, the directors may not invest in projects that offer an acceptable combination of risk and return for shareholders.

An ESOS is designed to overcome this problem, by making directors' remuneration dependent on the returns of projects and hence encouraging them to take into account the relationship between risk and return.

8.2 **Share price rises**

The options will only become valuable if **share prices rise**. In an **efficient stock market**, the market value of a company's shares should be determined by the **long-term value of the investments** it makes. Therefore investing in projects with positive net present values should mean that the company's market value will increase. In turn, this should mean that the value of share options will rise.

Long-term nature

The options cannot be exercised **until three years** after the date that they are offered. This should encourage the directors to be concerned with longer-term growth, rather than just focusing on the financial performance and results for the next year.

Exercise on specific date

Requiring options to be **exercised on a specific date** will mean that directors have to ensure share price increases are sustained, to guarantee increases in share prices.

However directors may have an **opportunity to manipulate results** and hence share prices around the date of exercise.

There is also the issue that different directors will have options that mature at **different times.** This may cause disagreement amongst the directors, for example directors who have a lot of options coming up in the near future may fight plans that could cause a short-term fall in the share price.

Options lapsing on departures

The fact that a director's options lapse when the director leaves the company should deter directors from departing suddenly and losing **potentially significant rewards.** This should help with long-

term board succession planning, as the nomination committee will not need to allow for a significant possibility of directors leaving without warning.

8.3 **Advantages of profit-related bonuses**

Link with performance

Paying a bonus based on performance means that part of the directors' remuneration packages are based on what they have **achieved during the year**. Profitability figures provide a simple measure of **feedback** on performance. Directors can be **held to account** if the company has failed to reach target profitability. Bonuses can vary year by year if performance varies. They can be used flexibly to encourage and reward performance that is not taken into account in long-term incentive schemes, but is still important. Bonuses contrast with rewarding directors solely by salaries, as salary levels are not determined by actual performance.

Clarity of disclosure

Readers of the accounts may find it **easier to understand** profit-based bonuses than the rewards conferred by share-based schemes. **Directors' motives** may be **clearer**. The amount of information disclosed about complex schemes may make their nature and scale difficult to understand.

Limitation of profit-related bonuses

The size of bonuses can be restricted to whatever **limit is considered desirable** by shareholders. Under an ESOS, where the directors' rewards depend on the difference between share price and exercise price, the maximum reward directors can earn is not limited by the company.

Disadvantages of profit-related bonuses

Manipulation of measures

Directors can **use questionable accounting policies** to distort profit. This issue would become less significant if a range of different measures was used to determine performance, so that manipulation of individual measures would have less impact. However, it would then be more difficult to decide how important each measure used should be and whether the relative importance of each should vary by individual director. A scheme based on multiple measures might also be more difficult for shareholders to understand.

Encouragement of short-term outlook

Cash bonuses encourage directors to focus on **annual, short-term, performance**. This may mean their decision-making is distorted from the viewpoint of shareholders. Directors may choose shorter-term projects with quick gains, rather than projects that offer shareholders the best combination of risk and return over the longer term.

Publicity

Large bonuses may be more likely to attract **adverse publicity** because they are more visible. They may be particularly unpopular in a poor economic climate when they are based on profits that have increased because of cutbacks in staff. Equally, large bonuses paid to directors are likely to be unpopular if they seem disproportionate to any bonuses or pay increases awarded to the remainder of staff in the company.

9 Fonezone

Marking guide

			Marks
9.1	Risks identified and discussed		12
9.2	Relevant ethical principles identified	2	
	Ethical implications of approach to personnel management	6	
			8
Total marks			20

9.1 **Lack of objective performance standards**

The measures do not provide an indication of how Fonezone is **performing against its competitors**. Although particular shops may achieve good sales figures through the use of high discounts, this could lead to Fonezone's profit margins being lower than its competitors achieve.

Although the managers are expected to control special offers and promotions such that each sale still achieves 'an acceptable margin' it is not clear how often this margin is reviewed, and so it may become less appropriate over time if it is not reviewed on a regular basis.

Sub-optimal performance standards

The objective of maximising sales may have been more appropriate when Fonezone was seeking to gain market share, but it is less appropriate as a long-term measure now that Fonezone is the market leader in its country.

The management team do not appear to have reviewed any of the factors which may contribute to Fonezone's ongoing success in the longer term, for example the **amount of repeat business** or the **sales of higher margin or new products.** There is also no indication that Fonezone monitors the number of customers cancelling contracts and returning products because they are dissatisfied with them.

Competing stores

The close proximity of several stores will inevitably mean that some stores are **competing against each other** rather than strengthening Fonezone's position against its competitors, using the advantages of advertising and visibility that it enjoys. Customers who live near to several Fonezone stores may shop around and buy from the store that offers the cheapest deal on a particular package, **reducing Fonezone's revenues.** In addition, customers could pass on this information to their own friends, relatives and colleagues, increasing the demand for the lower priced – and therefore lower margin – package.

Customer messages

The fact that individual shop managers can offer different promotions could also have wider implications. Customers may be confused by the different messages coming from different stores, if each has **different promotions on different products**.

The emphasis on **special offers** generally may result in a **loss of customer confidence** in the **quality** of the phones that Fonezone is selling.

Customer care

Customers may react poorly to the approach employed by the sales staff in Fonezone's shops, based on the desire to maximise sales. This objective may lead to **sales tactics** which customers find **too aggressive**, with not enough time, for example, being spent on finding out customers' requirements from their phone or phone contract. Customers may be particularly dissatisfied if they are **sold a package that does not fulfil their needs** and may not return to Fonezone's shops.

The lack of repeat business could be a reason why **Fonezone's growth is slowing**. However, the slowing down in Fonezone's rate of growth could also be indicative of the growth rate for sales of mobile phones as a whole slowing down. If this is the case, however, encouraging existing customers to become loyal to Fonezone will become increasingly important; but the current approach seems to be largely focused on making one-off sales rather than on customer retention and building relationships with customers.

Staffing

Fonezone may suffer **sudden staff shortages** if staff report sick due to stress. This may have an adverse impact on the service that stores offer, and put additional pressure on staff at under-staffed shops, increasing the risk that they too will suffer from stress.

Reputation risk

A poor reputation may damage Fonezone in various ways. A **bad reputation for customer care** may deter potential customers from shopping at Fonezone's stores in the first place. A **poor reputation for staff treatment** may deter individuals who are potentially good salespeople from applying to work at Fonezone.

Technology

Fonezone's sales process also appears to be dependent on the **functioning of its EPoS system.** There do not appear to be backup facilities available if the system breaks down.

9.2 **Duty to customers**

It seems likely that in order to maximise sales, staff may be making **exaggerated claims** for the products they are offering and possibly disparaging references to others, which could be symptomatic of a **lack of integrity or objectivity** amongst the sales staff.

Staff may also be showing customers a **lack of due care** if they fail to identify customer requirements, and do not resolve after-sales queries.

Duty to staff

Managers also appear to be guilty of unprofessional behaviour in dealing with staff. No account appears to be taken of the impact of stores and staff competing with each other and the **excessively pressurised working environment** that has resulted. Although stress problems have been identified as a cause of high turnover and staff absence, managers have not addressed the causes of stress.

Staff performance measurement

The measurement of staff performance seems to be particularly unfair. Staff appear to be judged predominantly on the performance of their shop rather than on their performance as individuals. No account seems to be taken of **factors** that staff **cannot control** which could influence sales, such as location of shops and staffing levels.

Threatening disciplinary action when staff have not done anything wrong seems particularly unjustified, and may well be illegal under employment law.

Objective setting and business monitoring

Directors may also be guilty of showing a **lack of competence and due care** by perpetuating performance measures that seem increasingly less appropriate for the needs of Fonezone's business**.** By not benchmarking externally, and by seemingly failing to consider Fonezone's long-term strategic position, the directors are not fulfilling their responsibilities to set proper strategic objectives and targets, and to monitor the business effectively.

Lack of central guidance

The board has also shown a lack of due care by failing to give enough guidance in areas where central guidance is required, for example **use of promotions.** This may have meant that revenues are less than they could have been, also that the advantages in promotion and advertising that Fonezone should enjoy are not being realised because of a lack of clarity of messages.

In this respect, the board could also be failing in their duty to run the company in a way which maximises its value to its owners (shareholders).

10 Stored for You plc

Marking guide

		Marks
10.1	Allocation of costs to activities	2
	Cost driver rate	3
	Amount charged to Technology Talks	2
		7
10.2	Uses of ABC	10
10.3	Factors to be considered	8
Total marks		25

10.1 **Step 1 – Allocate costs to each activity**

	Inspection £'000	Storage £'000	Packaging £'000

Indirect labour: basic	175	131	569
overtime	49	8	18
Rental of premises	188	875	187
Administration	68	7	75
Packaging	–	–	4,875
Total cost	480	1,021	5,724

Note: Some costs have been rounded so that totals are correct.

Step 2 – Calculate cost per activity

Activity	Cost driver	Cost per cost driver unit
Inspection	Number of items inspected	(£480,000/160,000) = £3 per item
Storage	Number of cubic metres	(£1,021,000/250,000) = £4.08 per m^3
Packaging	Number of packages	(£5,724,000/100,000) = £57.24 per package

Step 3 – Calculate amount charged to Technology Talks plc

Activity		£
Inspection	£3 × 20,000	60,000
Storage	£4.08 × 50,000	204,000
Packaging	£57.24 × 10,000	572,400
Total		836,400

10.2 Activity-based costing is relevant for service industries as the majority of their activities are indirect.

Service companies often supply resources in advance. In addition, short-term spending on supplying services is not affected by fluctuations in demand – such costs would normally be treated as fixed costs by traditional accounting systems. Ways in which service industries may use activity-based costing to improve decision making and profitability include the following:

Demand on overhead resources

Different customers place different demands on overhead resources. The company may find that some costs, such as marketing, administration etc, vary with the number of different customers rather than the volume of business, and a customer who stores many small packages in different transactions will cause higher costs than one who stores the same volume of material in one large package.

Realistic pricing

ABC enables service organisations to determine more realistic prices for their services. Costs are allocated to services based on the activities that cause these costs to arise in the first place, therefore there is a greater likelihood that fairer prices will be charged for these services.

Diversity of services and customers

Service organisations provide a vast range of different services to a diverse range of customers. Even services that would appear to be relatively simple – such as storage of products in Stored for You's case – can still result in a wide range of choices. By enabling organisations to identify the activities that support different levels of service, activity-based costing can help to determine the 'real' cost of each level which will again help in the pricing process.

Cost efficiency

The use of the activity-based approach is also valuable for cost-efficiency. Careful analysis of overheads on a cause and effect basis makes it easier to control them by showing exactly where attention is required. This should be of particular interest to Stored for You as it attempts to respond to increasing competition.

10.3 **Cost**

Cost will always be important, since it is obvious that profit cannot be made if revenue is less than costs. In some cases, services may be sold below cost, perhaps to encourage customers to buy other services or as a long-term strategy to win market share. This is unlikely to be the case for Stored for You as its service is based on quality at the top end of the market. Low prices might actually discourage customers from using Stored for You's services as they may be taken as an indication of lower quality. Also, the company is more concerned about defending market share

than increasing it. This may lead it to occasional price reductions for special offers, but selling at a loss is almost certainly inappropriate.

Market conditions

Stored for You has had an enviable position until recently, encountering little competition in its chosen segment. This is now changing and the company must ensure that its prices are seen as appropriate in comparison with those of its competitors. A great deal will depend on whether it can maintain its brand values, which mark it out as the reference standard for excellence. The activities of competitors will influence the views of potential customers on what they think it is reasonable to pay for the company's services.

Type of item being handled

Although Stored for You has not taken this into account when determining costs to be allocated to individual items, it is clear that fragile items will require much more careful handling and greater amounts of packaging. It would make sense if the price charged to customers was more closely related to the fragility of the items as more fragile items will cost more to inspect and package. This is a flaw in the current pricing policy – customers with fragile items are actually being subsidised by customers with non-fragile goods who are paying the same price for a less stringent service.

Contribution

Identifying incremental costs will be important in determining contribution. Where price changes are made, the impact on contribution per item needs to be considered, along with the effect on sales volumes, in order to determine total contribution.

11 ACE Ltd

Marking guide

		Marks
11.1	Reasons why ACE may not need to hedge	4
11.2	Three forms of hedging that may be beneficial	6
11.3	(a) Forward	2
	(b) Money market	4
	(c) Option	4
11.4	Possible interest rate hedges	5
Total marks		25

11.1 **Matching receipts and payments**

If ACE's customers are from a large number of different countries then it would be attractive to these customers for them to pay in their local currency. ACE needs to maintain a number of overseas bank accounts, and payments would be made out of these accounts to meet amounts owing. This means that some currency would not need to be exchanged and returned to the head office so no hedging is needed.

Currency of transaction

ACE may have agreed with some customers that they will pay in sterling even though this is not the local currency. This then transfers all of the foreign exchange risk to the client.

Netting

Since the local branches send foreign remittances to the head office and head office send a large amount to the regions to be repatriated these amounts could be netted off in the inter-company accounts.

11.2 Forms of hedging that might be useful to ACE are:

Forward contracts

When using a forward contract ACE can arrange for a bank to buy or sell foreign currency at a future date, at a rate of exchange determined when the contract is made.

The advantage with this is that ACE will definitely know the future exchange rate. However the disadvantage is that these contracts must be used regardless of whether the spot rate is more favourable than the agreed forward rate. This prevents any exchange gains being made.

Although no gains can be made, forward contracts are easy to arrange and would give ACE a definite rate for cash flow projection purposes. It may be possible, although not certain, for ACE to obtain an exchange rate that matches with the rate used on the date of sale on the system and so, in bookkeeping terms, no loss or gain would have been made.

Currency options

A currency option is an agreement involving a right, but not an obligation, to buy or sell a certain amount of currency at a stated rate of exchange on or before some specified time in the future. Currency options involve the payment of a premium, which is the most the buyer of the option can lose.

The advantage with this method is that it reduces the risk of losses due to currency movements and allows currency gains to be made. A main disadvantage is the upfront cost of the premium.

If ACE is currently experiencing some cash flow problems it may not be wise for it to incur any extra expense and so this would not be the best method for it to use in these circumstances.

Money market hedge

A money market hedge could be set up to cover future foreign currency receipts from the foreign branches. If ACE was due in the future to ship Japanese yen from the Australian office, for instance, and wished to convert this to Australian dollars once the money had been banked in Japan it would:

- Borrow an appropriate amount in Japanese yen now.
- Convert this to Australian dollars now.
- Place Australian dollars on deposit in the Australian bank account.
- When the yen that is being shipped to Japan is banked ACE would pay off the loan from the yen bank account.

The advantage with this is that there is no exchange loss or gain. The disadvantages would be that no gains could be made if exchange rates moved favourably, and ACE would need to have loan facilities available in a large number of different banks in different countries, which may be difficult to arrange and track.

This may be worth considering for the main currencies but ACE would need to ensure it had the expertise to do this.

11.3 (a) **Forward exchange market**

The three month forward rates are 1.2600 – 1.2655.

The receipt in three months is $326,000/1.2655 = £257,606.

(b) **Money market**

$326,000 will be received in three months' time; the company can borrow the present value of this sum and repay the principal plus the interest when it receives the money in three months. Meanwhile, it can convert the sum borrowed into sterling at the spot rate, thus eliminating foreign exchange risk. If it puts the sterling on deposit for three months, the sum it eventually receives will effectively be its dollar receipt converted into sterling.

Sum borrowed in dollars now = $326,000/[1 + (0.06 × 3/12)] = $321,182

Sum received in sterling now = $321,182/1.2685 = £253,198

Sterling value after three months = £253,198 × (1 + (0.042 × 3/12))

= £255,857

The effective three month exchange rate is $326,000/£255,857

= 1.2741 $ per £

(c) **Traded options**

The company will wish to sell dollars in exchange for sterling. Therefore it will buy $326,000@1.27/£31,250 = 8.2 say eight contracts (calls) at a premium of 1.61 cents per £1 sterling. The total premium will therefore be 8 × £31,250 = £250,000 × $0.0161 = $4,025 which if bought at the spot rate of $1.2635/£ = £3,186. If the spot exchange rate turns out to be, say, 1.30, the option will be exercised and the receipt of $326,000 will be exchanged as below.

	$	£
£31,250 × 8 contracts = £250,000 at 1.27 =	317,500	250,000
$8,500 sold at 1.30 (Note 1)	8,500	6,538
Total receipt	326,000	256,538
Premium paid		(3,186)
Net result		253,352

Note: Assume that the difference of $8,500 is sold at a rate of $1.30

11.4 If the financial controller is concerned about possible future fluctuations in interest rates he could make use of the following possibilities:

- Forward rate agreements (FRAs)
- Interest rate futures
- Interest rate guarantees or short-term interest rate options

Forward rate agreements (FRAs)

Entering into an FRA with a bank will allow the treasurer to effectively lock in an interest rate for the period of the loan. This agreement is independent of the loan itself, upon which the prevailing rate will be paid. If the FRA was negotiated to be at a rate of say 10%, and the actual interest rate paid on the loan was higher than this, the bank will pay the difference between the rate paid and 10% to the company. Conversely, if the interest paid by the company turned out to be lower than 10%, they would have to pay the difference to the bank. Thus the cost to the company will be 10% regardless of movements in actual interest rates.

Interest rate futures

Interest rate futures have the same effect as FRAs, in effectively locking in an interest rate, but they are standardised in size, duration and terms. They can be traded on an exchange (such as LIFFE in London), and they will generally be closed out before the maturity date, yielding a profit or loss that is offset against the loss or profit on the money transaction that is being hedged. So, for example, if the company is concerned about rises in interest rates, the financial controller can sell future contracts now. If that rate does rise, their value will fall, and they can then be bought at a lower price, yielding a profit which will compensate for the increase in the company's loan interest cost. If interest rates fall, the lower interest cost of the loan will be offset by a loss on their futures contracts.

There may not be an exact match between the loan and the futures contract (100% hedge), due to the standardised nature of the contracts, and margin payments may be required while the futures are still held.

Interest rate guarantees

Interest rate guarantees (or short-term interest rate options) give the company the opportunity to benefit from favourable interest rate movements as well as protecting them from the effects of adverse movements. They give the holder the right but not the obligation to deal at an agreed interest rate at a future maturity date. This means that if interest rates rise, the treasurer would exercise the option, and 'lock in' to the predetermined borrowing rate. If, however, interest rates fall, then the option would simply lapse, and the company would feel the benefit of lower interest rates.

The main disadvantage of options is that a premium will be payable to the seller of the option, whether or not it is exercised. This will therefore add to the interest cost. The treasurer will need to consider whether this cost, which can be quite expensive, is justified by the potential benefits to be gained from favourable interest rate movements.

12 Try-it plc

Marking guide

			Marks
12.1	Cost of equity	2	
	Costs of debt	3	
	WACCs	3	
	Explain differences	2	
			10
12.2	Differences between financial reconstruction and refinancing	4	
	Issuing of bonds	2	
			6
12.3	Explanation of duration		5
12.4	Pecking order theory		4
Total marks			25

12.1 **Using CAPM**

Cost of equity

$k_e = r_f + \beta (r_m - r_f)$

$k_e = 5\% + 1.6 (12\% - 5\%) = 16.2\%$

Cost of redeemable debt

k_d = IRR of the debt flows × (1 – 0.23)

Time	Flow	Discount factor at 8%	PV at 8%	Discount factor at 10%	PV at 10%
0	(91)(MV ex int)	1	(91)	1	(91)
1 – 4	6	3.312	19.87	3.170	19.02
4	102 (incl premium)	0.735	74.97	0.683	69.67
NPV			3.84		(2.31)

IRR = 8% + [3.84/(3.84 + 2.31)] × (10% – 8%)

= 9.2%

k_d = 9.2% × (1 – 0.23)

= 7.1%

Cost of irredeemable debt

$k_i = [7 \times (1 - 0.23)]/85 = 6.3\%$

WACC using CAPM

= (16.2% × 800,000 + 7.1% × 455,000 + 6.3% × 212,500)/(800,000 + 455,000 + 212,500)

= 11.9% ≈ 12%

Using DVM

$$k_e = \frac{d_0(1+g)}{P_0} + g$$

$$= \frac{0.1(1+0.05)}{0.8} + 0.05 = 18.1\%$$

WACC using DVM

= (18.1% × 800,000 + 7.1% × 455,000 + 6.3% × 212,500)/(800,000 + 455,000 + 212,500)

= 13%

The cost of equity may differ between the two methods as CAPM is a risk based model. The DVM does not consider the risk of the investor directly but rather uses the market price of the security as a reflection of the potential risk of the investor. The market value on any given day may reflect other issues eg market sentiment, actions of speculators etc and so may not accurately reflect the risk. The DVM also assumes that there is constant growth in annual dividends paid which may be inaccurate.

12.2 **Briefing notes on financial reconstruction and refinancing**

A financial reconstruction scheme is a scheme whereby a company reorganises its capital structure. There are many possible reasons why management would wish to restructure a company's finances. One reason may be when a company is in danger of being put into liquidation, owing debts that it cannot repay, and so the creditors of the company agree to accept securities in the company, perhaps including equity shares, in settlement of their debts.

Refinancing is the application for more finance, eg, a secured loan, to replace an existing loan secured by the same assets. It may take place to reduce interest costs, pay off other debts or reduce risk. Although refinancing may reduce interest costs, there can be fees related to refinancing a loan that may outweigh any savings.

In this instance, Try-it plc is looking to expand its operations through acquisition and so will need finance to do this in the absence of internally available funds. There is also no indication that the

company is in any financial difficulty. It states that the company is looking to replace a short term loan so it would seem that the issuing of the bonds would be for refinancing purposes.

12.3 **The concept of duration**

The calculation of duration (also known as Macaulay duration) gives each bond an overall risk weighting that allows two bonds to be compared. It is a composite measure of risk expressed in years.

Duration is the weighted average time before the bond's benefits (coupon and redemption value) are realised. The 'weights' are the present values of the benefits involved. The duration of the bond will shorten as its life value decays.

Sensitivity to interest rate risk is reflected in the duration calculation as follows:

Longer-dated bonds will have longer durations, as will lower-coupon bonds.

Lower-coupon bonds will have longer durations. For zero-coupon bonds, the duration will be the term to maturity.

Lower-yield bonds will result in longer durations. The present value of benefits in the future will rise if the yield falls which will lengthen the duration.

12.4 Pecking order theory suggests that Try-it should use straight debt to finance the takeover, assuming that it lacks the necessary cash surpluses from retained earnings, rather than convertible debt or equity.

Perhaps the most important reason for following the pecking order is the signal given to the market. Try-it's board may consider that debt issues will demonstrate its confidence in the success of the takeover. The directors are showing that they believe the combined group will make sufficient profits to fulfil its obligations on the new debt. The board may also feel that a debt issue is more likely to be completely successful than an equity issue. This may depend on their past experience, and whether Try-it has had any problems fulfilling the conditions of debt finance it has used. The cost of issuing bonds is also likely to be lower than the costs of an equity issue.

However the board may consider other factors as important, particularly the level of gearing if the new debt finance is more than a straight replacement for the redeemable debt. Investors may become alarmed if Try-it becomes significantly more geared than the industry average.

13 PizzaClub plc

Marking guide

			Marks
13.1	Asset-based valuation	3	
	Earnings-based	4	
	Dividends-based	4	
			11
13.2	Factors affecting share price		8
13.3	Additional factors:		
	PizzaClub shares	3	
	Majority holding	3	
			6
Total marks			25

13.1 **Assets-based valuation**

	£'000
Total assets less liabilities	580
Adjustment for non-current asset value	(150)
Total valuation	430
Number of ordinary shares	50,000
Value per share	£8.60

Comment

Although this method is easy to calculate with figures available in Maria's financial statements it is difficult to ascertain what is included within the total assets less liabilities. Items such as intangibles may not be included in the figures because these items are difficult to value.

Price/earnings model

	For PizzaClub
No of shares	5,290,000
Share price	216p
Market value	£11,426,400
EPS	21p
P/E ratio (share price/EPS)	10.29

As Maria's shares are not traded, it is not possible to obtain a P/E directly. However, we may use PizzaClub's P/E as a proxy, since the businesses are similar in nature. PizzaClub's P/E is 10.29. It would be appropriate to reduce this to reflect the increased risk associated with an unquoted company. Using a typical reduction of 30% gives a P/E ratio for Maria's of 10.29 × 70% = 7.2.

This gives a value of 7.2 × £140,000 = £1,008,000 with an associated price per share of £20.16.

Comment

One major drawback of this method is that it attempts to use a P/E ratio for a listed company and apply it to a non-listed one. The arbitrary use of 70% could be misleading so it would be better to use a range of figures to adjust the P/E ratio. It also assumes that the two companies have the same expected growth rates and risk profiles (financial and operating risk).

However, the figures for the calculation would be easy to obtain from financial statements and this method can give an indication of possible worth.

Dividend valuation model

CAPM will need to be used in order to establish the cost of equity for the company.

k_e = 4.6% + 0.7 (11.2% – 4.6%) = 9.22%

Based on the available information there is no growth in dividend payments, so using a growth rate of zero, this gives a market valuation of £50,000/0.0922 = £542,299.

Since this gives the market value for a quoted company it needs to be reduced. A reduction of 30% would give a valuation for Maria's of £379,610 and a share price of £7.59.

Comment

This method assumes that the β for Maria's is consistent with that for the sector which may not be realistic. In particular, Maria's has no long-term borrowing, so the sector's equity beta would need to be ungeared.

There is also no growth in dividends over the past year but that may not be representative of the company's progress over a longer period as there may have been growth in previous years.

Looking at the company's profits, which are £140,000 and some 17% higher than the previous year plus the reinvestment of £90,000 in 20X8 and £70,000 in 20X7, it seems likely that growth will not be zero, and the valuation therefore higher than £542,000.

Again an arbitrary discount to 70% has been used which may be unrealistic so a range of values may be better.

Tutorial note:

You may also have used the Gordon growth model g = rb in this part of the question.

13.2 **Summary**

	Valuation	**Price per share**
Asset value	£430,000	£8.60
P/E model	£1,008,000	£20.16
DVM	£379,610	£7.59

The asset valuation and the dividend valuation models give results that are broadly comparable, but the earnings-based approach gives a value more than twice as high. The difference between the asset and earnings-based valuations may arise because a restaurant business is not likely to be very capital-intensive: much of the profit earned by Maria's is the result of the skill and efforts of its staff, rather than the exploitation of non-current assets. This suggestion is supported by the business's high return on capital employed, which is 140/580 = 24% for 20X8.

Tutorial note:

As the fair value of Maria's non-current assets is below the carrying amount, then the carrying amount should already have been impaired to the fair value unless the value in use is greater. This seems likely given the comment above about staff skills creating profitability.

Maria's owners will no doubt subscribe to the earnings-based model for the reasons outlined above and, in any case, will want the valuation to be as high as possible.

PizzaClub's approach may depend on its intentions for the Maria's chain. If it simply wishes to acquire the premises and convert it to its own model rather than continuing with the more complex existing restaurant business, the valuation based on assets will be of more interest than the one based on earnings. On the other hand, if it wishes to maintain the target company's earning potential, it will have to maintain its restaurant businesses and, almost certainly, ensure that key people do not leave. Under these circumstances, it may accept that the earnings valuation is more appropriate.

If we accept that the earnings-based valuation best reflects the nature of the business, the low dividend-based valuation seems anomalous at first. However, the dividend is a small proportion of the earnings and would be an even smaller proportion of the pre-tax earnings. We might enquire what the retained earnings are being used for, as the value of non-current assets does not seem to be high. Perhaps the business is recovering from a period of sustained low profits.

There will be considerable synergies associated with the acquisition of Maria's. As PizzaClub does not have many outlets in this geographical location this acquisition should result in revenue synergies.

Maria's has an existing client base for take-away pizza so the risk of failure is much less than if PizzaClub had to start the business from scratch.

Cost synergies may also exist due to economies of scale and economies of scope, which may make paying more than the lowest price for Maria's possible.

It should also be noted that the acquisition of Maria's may help to reduce PizzaClub's overall gearing which is very high at the moment.

13.3 **Additional factors to be considered if the acquisition were:**

(a) **In PizzaClub shares**

- A value for the business would still need to be agreed upon and it would be necessary to decide the number of shares to be issued to cover the cost of the acquisition.
- What would be the cost of issuing the shares?
- How would the new issue affect PizzaClub's share price?
- Would the shareholders of Maria's agree to receiving shares instead of cash?
- Dilution of PizzaClub shareholders' holdings.

(b) **For a majority holding**

- A share price would have to be agreed. An extra complication would be that PizzaClub would not have total control, which would tend to reduce the value of the offer it was prepared to make.
- Would PizzaClub buy someone out or buy a proportion of all holdings?
- Would the acquisition of a majority holding be considered favourably by either company's shareholders?

14 Rocky Road Institute

Marking guide

		Marks
14.1	Plan A	8
	Plan B	8
		16
14.2	Identification and explanation of relevant issues	8
Total marks		24

14.1 The costs of the surveys have already been incurred and are sunk costs, so they will be ignored in the analysis below. Depreciation is not a cash flow and again will be ignored. The non-refundable deposit paid to reserve the site in Plan B is a sunk cost and should not be included in the calculations.

Plan A

	t_0 Apac $'000	t_1 US$'000	t_2 US$'000	$t_{3–20}$ US$'000	
Fees		11,625	13,375	16,125	
Operating costs (55% of fees)		(6,394)	(7,356)	(8,869)	
Purchase of lease	(50,000)				
Fixtures and equipment	(10,000)				
Construction	(25,000)				
Net cashflows	(85,000)	5,231	6,019	7,256	
Exchange rate (W1)	7	1.764	1.778	1.792	
Cashflows in T£	(12,143)	2,965	3,385	4,049	
Opportunity cost (lost fees)		(625)	(625)	(625)	
Net cashflows	(12,143)	2,340	2,760	3,424	
DF @ 18%	1	0.847	0.718	3.787	(W2)
PV	(12,143)	1,982	1,982	12,967	
NPV	4,788				

WORKINGS

(1) **Future exchange rates**

Current spot = T£/US$ = US$1.75

t_1 US$1.75 × 1.008 = US$1.764

t_2 1.764 × 1.008 = US$1.778

t_3 1.778 × 1.008 = US$1.792

(2) **Annuity discount factor**

Annuity factor Years 3–20 = Annuity factor for Years 1–20 – annuity factor for Years 1–2
= 5.353 – 1.566 (both from annuity tables)
= 3.787

> Alternatively, the annuity factor for 18 years at 18% could be discounted by two years
>
> = 5.273 × 0.718
> = 3.786 (Difference due to rounding)

Plan B

	t_0 T£'000	t_1 T£'000	t_2 T£'000	t_3 T£'000	t_4 (W1) perpetuity T£'000
Fees		4,375	5,625	6,750	
Operating costs (55% of fees)		(2,406)	(3,094)	(3,713)	
Travel costs (1.5% of fees)		(66)	(84)	(101)	
Land purchase	(15,000)				

Fixtures and equipment	(2,500)				
Construction costs	(7,500)				
Net cashflows	(25,000)	1,903	2,447	2,936	27,492
DF @ 14%	1	0.877	0.769	0.675	0.675
Present value	(25,000)	1,669	1,882	1,982	18,557
NPV	(910)				

WORKINGS

(1) Growing perpetuity formula = $\frac{\text{Cash flow @}t_1}{r-g}$

Value @ t_3 = $\frac{2{,}936 \times 1.03}{(0.14-0.03)}$ = T £27,492,000

PV at t_0 = 27,492 × 0.675= T £18,557,000

Plan A (investing in Apac) is preferable as it offers a higher NPV. Plan B should not be considered as it would have negative NPV and so would reduce wealth.

14.2 **Other factors to be considered**

Plan A

(a) Foreign exchange risk.

(b) Resistance from staff who want domestic expansion.

(c) Limited skills and knowledge of the Apac market.

(d) Problem with using local tutors – such as quality, availability.

(e) Potential political risk – instability of the market could cause loss of students or shutdown of the institution.

(f) Domestic staff may not want to be seconded to Apac for two or three years.

(g) Are estimates accurate (for example, fees are assumed to be constant in T£ terms until Year 20).

(h) Will the Apac government cancel the lease at one of the five-year 'get out' points?

Plan B

(a) Uncertainty of obtaining planning permission.

(b) Staff will have to travel between sites that will be expensive both financially and in terms of time.

(c) Inflation rate may be inaccurate.

Factors affecting both plans

(a) What happens if the project life is cut short?

(b) There has been no mention of refurbishment costs which will be necessary if the buildings are to be used for at least 20 years.

(c) A sensitivity analysis may be useful to see how sensitive the NPV is to changes in, for example, fee income, operating costs, and construction costs.

(d) Plan A has 'get out' points at the end of each five year period, and the financial impact of these has not been included in the analysis, other than by use of a discount rate which reflects risk.

(e) Plan A is of limited duration (20 years), whereas Plan B has been analysed assuming an indefinite life, and it is not clear what the residual value of Plan A is. To compare like with like, cashflows after Year 20 should be estimated.

(f) It is not clear how the costs of capital have been calculated and to what extent they reflect different levels of risk. If it is not the case that Plan A is substantially more risky than Plan B, then it may not be appropriate to use costs of capital that are so different.

15 BST Motors Co

Marking guide

			Marks
15.1	Assets-based valuation	3	
	Earnings-based	3	
	Dividends-based	3	
			9
15.2	Factors affecting bid		9
15.3	Practical considerations		7
Total marks			25

Tutorial note:

In 15.1, you are not told what methods to use so you have to identify relevant information. You are given the net assets value, given all the information for the price-earnings, market capitalisation calculation, and given an indication of future growth that you can use in the dividend valuation model calculation.

Key factors in 15.2 are quality of forecasts, assets being purchased, effect on dividend policy and post-acquisition savings.

15.3 is a straightforward discussion of factors affecting share prices.

15.1 **Methods of valuation and range of values for SM**

Net assets

The book value of SM's net assets attributable to equity shareholders is £45 million. This figure may need to be adjusted for increased or decreased market values of assets, particularly SM's property holding. However, for a going concern, the book value of assets is a poor indicator of their economic value, which depends on their income-generating capacity, rather than their historical cost or realisable value. Here also SM has a franchise generating earnings that will probably not be reflected in the statement of financial position.

Price/earnings model

SM's existing earnings per share is £1.53, and number of shares is 1.5 million, giving total equity earnings of £2.295 million. Taking the 5% growth figure given, next year's earnings would be £2.410 million. However, the managing director is estimating £4 million for next year. This figure cannot be accepted at face value and would need to be substantiated.

In the absence of any better information, BST's P/E ratio could be applied to these earnings figures. This is 1237/112.5 = 10.996, say 11.

The range of values for SM's valuation would be between £2.410m × 11 and £4m × 11 ie, between £26.5 million and £44 million.

This valuation is dependent upon the P/E ratio. Arguably a lower ratio should be used as SM is unquoted, but it is difficult to say how much lower. Also BST's ratio may not be typical of the industry.

Dividend valuation model

Again, there is a range of values depending on whether the MD's forecast earnings are believed.

Last year's total dividends were 1.5m × 100 pence = £1.5m. A 5% increase next year would give £1.575 million. The cost of equity for similar firms is 10% and the expected growth rate 5%.

So on this basis the expected company value = £1.575m/(0.1 – 0.05) = £31.5m.

SM's dividend payout ratio (dividend/earnings) is 100 /153 = 0.654.

Based on the MD's forecast earnings of £4 million, next year's dividend would be £4m × 0.654 = £2.616m.

The forecast company value would be £2.616m/(0.1 – 0.05) = £52.3m.

The drawbacks of this method are as follows.

(a) The assumption that SM's cost of equity is the same as similar firms may be misleading.

(b) The assumption of constant dividend growth may be misleading. Dividend policy may change on takeover.

(c) Share price is not normally just a function of dividend policy; future expected earnings are also a key factor.

Summary

Based on valuation of assets and income earning capacity, SM appears to have a value anywhere between £25 million and £52 million. The higher earnings-based figures are heavily dependent on the MD's forecast of next year's earnings that may well be overstated. Because the net asset value is towards the top end of the valuation range, BST could probably look at a value of between £40 million and £45 million, but will need to carry out further investigations on likely asset values.

15.2 **Financial factors that may affect the bid**

Financial factors relating to BST

(a) Like SM, the forecast of next year's earnings may be overstated. Current earnings = £1.125 × 25m = £28.125m. 4% growth (given) gives £29.25 million, but BST's forecast for next year is £35 million.

(b) The total market value of the company's shares is below the net asset value.

25m shares × £12.37 = £309.25m is below the £350 million net asset value. This may indicate that the company possesses under-utilised assets, or alternatively that its assets are overstated in value. On the face of it, the company would be better broken up than operating as a going concern. All these factors will be of interest to any of SM's shareholders who would be considering receiving BST shares. It will also interest the market and BST's low market value may mean that it becomes a takeover target itself.

(c) BST has a fairly high gearing ratio. If BST lacks cash and has to borrow more in order to buy out those 50%+ shareholders of SM who do not wish to have BST shares, this may have the effect of increasing the company's cost of capital.

(d) BST has a lower dividend payout ratio than SM. This may discourage some of SM's shareholders from accepting BST's shares.

(e) Strategically it is unclear why BST is buying SM; whilst BST may be trying to diversify, SM may not be a big enough acquisition to make it worth diversifying. There may be better investment opportunities.

Financial factors relating to SM

(a) Next year's forecast earnings may be overstated. However, some of the directors may be taking higher salaries than realistic market levels, and the ongoing future profitability of the company may be higher if these people are replaced with lower cost managers.

(b) Like BST, asset value is high. The net asset valuation is in fact higher than some of the other valuations, and SM's shareholders are unlikely to accept an offer below net asset value.

(c) The company is ungeared, which is advantageous, as it enables BST to borrow to fund part of the acquisition.

(d) The 'quality' of SM's earnings is probably higher than BST's, as it operates in upmarket areas.

(e) Selling SM to a listed company represents a good way for SM's shareholders to realise the value of their investment. However, many of the shareholders are likely to lose their jobs and may find it difficult to find equivalent positions. The bid may therefore be opposed by a substantial number of shareholders.

(f) There are likely to be many areas where costs can be saved as a result of the acquisition of SM. This may make it worthwhile for BST to pay a higher price for SM.

(g) BST is likely to have good access to SM's business documentation as SM has contacted BST. This should enable BST to calculate a more accurate valuation.

15.3 The realistic market price of a share can be derived from a valuation of estimated future dividends. The value of a share will be the discounted present value of all future expected dividends on the shares, discounted at the shareholders' cost of capital.

If this theory of share values is correct, the price of any share will be predictable, provided that all investors have the same information about a company's expected future profits and dividends, and a known cost of capital.

However, share prices are also affected by a number of other factors.

Marketability and liquidity of shares

In financial markets, liquidity is the ease of dealing in the shares. How easily can the shares can be bought and sold without significantly moving the price?

In general, large companies, with hundreds of millions of shares in issue, and high numbers of shares changing hands every day, have good liquidity. In contrast, small companies with few shares in issue and thin trading volumes, can have very poor liquidity.

The marketability of shares in a private company, particularly a minority shareholding, is generally very limited, a consequence being that the price can be difficult to determine.

Shares with restricted marketability may be subject to sudden and large falls in value and companies may act to improve the marketability of their shares with a stock split. A stock split occurs where, for example, each ordinary share of £1 each is split into two shares of 50 pence each, thus creating cheaper shares with greater marketability. There is possibly an added psychological advantage, in that investors may expect a company which splits its shares in this way to be planning for substantial earnings growth and dividend growth in the future.

As a consequence, the market price of shares may benefit. For example, if one existing share of £1 has a market value of £6, and is then split into two shares of 50p each, the market value of the new shares might settle at, say, £3.10 instead of the expected £3, in anticipation of strong future growth in earnings and dividends.

Availability and sources of information

An efficient market is one where the prices of securities bought and sold reflect all the relevant information available. Efficiency relates to how quickly and how accurately prices adjust to new information. Information comes from financial statements, financial databases, the financial press and the internet.

It has been argued that shareholders see dividend decisions as passing on new information about the company and its prospects. A dividend increase is usually seen by markets to be good news and a dividend decrease to be bad news, but it may be that the market will react to the difference between the actual dividend payments and the market's expectations of the level of dividend. For example, the market may be expecting a cut in dividend but if the actual decrease is less than expected, the share price may rise.

Market imperfections and pricing anomalies

Various types of anomaly appear to support the view that irrationality often drives the stock market, including the following.

- **Seasonal month-of-the-year effects**, day-of-the-week effects and also hour-of-the-day effects seem to occur, so that share prices might tend to rise or fall at a particular time of the year, week or day.
- Academic studies have shown that bad news can cause a disproportionate **short-run overreaction** in the stock market.
- Individual shares or shares in small companies may be neglected.

Market capitalisation

The market capitalisation or size of a company has also produced some pricing anomalies.

The return from investing in smaller companies has been shown to be greater than the average return from all companies in the long run. This increased return may compensate for the greater risk associated with smaller companies, or it may be due to a start from a lower base.

Investor speculation

Speculation by investors and market sentiment is a major factor in the behaviour of share prices. Behavioural finance is an alternative view to the efficient market hypothesis. It attempts to explain the market implications of the psychological factors behind investor decisions and suggests that

irrational investor behaviour may significantly affect share price movements. These factors may explain why share prices appear sometimes to over-react to past price changes.

16 Holt plc

Marking guide

			Marks
16.1	(a)	Effect of the advertising campaign	5
	(b)	The maximum amount it would be worth paying	5
			10
16.2	Annual benefit of the cash discount		8
16.3	Practical considerations and sources of finance		7
Total marks			25

16.1 (a) **Increase in receivables:**

Current receivables:

		North		South
Sales £1.2m	(40%)	£480k	(60%)	£720k

	£'000
Current receivables: 480 × 72/360 =	96
720 × 50/360 =	100
Total	196

New receivables:

		North		South
Sales £1.2m × 1.2 = £1.44m	(60%)	£864k	(40%)	£576k

	£'000	£'000
New receivables:		
North:		
30 days 30/360 × 864 × 10% =	7.20	
60 days 60/360 × 864 × 20% =	28.80	
90 days 90/360 × 864 × 68% =	146.88	
		182.88
South:		
30 days 30/360 × 576 × 8%	3.84	
60 days 60/360 × 576 × 10%	9.60	
90 days 90/360 × 576 × 80%	115.20	
		128.64
New level of receivables		311.52
Current level of receivables		196.00
∴ Additional receivables		115.52

(b) **Maximum amount to be paid for advertising campaign**

Additional sales £1.2m × 20% = £240k

	£'000	£'000
Additional contribution (240 × 20%)		48.00
Bad debts: £1.2m × 1.2 × 2%	28.80	
Increased capital tied up in receivables = £115.52k		
Financing cost thereof = £115.52k × 11%	12.71	
		41.51
Incremental benefit		6.49

Therefore about £6,500 is the maximum amount that should be paid for the advertising campaign.

16.2 **Annual benefit from the application of the cash discount terms.**

(a) Calculate reduction in receivables:

		North £'000	South £'000
Receivables (taking into account cash discounts)			
North –	30 days 30/360 × 864 × 60%	43.20	
	90 days 90/360 × 864 × 39%	84.24	
South –	30 days 30/360 × 576 × 30%		14.40
	60 days 60/360 × 576 × 8%		7.68
	90 days 90/360 × 576 × 60%		86.40
		127.44	108.48
Receivables (without cash discounts – see 16.1 (a))		182.88	128.64
Reduction in receivables		55.44	20.16

(b) Calculate savings associated with discounts

	North £'000	South £'000
(1) Saving from reduced investment in receivables:		
North: 11% × 55.44	6.10	
South: 11% × 20.16		2.22
(2) Reduced bad debts (North only)		
£1.44m × 60% × (2% – 1%)	8.64	
Total savings	14.74	2.22

(c) Calculate cost of cash discounts

	North £'000	South £'000
(2/3 of receivables paying in 30 days taking a 3% discount)		
North: £864k × 60% × 2/3 × 3%	10.37	
South: £576k × 30% × 2/3 × 3%		3.46

(d) Calculate net benefit/cost

	North £'000	South £'000
Total savings	14.74	2.22
Cost of cash discounts	(10.37)	(3.46)
Net savings/(costs)	4.37	(1.24)

The cash discount policy should be introduced to North and not South.

16.3 Main factors to be considered in working capital financing for a growing, but seasonal firm:

(a) The volume of working capital required. The base investment should be financed by long-term funds wherever possible.

(b) The attitude of management. Management's attitude to risk will determine whether or not a policy of low inventory-holding levels, tight credit and minimum cash holdings is pursued as opposed to one of high inventory, easier credit and sizeable cash holdings.

(c) Seasonal fluctuations and how best to finance these. This may depend on how accurate management's forecasts of seasonal requirements are.

(d) The rate of growth. Long-term finance should perhaps be obtained now to prepare for sudden expansion.

Three types of short and medium-term finance that could be used to finance working capital requirements.

(a) Bank overdrafts. These have the advantages of being easy to arrange and flexible but the overdrafts are repayable on demand and the interest cost will be high.

(b) Delaying paying to payables. This has the advantage of not needing arrangement with a third party and of saving the cost of paying early. However, cash discounts for early settlement will be lost and supplier dissatisfaction will increase.

(c) Factoring. Sales ledger costs will be eliminated and bad debts should be reduced because of the factor's superior credit control facilities. Cash will be recovered earlier but the cost of factoring may well outweigh these benefits.

17 Nestlehoff Restaurants

Marking guide

		Marks
(1)	Analyse and compare the performance of owned and franchised restaurants	11
(2)	Compare the proposed sale and leaseback arrangement with a bank loan, and explain the financial reporting treatment of the sale and leaseback proposal	7
(3)	Controls to prevent and detect material understatement of revenues	7
Total marks		25

(1) **Performance and future expansion**

Analysis of performance

	20X2	20X3	20X4
Owned			
Outlets	6	6	6
Revenue (£)	1,500,000	1,470,000	1,410,000
Operating profit (£)	240,000	190,000	90,000
Franchised			
Outlets	2	5	8
Revenue:	£	£	£
Fixed fees received	40,000	100,000	160,000
15% variable fees	54,000	142,500	240,000
Costs to NR of operating franchises	80,000	200,000	320,000
Operating profit from franchisees	14,000	42,500	80,000
Analysis	£	£	£
Operating profit per owned outlet	40,000	31,667	15,000
Operating profit per franchised outlet	7,000	8,500	10,000
Capital invested owned outlets (£500k per outlet)	3,000,000	3,000,000	3,000,000
Capital invested franchised outlets (£250k per outlet)	500,000	1,250,000	2,000,000
ROCE owned (based on initial cost)	8.00%	6.33%	3.00%
ROCE owned (based on carrying amount)	8.21%	6.67%	3.24%
ROCE franchised	2.80%	3.40%	4.00%
	£	£	£
Revenue per owned outlet	250,000	245,000	235,000
Revenue per franchised outlet	180,000	190,000	200,000
Owned restaurants – carrying amount	2,925,000	2,850,000	2,775,000

Revenue

Revenue from owned outlets has been generated by a consistent asset base of 6 outlets and is thus broadly comparable over time. The trend has shown a decline of 6% over the 3-year period

from £1.5 million to £1.41 million. There has been a similar decline in revenue per owned outlet of 6% from £250,000 to £235,000.

The franchised outlets have increased in number over the 3-year period from 2 in 20X2 to 8 in 20X4. The trend can therefore best be observed by examining the revenue per outlet.

This has grown by 11.1% from £180,000 per outlet in 20X2, to £200,000 per outlet in 20X4.

Despite revenue per franchised outlet growing and revenue per owned outlet declining, the revenue per outlet remains higher in owned outlets. Clearly this may not remain so if the trend continues.

Another key distinction is that the revenue from customers in franchised outlets is revenue to franchisees, rather than revenue to NR. The comparison is only valid as a benchmark to assess which restaurants are better performing. The revenue to NR in terms of franchise fees can better be compared to NR in terms of profitability rather than revenue.

Profitability

As would be expected, the decline in operating profit from owned restaurants is more significant than the decline in revenue. Overall, operating profit has fallen by 62.5% from £240,000 to £90,000. Similarly, operating profit per outlet has fallen from £40,000 to £15,000.

The operating profit to NR from franchised restaurants has increased from £14,000 to £80,000. However, this increase does not only reflect performance, but also the increased scale of the franchised operations over this period arising from more investment. A better indicator of performance is operating profit per outlet which has increased 43% from £7,000 to £10,000. Whilst the percentage increase is significant, the profit remains at a low level in absolute terms, and more particularly when seen in the context of the scale of the investment.

Return on capital employed

For owned outlets the ROCE figure began reasonably, for a start-up, at 8%. Since then however it has declined to 3% in 20X4, which is a poor return on a risky investment. These figures calculate ROCE based on the initial cost rather than the depreciated cost. However, the ROCE based on carrying amounts for 20X2 and 20X4 are little better at 8.21% and 3.24% respectively.

The ROCE on franchised outlets has improved from 2.8% to 4%. This is a movement in the right direction and is better than the ROCE for owned outlets but remains a poor return on a risky investment. One reason for the increase may have been that the costs of running the franchises could have a fixed element as the number of outlets grows although, to date, this does not appear to have been the case as these costs are linear with the number of outlets.

Conclusion

The business is only three years old and is still in its start-up phase. However, the profitability in absolute terms is low and the return on investment is poor.

There is a positive trend of growth in franchised income but this is off-set by a decrease in income from owned outlets. There is scope for future growth from improved utilisation and from economies of scale but, at the moment, the performance is poor for both types of restaurant. Subject to factors such as learning, economies of scale and establishing a growing customer base in new markets, further expansion using the same business model seems unlikely to yield success.

(2) **Sale and leaseback or loan**

Sale and leaseback v borrowing

The implicit interest rate on the sale and leaseback agreement at 12% is higher than the loan at 10%; thus the effective cost of loan finance is lower.

Similarly, in cash terms the annual repayments on the leaseback agreement are higher at £565,000, compared to annual loan interest payments of £400,000. However, in 10 years' time the loan of £4 million needs to be repaid whereas the properties have a terminal fair value of only £2.5 million, should NR want to buy them back at that stage.

Overall the cost of finance is lower with a loan.

In terms of risks, the loan is secured over all assets and so if NR was unable to make repayments then the company is at risk of being put into administration. In contrast, if lease payments are not made on the leaseback arrangement then only the owned properties may be at risk (this would depend on the detailed terms of the sale and leaseback arrangement).

In addition after 10 years, NR would have the flexibility to terminate the lease agreement without cost or obligation.

Financial reporting

This is a sale and operating leaseback as there is a significant value to the property after 10 years, which is, at that time, less than half way through the 40-year useful life.

The profit of £800,000 (ie, the difference between the £3.6 million fair value and the £2.8 million carrying amount) is recognised immediately.

The excess proceeds over fair value of £400,000 is deferred and recognised over the lease period of 10 years ie £40,000 per annum.

The lease rentals paid of £565,000 are charged to profit or loss.

The net charge to profit or loss is therefore £525,000 (£565,000 – £40,000).

(3) **Controls with respect to franchisees**

Understatement of revenues by franchisees is a key risk as franchisees are incentivised to reduce revenues reported to NR in order to reduce the variable element of the franchise fee.

It is necessary to have controls at the point of sale to ensure that all sales are captured and recorded. It is also important that such controls are being implemented appropriately.

Key control procedures should include:

- Regular reconciliations of till control totals with amounts banked and monitoring of differences for trends or any large or unusual items.
- Banking of all cash receipts intact (ie, without any payments being made in cash from cash receipts) implementing imprest type cash system with appropriate controls to cover cash payments.
- Bank reconciliations reviewed as regularly as is feasible. Would include bank reconciliations as requirements in franchise agreements in future.
- Reconciliation of revenues reported to NR, with franchisees' financial statements and tax returns.
- Provision of management accounting records of franchisees to NR on a regular basis.
- Review of staff physically working in the restaurants against payroll records.
- Random unannounced visits and cash counts.
- Reconcile the accounting records with VAT returns and financial statements submitted for tax purposes.

In addition to internal controls over sales, analytical procedures can include:

- Obtain analysis of daily sales by type (eg, food, drink, lunches, dinners) to plot trends in separate elements of revenue streams.
- Review of management accounting information comparing monthly sales over time for evidence of unusual patterns which may indicate understatement (eg, abnormal movements in sales; movement in gross profit margins).
- Comparison of revenue patterns between franchised outlets and comparing franchised and owned outlets.
- Reviewing the relationship between purchases of food/drink and related revenues.

18 Silver Spoon Serving plc

Marking guide

		Marks
(1)	Contract – risk assessment	8
	Contract – financial reporting	6
(2)	Hedging – impact of hedging on risks	8
	Hedging – financial reporting	5
(3)	Sale and leaseback	8
Total marks		35

MEMORANDUM

To: Tiger Irons, Chief Executive
From: A. Senior
Date: 7 November 20X5
Subject: Handals Contract

(1) **Risk assessment – unhedged position**

Revenue risk

Foreign exchange transaction risk arises from the fact that the contract price is fixed in €, but the functional currency of SSS is £. A profit is predicted in £ sterling using current spot rates, however, if the € weakens against the £ between now and the settlement date in January 20X7 then the sterling equivalent of the €15 million revenue at that time may fall below the £12.52 million of variable costs. This would take a 7.0 devaluation of the € in 15 months, which is not necessarily unrealistic..

Another revenue based risk relating to the contract is credit (ie, default) risk. This is greatest for SSS after delivery of the silverware goods to Handals but before receipt of cash between November 20X6 and January 20X7. If Handals fails to pay then the costs incurred are substantial. This could be reduced by some interim payments given the long-term nature of the contract.

The other type of default is order cancellation. Up to August 20X6 this risk is not significant (in the absence of hedging) as work has not commenced. Even after the order has been made for the silver in July 20X6 the risk is insignificant (other than loss of profit on the contract) as silver is the standard raw material used by the company and it could thus be used on other contracts without a loss being incurred.

If the order is cancelled after August 20X6 then losses may be incurred as the goods contain the Handals logo and thus could not be readily sold to other customers. The NRV might be reduced in this case, possibly being the amount derived from melting down the items and reusing the silver, given the relatively high value of the raw material content.

Raw material cost risks

The cost side risks arise from the fact that the intended purchase date for silver is July 20X6 by which time there may have been an increase in costs thereby reducing profit or creating a loss. The cost of silver makes up a high proportion of the total cost of the contract. The two key issues are: commodity price volatility; and foreign exchange movement.

- Prices of traded commodities, such as in bullion markets where silver is traded, are potentially very volatile, not least because of speculation. In the period between November 20X5 (when the contract is signed) and July 20X6 (when the silver is purchased and thus the price is set) there is a significant possibility that the US$ denominated price of silver may increase significantly. If the price increases (at current exchange rates) by more than US$1.0875 million (ie 7.6%) then the contract would only break even. Any more than this (in the absence of hedging) and it could move into a loss making position.
- The second type of risk is the currency risk between the £ and the US$. If the US$ strengthens against the £ then the cost of silver will increase even if the underlying commodity

price in US$ has remained stable. The same issues arise as for commodity price changes in that a 7.6% increase in the £/US$ exchange rate would wipe out any profit.

There are two other matters in relation to the above analysis.

- While there is downside risk arising from changes in commodity prices and exchange rates, there is also upside potential, in that favourable changes could increase the expected profit on the contract.
- Each of the risks has been looked at in isolation. In practice, the factors are all likely to change simultaneously. If the changes are random they may be offsetting and/or have additive effects. Some of the changes are, however, likely to be correlated. For example if the £ weakens against world currencies then this will have both favourable and unfavourable effects. The US$ cost of raw materials will increase but the euro denominated revenue will also increase. There may therefore be a degree of natural hedging even in the absence of any deliberate action to hedge by the company.

Other risks

- SSS will be at full capacity during production for this contract. This may mean the risk of an opportunity cost of rejecting an unexpected urgent order unless other production can be rescheduled.
- There may be liquidity risk as there are substantial outlays on the contract in advance of any receipts. The period between outlays and inflows is up to six months.

Financial reporting

Year end 31 December 20X5

The contract would be signed in the year ended 31 December 20X5. Despite this, IAS 18 *Revenue* does not permit any recognition of revenue in this accounting period as significant risks and rewards are retained, not least because the goods have not been manufactured at the 20X5 year end.

Year end 31 December 20X6

Revenue would be recognised in the year to 31 December 20X6, probably at the date of delivery on 30 November 20X6 as, according to IAS 18 this is most likely to be the date on which significant risks and rewards of ownership pass.

According to IAS 21 the contract price would be recognised at the spot exchange rate on this day. According to IAS 21 the date of translation would be on 30 November 20X6, which is the actual date of the transaction.

Any further exchange rate difference on receivables arising between 30 November 20X6 and 31 December 20X6 would be recognised in profit or loss for the year.

Any further exchange differences arising on receivables on the contract between 1 January 20X7 and ultimate settlement, would be recognised in profit or loss in the year ending 31 December 20X7.

The purchase of silver would be recognised at the exchange rate at the date of the transaction in July 20X6. Any further exchange difference arising on payables between the transaction date and the date of settlement would also be recognised in profit or loss for the year ending 31 December 20X6.

(2) **Risk assessment – hedging strategies**

Revenue based risk

Foreign exchange transaction risk arises from the fact that the contract price is fixed in € but the functional currency of SSS is £s.

In order to 'lock into' current currency market conditions and reduce, or remove, this risk, a number of choices are available to SSS plc.

- **Current money market cover**. Borrow now in € on a 15 month term loan. This would be an amount which, with interest, would accumulate to €15 million after 15 months ie

  €15 million/$(1 + i)^{15/12}$

(where i = the annual € denominated interest rate)

The sum borrowed now is immediately converted to sterling (thus protecting against future exchange rate movements) and perhaps invested at market interest rates for sterling. The revenue on the contract will be used to settle the €15 million loan including interest.

- **Currency forward contract**. This is a binding obligation to exchange a fixed amount of currency, on a fixed date, at a predetermined exchange rate. The period of cover needed is 15 months which would be unusually long for this type of hedge but the purpose would be to fix now a certain exchange rate in order to avoid future currency fluctuation risk. The contract rate may be higher or lower than the spot rate depending on whether the market expects the £ to rise or fall against the euro in future. These forward contracts are available from banks or from exchanges. There is no immediate cash outlay required. The bank or other party would however make a profit on the bid-offer spread.
- **Currency option**. This gives the buyer the right, but not the obligation, to exchange currency at a pre agreed rate in the future. They therefore retain any upside potential from currency fluctuations but, as a consequence, they are more costly. Much would depend on the exchange rate at which the option applied. SSS would desire to acquire a put option to sell € 15 million in 15 months at the best exchange rate the market could offer.

Raw material based risks

Similar risks are applicable to the foreign currency aspects of the purchase of raw materials as with revenue above, except SSS would now be in the opposing position.

- **Current money market cover**. SSS would, on signing the contract, exchange an amount of £ sterling immediately into US$ such that with interest it will accumulate to $14.4m in the 8 months to July 20X6.
- **Currency forward contract**. This would operate similarly to above but now SSS would wish to acquire US$ at a fixed rate in 8 months.
- **Currency option**. Similarly SSS would wish to acquire an option to purchase US$ at a fixed rate in 8 months. This is thus a call option.

With respect to the price of the silver itself, there are similar financial instruments available to hedge. Commodity futures and options would attempt to fix the price of silver in a similar manner to that above for foreign currency exchange rates. They would therefore fix the US$ denominated raw material cost.

Using the data provided, the cost of silver bullion on the futures market would be:

(7.201 + 0.0013) × 2 million troy ozs = $US14,404,600

Other points include:

- Hedging needs to be considered collectively for all transactions (macrohedging) rather than for each contract. For instance if other contracts were generating US$ income at a similar time as the silver needed to be paid for, it would only be the net position that would require hedging.
- Other than the option contracts, all the hedging arrangements destroy upside potential while protecting against downside risk.
- It might not be necessary to hedge the whole amount of future income/expenditure. If SSS is willing to take some risk, only part of the exposure would need to be hedged.
- If the contract is cancelled by Handals then, perversely, hedging could actually increase risk as whereas previously there was no commitment prior to July 20X6, there would now be an unmatched hedge position.

Financial reporting of hedging

Hedging is about risk management. Hedge accounting is about offsetting profits and losses on hedging arrangements in a similar manner, in the same financial statement, in the same period. As a result the accounting treatment is intended to reflect the underlying commercial reality of a hedge arrangement.

Hedge accounting is specifically allowable according to IAS 39 subject to the following:

- The risk being hedged is clearly defined (eg, foreign currency risk; commodity price risk).

- The hedged item and the hedging instrument must be clearly identified.
- The values in the hedge arrangement are measurable.
- The hedge is expected to be effective and turns out to be effective within an 80% – 125% range.
- The hedge must be pre-designated and documented.

Hedge accounting is only permitted where derivatives are used as the hedging instrument (eg, commodity futures or commodity options for silver). The exception is that foreign currency may be hedged by non-derivatives (eg, this may include a money market cover arrangement specified above).

Once the contract with Handals is signed, this represents a binding and firm commitment. Given that SSS's hedging includes foreign exchange risk this can be accounted for either as a cash flow hedge or as a fair value hedge (per IAS 39).

As it is a non-financial item being hedged then it can only be designated as a hedged item:

- In respect of foreign currency risk only; or
- In its entirety for all risks (ie for foreign currency and the commodity price risk for silver).

The effect of the hedge accounting is:

- Fair value hedge. Changes in the fair value of the hedging instrument (eg, an option to purchase silver) are recognised in profit or loss in the same period as the item being hedged (the firm future commitment to purchase silver).
- Cash flow hedge. Changes in the fair value of the hedging instrument (eg, changes in the option price during 20X5) are recognised initially in other comprehensive income and accumulated in equity and then later, (eg, in 20X6 when the silver is purchased) reclassified from equity to profit or loss as a reclassification adjustment when the hedged item (eg, the purchase of silver) affects profit or loss.

(3) **Sale and leaseback**

Option A

This option generates a profit on sale of £225,000 (£1,925,000 – £1,700,000). This sales price is £75,000 below the £2m fair value, but this below market price appears to be compensated for by the developer offering below market rentals for the following three years.

This profit should be recognised immediately and the subsequent rentals should be recognised in profit or loss each year at £150,000. This will have the following effect:

	20X6 £'000	20X7 £'000	20X8 £'000
Profit on derecognition	225	–	–
Rental expense	(150)	(150)	(150)
Net effect on profit or loss	75	(150)	(150)

Option B

This option generates a profit on sale of £450,000 (£2,150,000 – £1,700,000). This sales price is £150,000 above the £2m fair value, but this extra consideration appears to be compensated for by the above market rentals for the following three years.

Because this is a sale and leaseback arrangement the profit to be recognised immediately should be only the difference between the £2m fair value and the £1.7m carrying amount. The extra £0.15m should not be recognised immediately but should be treated as deferred income and recognised in profit or loss over the three year lease period. The effect will be:

	20X6 £'000	20X7 £'000	20X8 £'000
Profit on derecognition	300	–	–
Rental expense	(245)	(245)	(245)
Deferred income recognised in profit or loss	50	50	50
Net effect on profit or loss	105	(195)	(195)

Analysis

Examining the sale and leaseback arrangements as a loan gives an indication of the cost of finance:

Under option B, we gain £150,000 initially and have to pay above-market rentals of £70,000 per year. The effective cost of finance can be calculated as the internal rate of return of these cash flows, which is approximately 19%. (150,000 – (70,000 × A) = 0 where A is the 3-year cumulative discount factor; A = 150,000/70,000 = 2.1429.) This seems a very high rate of interest and almost certainly we could obtain secured finance for less.

Under option A we sell the factory at £75,000 less than market value and pay below-market rentals of £25,000 per year. This gives us no return at all on our notional loss of £75,000 so this option should probably not be considered on financial grounds. Option A does, however, allow us to terminate the contract early. This would not be of any benefit to us financially, since we would be renting at below-market rates, but it does provide us with some flexibility, for instance, if our new premises are available earlier and we do not want to have to sublet in order to cover our costs. It is likely to be more profitable to us to sublet than to simply walk away but this assumes that we can find a tenant who is prepared to pay. Under option B, we do not have the possibility of terminating the contract, so subletting would be the only way we could recover costs if we did want to vacate early.

Both options have the advantage of allowing us to sell the premises now, whereas if we keep them for another three years and then try to sell we are exposed to the risk of movements in the value of the premises. We could make a larger gain by a later sale but we could also make a loss if the value falls.

If we proceed with one of the options, for example to release funds or to avoid the risk associated with falling market values, then option A is better; as the cost to us will simply be the opportunity cost of not investing money elsewhere in the medium-term, which at best would be 3 – 4% risk free.

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Marking guide

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	New loan	8
(2)	Hedging explanation	3
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(3)	Swap arrangement	5
	Implications of waiting	4
Total marks		40

Briefing notes

To: Claire Cooling
From: Charlie Peters
Date: 16 October 20X2
Client: Mugswamp plc
Subject: Finance for new business strategy

(1) **Financing for diversification**

Debt factoring

Financial reporting implications

The nature of debt factoring is covered by IAS 39 *Financial Instruments: Recognition and Measurement* although the standard does not give specific detailed guidance on the treatment of

debt factoring. The key question is whether factored receivables should be derecognised as a financial asset.

Derecognition (ie, ceasing to recognise the factored debts) is appropriate only where the criteria for derecognition of a financial asset according to IAS 39 have been satisfied. Specifically, derecognition should only take place where the seller (Mugswamp plc) has transferred substantially all of the risks and rewards of the receivables.

This is a question of judgement as to whether substantially all the risks and rewards have been transferred. In respect of the £3.2 million that would be immediately received from the factor, it would appear that there is a strong case that this should be derecognised given that it is non-recourse finance. However, interest has to be paid until cash is received from receivables, which gives some slow-moving risk and it is a question of judgement as to whether this is 'substantial' in the context of the specific circumstances.

Mugswamp is ultimately to receive a net total of £3.8 million (see Working) thus the question arises as to when risk passes with respect to the remaining £600,000 and thus when derecognition should occur with respect to this amount. This is again likely to be a question of judgement as to what is 'substantial' risk but it would not exceed three months before derecognition, when the factor assumes unconditional responsibility.

The £6 million of receivables which have not been factored will continue to be recognised.

The £3.2 million received would be shown under 'cash and cash equivalents' in the statement of financial position.

Impact on reported profits

The interest and credit protection fee would be charged to profit or loss and thus profit would be reduced by a maximum of £200,000 [(£4m × 2%) + (1.25% × £3.2m × 3 months)] by this arrangement.

Financial risks

Given that this is non-recourse finance then, with respect to bad debts at least, this is low risk finance (assuming of course that the factoring entity is financially secure). Indeed, it is lower risk than continuing to administer all receivables internally, as in this case there would be some variability with respect to bad debt experience, whereas it is guaranteed – at a cost – with the factoring arrangement.

A further financial risk does, however, arise and this is that a short-term financing arrangement is being used to fund a long-term project. The cash flows from receivables will be brought forward by about three months but this will do little to fund the new plant over many years, unless the factoring arrangements are repeated every three months (or other appropriate period) on an indefinite basis.

This leads to two financial risks:

(1) The company will be tied into factoring as core long-term finance and the availability of the scheme may change.

(2) The maximum costs of £200,000 will not be a one-off but repeated every three months, thereby representing a significant, and possibly variable, financing cost in the long term.

Sale and leaseback

Financial reporting implications

According to IAS 17 *Leases*, the plant leaseback appears to be a finance lease, as 15 years is the great majority of the 16 years' remaining useful economic life of the asset and the residual value is nil after 16 years (although detailed contract terms as to cancellation, lease rental variation and maintenance would need to be reviewed).

Given a cost of £25 million on 1 December 20W8, and a useful economic life of 20 years, the carrying amount in the statement of financial position at 1 December 20X2 would be £20 million. The sale proceeds of £35 million are treated as a loan representing the lease finance liability, being an approximation of the present value of the lease payments.

Total interest would be the difference between the total lease payments and the liability of £35 million. This would be recognised in profit or loss over the next 15 years to give a constant periodic rate of charge.

The profit on sale of £15 million (£35m – £20m) would not be recognised immediately but would be deferred and recognised in the financial statements over the lease term – in this case 15 years. Thus £1 million would be recognised in each year.

The non-current asset would be shown at fair value of £35 million having been, in effect derecognised and rerecognised at the new higher value. The asset will be depreciated using this new value in the accounts.

Impact on reported profits

The impact on profit would be the finance charges on the lease liability. There would also be an additional depreciation charge of £1 million per year on the asset but also a deferred recognition of profit of £1 million per year (assuming both to be on a straight-line basis).

The profit on sale would not be recognised immediately (as suggested in the memorandum) as the substance of the transaction is a borrowing arrangement, rather than the sale of a non-current asset.

Financial risks

The substance of the transaction is that the company is borrowing against the security of the asset. It is thus in effect increasing its financial risk by increasing its gearing. This will make future returns potentially more volatile.

Specifically, if the company does not generate sufficient cash flows to pay the lease rentals as they fall due they could lose the paper recycling plant.

Given that this is currently the core business, there may be lower financial risk if the new plant were leased instead of being purchased. This would, however, depend on lease terms, market rates, the timing of acquisition and financing decisions. These issues could be reviewed as part of a more detailed assurance assignment.

New loan

Financial reporting implications (including impact on reported profits)

The £15 million loan would be treated according to IAS 39. This requires that the redemption premium should be treated as a finance cost and allocated to the periods of the loan at a constant rate.

The premium is 50% after 6 years, thus the annual effective rate is:

$$\left(\frac{150}{100}\right)^{1/6} - 1 = 7\%$$

The charge for the year to 30 November 20X3 is thus

$7\% \times £15 \text{ million} = £1.05 \text{ million}$

This charge will increase at 7% over the period of the loan.

The above calculations assume, however, that there is no exchange movement between the £ and the SFr over the period of the loan. Such movements will have financial reporting implications and represent a financial risk.

The loan would represent a long-term monetary liability (as per IAS 21) denominated in SFr. It would normally be translated at the spot rate at the year end.

Exchange gains and losses on such monetary items will be recognised each year in profit or loss on an accruals basis.

The effect of the exchange differences on each year's profit is difficult to determine, as money markets can be volatile and the direction of change is uncertain.

Financial risks

Taking out a foreign currency loan generates significant additional risk: the final repayment in terms of £s is uncertain as it depends on the exchange rate in six years' time. Given that there is a premium on redemption, this risk is magnified.

The key point is that the annual exchange rate fluctuations might affect reported profit, but the only cash effect is the rate in six years' time when sufficient SFr need to be purchased to redeem the loan.

If the CHF has strengthened against the £ in this period, the effective sterling redemption cost will be greater than the £22.5 million predicted at current exchange rates.

Given that the company currently has no activity in Switzerland, the loan cannot be part of a hedging arrangement as a means of reducing risk. However, this may be the case if developments in Switzerland are planned over the next six years, or if the company is acquired by a parent (eg, when the chairman sells his shares) which has Swiss activities.

If hedging arrangements are to be put in place for the loan then the hedging requirements of IAS 39 must be satisfied. They are basically as follows.

- The risk being hedged is clearly defined.
- There is measurability in the hedge so that hedge effectiveness may be ascertained.
- The hedge undertaken is effective.

Satisfying these hedging requirements will allow the company to offset gains and losses so that the impact on the financial statements is only the net effect to the extent that there exists an unhedged liability.

There will clearly be some costs involved in arranging the hedge and there are also two elements to it – the interest cash flows and the principal cash flows.

Mugswamp plc might like to consider a currency swap for the duration of the loan which, for a cost, will ameliorate much of the exchange risk.

It may also be difficult to give security for this loan if the existing plant has been the subject of a sale and leaseback arrangement and the new plant has not been finalised at the time of financing. This additional financial risk to the lender may mean that interest rates may be increased or the loan may not be granted.

As with any other loan gearing will be increased, adding to financial risk.

WORKINGS

Receivables factored without recourse

	£
Gross receivables sold to debt factor	4,000,000
Less: Credit protection fee (2% × £4m)	(80,000)
Interest (£3.2m × 1.25% × 3 months)	(120,000)
	3,800,000

This assumes the worst case that none of the receivables pay within three months.

(2) **Foreign currency and hedging**

Explanation of treatment

In order for hedge accounting to be used the requirements of IAS 39 must be met. There must be formal designation and documentation of the hedging relationship and of the entity's risk management objective and strategy for undertaking the hedge. The hedge must be expected to be highly effective in offsetting changes in fair value or cash flow changes attributable to the hedged risk. The effectiveness of the hedge can be reliably measured and the hedge must be highly effective (between 80% and 125%) throughout the financial reporting periods for which the hedge is designated.

Note that because the functional currency of the Chinese company is the dollar, the contract does not contain an embedded derivative, so hedge accounting can be used.

A transaction of this nature can be treated either as a fair value hedge as it is the hedge of a recognised asset or liability, being the payable, or it can be treated as a cash flow hedge, being the hedge of a future fluctuating cash flow. The accounting treatment in either case will be the same, as any amounts recognised as other comprehensive income under a cash flow hedge will be immediately reclassified to profit or loss in the statement of profit or loss and other comprehensive income as the change in value of the hedged item (the payable) is taken to profit or loss, which would happen at the year end and again on settlement.

If treated as a fair value hedge:

31-10-X2 Payable for $485,000 at spot rate at date of transaction of $1.25 = £388,000

Forward contract at inception has no value, disclosures under IFRS 7 must be made.

30-11-X2 Payable restated to closing rate under IAS 21 $485,000/$1.20 = £404,167 producing a loss of £16,167

Forward contract at fair value $485,000/$1.19 – $485,000/$1.15 = £14,176 so recognise the financial asset and credit the change in value to profit.

14,176/16,167 = 88%, so the hedge is effective.

The effect on profit or loss is a loss on foreign exchange of £16,167 and a gain on the forward contract of £14,176, netting off to a net loss of £1,991.

31-1-X3 Cash to be paid to supplier $485,000/$1.14 = £425,439 resulting in further loss on foreign exchange of £21,272 (£425,439 – £404,167).

Value of the forward contract is now $485,000/$1.19 – $485,000/$1.14 = £17,876. This results in a gain of £3,700 (£17,876 – £14,176). This gain is not within the 80–125% range for hedge accounting and so hedge accounting should be discontinued. (However, if designated and documented as such at the inception, the gains and losses can be assessed on a cumulative basis.)

However, under IAS 39, the forward contract would be measured to fair value and the payable would be settled at the rate at the date of payment under IAS 21, with both corresponding entries going to profit or loss, which means the entries would be the same.

So on settlement of the payable using spot rate at date of payment:

	£	£
DR Payable	404,167	
DR Profit or loss	21,272	
CR Cash		425,439

On settlement of the forward contract (change in value from inception to exercise):

	£	£
DR Cash	17,876	
CR Financial asset		14,176
CR Profit or loss		3,700

If treated as a cash flow hedge, the change in value of the forward contract at 30-11-X2 would have been taken to equity and recognised as other comprehensive income, and then immediately reclassified as profit or loss in the statement of profit or loss and other comprehensive income on the restatement of the payable, giving the same result as above.

In conclusion, the hedge has not been effective in the final two months and so hedge accounting would have to be discontinued in this period. However under IAS 21, the payable would be re-measured to closing rate and under IAS 39 the derivative would be measured at fair value through profit or loss, and so the changes in value would effectively net off for bottom line profit without the use of hedge accounting.

(3) **Swaps**

The maximum that you should offer under such an agreement is marginally below LIBOR + 1.9%, as shown by the following calculation.

Interest on fixed loan available to you	8.5%
Fixed amount received under swap agreement	(8.9%)
Difference	(0.4%)
Bank charge	0.5%
Payment under swap agreement (residual)	LIBOR + 1.9%
Current variable rate available to you	LIBOR + 2.0%

Thus, paying the counterparty LIBOR + 1.9% will have the same effective cost as the variable rate that is currently on offer. The maximum you should therefore pay for the swap to be worthwhile is any amount less than this figure that you can negotiate. Given the risk of default by the counterparty, there is an argument for seeking a reasonable discount on the LIBOR + 1.9% to make the saving compensate for the additional risks over and above those associated with taking out a variable rate loan.

Waiting to raise funds

There are a number of advantages.

- Some uncertainty will be resolved, which is a significant advantage. Uncertainty creates nervousness in the markets, which always results in higher costs of capital, including debt capital.
- You will potentially be able to raise more capital at the same total interest costs if interest rates fall.
- There is a limit to the period that you can wait if you are looking to re-finance, assuming that you cannot afford to pay back your existing loan completely. In this case partial re-financing may be an option if you wish to raise money in more favourable market conditions later.

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Marking guide

		Marks
(1)	Evaluation of the viability of toothbrush production using ABC, and analysis of the implications of these calculations on the closure decision.	7
(2)	Explanation of the impact of ABC on inventory valuation (including calculations as requested)	5
(3)	(a) Assessment of the implications of changing from a functional to a divisional structure, and	10
	(b) Discussion of the importance of change management in relation to introducing a new organisational structure	9
(4)	Explanation of the impact of the share option scheme on managers' performance, and the potential costs of the scheme	9
(5)	Explanation of the impact of the revision of the pension scheme on staff motivation and on the financial statements	5
Total marks		45

REPORT

To: Finance Director
From: Assistant Accountant
Date: [Today]
Re: Future Plans for Yolland plc

(1) **Viability of the toothbrush division**

(a) **Computation**

	Shavers	Lighting	Toothbrushes
	£'000	**£'000**	**£'000**
Revenue	12,500	15,000	4,000
Materials	(5,000)	(3,000)	(1,000)
Labour	(2,500)	(1,500)	(1,000)
Set-up costs (W1)	(720)	(720)	(720)
Order costs (W2)	(1,200)	(600)	(600)
Volume related	(2,000)	(1,200)	(800)
Contribution	1,080	7,980	(120)

WORKINGS

(W1) Costs per set up = £2,160,000/60 = £36,000
(W2) Costs per order = £2,400,000/200 = £12,000

Fixed costs are assumed to be unavoidable by a closure decision so they have been ignored, but there may be an element of cost savings.

(b) **Viability assessment**

On the basis of the figures as presented, toothbrush production appears to generate a small negative contribution. However, there may be further cost savings of fixed costs if closure occurs. This might relate to reduced administration or it may be that additional revenue could be generated using the spare space by making the other production lines more efficient. This would make closure even more financially attractive.

However, despite the negative contribution there may be a case for keeping production continuing:

- These are historic figures. It is only the future that matters with a closure decision and under the new organisational structure there may be better incentives and better management to improve performance or save costs.
- There may be synergies between products eg, economies of scope or cross selling opportunities where closure would adversely affect the costs and revenues of the other two products.
- The closure costs (eg, redundancies and other exit costs) may be considerable and the cash flow problems may mean it is worth delaying the decision. This would also keep the real option to maintain production under the new structure to see if improvements can be made. Closure could then be carried out at a later date if there were no improvement.

(2) **Inventory measurement**

Total costs incurred

	Shavers	**Lighting**	**Toothbrushes**
	£'000	**£'000**	**£'000**
Materials	5,000	3,000	1,000
Labour	2,500	1,500	1,000
Set-up costs (W1)	720	720	720
Order costs (W2)	1,200	600	600
Volume related	2,000	1,200	800
Fixed production overheads (per unit basis)	2,250	1,350	900
Total cost	13,670	8,370	5,020
Total cost	£13,670,000	£8,370,000	£5,020,000
Units produced/sold	500,000	300,000	200,000
Inventory cost per unit	£27.34	£27.90	£25.10

The selling price of Shavers is £25 which is lower than the cost of £27.34. This would therefore need to be written down to NRV (by deducting distribution costs and other further costs from selling price).

Similarly, but more significantly, the selling price of toothbrushes is only £20 which is much lower than the above cost of £25.10 so this would also need to be written down to NRV.

(3) (a) **Changes to organisational structure**

Current structure: functional

Yolland is currently structured on a functional basis, with board members heading up functional units (marketing, production, purchasing etc).

While functional structures can promote specialisation and the efficiencies which can result from specialisation, they can also have a number of disadvantages. In particular, they do not reflect the business processes by which value is created and they make it difficult for people to gain an understanding of how the whole business works. As a result, while functional managers are likely to be skilled in taking decisions relating to their own functional areas, they are likely to be far less adept at dealing with business plans or analysing an organisation's overall performance and its competitive and market position. This appears to be the case at Yolland; hence the proposed suggestion to let the directors have time to deal with policy and strategy matters rather than day to day operations.

Perhaps even more importantly, functional structures make it hard to identify the profitability of different products, and where profits and losses are generated on those products.

Equally, while units such as finance and human resources do not contribute directly to Yolland's revenue, they are still important components which help the company run smoothly and they need to be accounted for when considering the profitability of different products.

One of the major weaknesses in Yolland's management accounting records at the moment is that they do not identify the profitability of each of the different products. This appears directly linked to the fact that the business has a functional rather than divisional structure.

Often, functional strategies are seen as being most effective in small organisations with few products. However, while Yolland might have met that profile when it started out, the company's subsequent growth has meant that its structure has now become less appropriate.

Divisional structure

In the proposed alternative structure, the company will be structured into divisions, corresponding to its different products. Each division will have its own set of functional units (marketing, production, purchasing etc) and will operate as autonomous businesses.

Clear accountability – perhaps the most important benefit to Yolland of adopting a divisional structure will be that it will enable the expenses and profits attributable to each product to be identified much more clearly.

By being organised around product lines rather than functions, the new structure encourages people to think about the process and activities involved in making products, and how those activities fit together, rather than simply focusing on their own individual functions in isolation. In turn, this kind of process analysis could also help Yolland understand what its main value-adding processes are, and how that value could be increased.

Responsibility and motivation – if the directors are not involved in the day to day running of the divisions, this will mean there are opportunities for existing members of staff to be given greater responsibility in their divisions. Quite apart from the share option scheme, the extra responsibility being afforded to staff could help motivate them in its own right.

Responsiveness – also, since each division is product based and self-reliant, it will be able to respond more quickly to changes in the external environment. Again, this could be very important for Yolland, given that it is operating in a highly competitive business environment.

Duplication – however, one of the dangers of a divisional structure is that it can lead to duplication of resources. For example, under the current functional structure, Yolland's HR staff can deal with human resourcing issues across the whole company.Under a fully autonomous divisional structure, each division will have its own HR staff who deal with the human resources issues specifically in that division.

Similarly, if each division arranges its own procurement this may prove less efficient than if a single procurement function orders all the materials required for different products (particularly if this kind of central procurement enables Yolland to benefit from economies of scale in purchasing).

Head office costs – in this respect, Yolland may find it preferable to keep some functions centralised (eg, HR, finance, purchasing) whilst organising the primary value-generating activities on a product-specific, divisionalised basis. However, this approach could generate its own complexities, in terms of deciding how the costs which remain centralised should be re-allocated to each of the divisions.

Similarly, if the divisional managers are being appraised on the performance of their divisions, they should only be held responsible for those aspects of performance they can control. For example, if the actual costs incurred by head office departments exceed budget, the divisional managers should not be held accountable for their share of that over-spend. Although a proportion of the costs are allocated to the managers' divisions, the managers had no control over the initial costs being incurred.

(b) **Change management**

Quite apart from the differences between divisional and functional structures themselves, any decision to change the organisational structure of the company represents a significant change in its own right. However, the change of structure also needs to be seen in the wider

context of the performance issues facing Yolland: disappointing financial results, increased competition, and the need for rationalisation and cost-cutting in order for the company to remain competitive. Collectively these issues could be seen as triggers for the proposed change, indicating that the company needs turning around.

Despite the necessity of the changes, however, there is still likely to be resistance to them. Although Yolland has grown quickly, its approach to governance still remains the same as when it started out, and the Yolland family remain the directors. Equally, the company's accounting systems have not changed in line with its commercial growth. These examples suggest that, despite the company's growth, there could be an underlying reluctance to change the structures and systems within it.

Moreover, the perceived extent of a proposal to change the organisational structure of the whole company might increase the resistance to it (for example, due to the uncertainty around the impact the new structure might have on people's roles or their social relationships within the company).

Overcoming resistance to change

The success of any organisational change is dependent on the extent to which any resistance to it can be overcome. In this context, making people aware of the need for change and creating a readiness to change are going to be vital for the success of the proposed change at Yolland.

In particular, it will be necessary to explain the need for restructuring (in response to the pressures of increased competition and price sensitivity) rather than simply looking at improving Yolland's processes within its existing framework.

If, as seems likely, the scale of the changes needed to turn Yolland around is more extensive than can be achieved by improving existing processes, this context needs to be made clear, so that staff understand the level of changes required in order to try to safeguard the company's future.

Effective communication – explaining the need for change is likely to be vital in creating a readiness to change at Yolland. Equally, communication should involve explaining to staff the impact of the proposed new structure on their day to day work, and consulting with key members of staff about the proposed changes.

Staff retention has already been recognised as an issue for Yolland (hence the proposal for a share option scheme) and this reinforces the importance of change management in making managers and staff amenable to the changes, rather than resisting them and resigning from the company as a result.

Speed and scale of change

On the one hand there are pressures to act quickly to turn around the performance of the company, but on the other hand the directors have to be sure any decisions they take are strategically correct. This creates a potential dilemma around the speed with which the restructuring is introduced.

Equally,when deciding on the most appropriate way to manage the change process it will also be necessary to evaluate how far the restructuring will change the company's underlying culture. While it will change the way the company operates at a practical level, it is less certain that the restructuring will lead to any more fundamental changes in its underlying paradigm.

Change agent

It seems unlikely that Yolland's directors have any previous experience of managing a change process as extensive as this, so they should also consider employing an external change agent to help manage the process.

Reporting structures

As well as considering the human element of the change process, the implications for Yolland's management accounting systems and performance measurement systems also need to be considered. Part of the logic behind the restructuring is that it will enable management to have a better understanding of the profitability of different products. However, in order for them to do this, the management accounting reports will need to be redesigned so

that they allocate revenues and costs to divisions and products; rather than allocating costs to functions which is currently the case.

(4) **Share options**

Managerial resignations – one of the key problems facing Yolland is that middle managers who could potentially rise to become senior managers or directors in the future are leaving the company because there were given insufficient incentives to stay with the company in the medium to long term.

The working assumptions for the share option proposal suggest that currently about 10% of the company's managers (10 out of 100) will leave even if the options are introduced. Given that we can expect this figure to be even higher if there are no changes to the remuneration and incentive schemes, then the severity of the problem becomes clear.

Rolling programme – the 'rolling' nature of the share options programme (under which new options are issued each year) should also help to improve retention, because there will always be some options unvested, which would lapse if a manager leaves the company.

As you have identified, if we only issued the options for the initial three year period, then managers would only have an incentive to stay for that three year period. However, the 'rolling' nature of the issues should help to extend the impact of the scheme.

Goal congruence – one of the reasons for using share option schemes is often to align managers' interests with shareholder interests. If the managers are given more autonomy for managing the divisions under the new structure, it will be important that their operational goals are aligned with Yolland's overall objectives.

In particular, it will be important to ensure that performance measures focus on long-term shareholder value as well as short-term results.

Value of the options – although share options can be a useful tool in helping to motivate employees, they will only be effective if the exercise price is below the market price at the end of their vesting period (ie, the options are 'in the money' at vesting).

The exercise price of Yolland's share options has been set at £8, and the market price when the initial options are issued is also expected to be £8. Although there is an assumption that the market price will increase by £1 per year in future, if the company's financial results continue to be as 'disappointing' as they have been recently, this assumption may prove to be too optimistic.

Crucially, if Yolland's share price performance deteriorates such that there is a danger that the market price will actually be below £8 in 3 years' time, and therefore the options will be 'underwater' at their vesting date, the options will no longer have any impact on motivation and retention.

Controllability – the reference to the movements in Yolland's share price also identifies that the potential benefits from the share options ultimately depend on the performance of the company as a whole.

However, this may reduce their effectiveness as a reward scheme – because the managers have little or no control over the organisation's performance as a whole. In this respect, an element of the managers' remuneration scheme which links remuneration directly to individual effort and individual performance could also be useful; for example, bonuses based on performance against individual objectives or targets.

Non-cash costs – given the current shortage of cash at Yolland, one of the benefits of a share option scheme is that issuing the options will be a non-cash cost to the company.

Profit – nonetheless, Yolland will have to disclose the expense arising from the share options in its profit or loss for the period.

Importantly, although there are 100 managers employed at any time, the cost of each set of options issued will only be based on 70 managers, because 10 managers are expected to leave each year. So, for example, the effect of the scheme on profit or loss will be £42,000 in 20X9 and £140,000 in 20Y0 (W3).

EPS – Issuing the share options will also reduce Yolland's reported diluted earnings per share, because all dilutive options needs to be taken into account when calculating EPS.

WORKINGS

Shares issued 31 March 20X9

Year to 30 Sept	Computation	Expense
20X9	(100 – 30) × £3 × 6/36 × 1,200	£42,000
20Y0	(100 – 30) × £3 × 12/36 × 1,200	£84,000

Share issued 31 March 20Y0

Year to 30 Sept	Computation	Expense
20Y0	(100 – 30) × £4 × 6/36 × 1,200	£56,000

Summary of effect on profit

Scheme commencing	Year ending 30/9/20X9 £	Year ending 30/9/20Y0 £
31/3/20X9	42,000	84,000
31/3/20Y0	0	56,000
Total expense	**42,000**	**140,000**

(5) **Pensions**

Motivation – although the extent to which a company's pension scheme is a motivating factor for managers and employees may be debatable, the fact that Yolland's pension scheme is one of the poorest in the industry may be contributing to the lack of loyalty and motivation among the work force. In this respect, the pension scheme could be seen as a hygiene factor rather than a motivating factor.

Nonetheless, improving the hygiene factors in the company could help to reduce the level of staff turnover, even if by themselves they do not significantly increase motivation levels.

Not performance-related – also, in the context of performance management, Yolland needs to consider that the proposals appear to apply equally to all employees in the company, so they do not appear to be linked to effort or performance. Again, this is likely to reduce their impact as a motivational tool, because they are not performance-related.

This could be seen as a particular problem with Suggestion 2. The company's performance in recent years has been disappointing, yet, in effect, the proposal is rewarding all the staff for this (by increasing the pension benefits accrued for those years).

Retention – It is not clear from the scenario whether the pensions are portable (or how any transfer values are calculated). However, the ability of either of the proposals to encourage retention is likely to be dependent on whether employees can 'port' their benefits if they leave the company.

Suggestion 1

Cost implications – the fact that the employees no longer have to contribute to the pension schemes is, in effect, like a pay rise to them. Their disposable income each month will increase due to the amount of pension contribution they no longer have to pay.

Equally, however, the annual cost to the company will have to increase to compensate for the loss of the employees' contributions. This additional cost will be shown in the company's profit or loss.

Cash flow implications – the feasibility of this suggestion also needs to be considered from a cash flow perspective given that Yolland is already struggling with a shortage of cash. The increased contribution paid by the company to replace employee contributions will lead to an increase in cash outflows each year.

Suggestion 2

Obligations – whereas Suggestion 1 affects only current and future costs, Suggestion 2 also has a retrospective element. The commitment to increase the level of pension benefit accrued in relation to past years' employment needs to be reflected in the pension obligation shown in Yolland's statement of financial position, and in the surplus or deficit of the pension scheme.

If the proposed changes under Suggestion 2 result in a large deficit in the scheme's funding, then additional cash may be required to reduce the deficit. Finding this additional funding in the short term could again prove problematic for Yolland, given its current shortage of cash. It is unlikely that the funding required to close the deficit will have to be paid immediately though.

Cost implications – however, the fact that employees' contributions remain the same while the benefits accrued increase also means that the future annual service costs will need to increase. The increase in these costs will be charged to profit or loss.

21 Kramp plc

Marking guide

		Marks
(1)	Analysis of strategic risks facing Kramp and approaches to risk management	12
(2)	Assessment of offer price for Kramp from Sunami	12
(3)	Valuation of BVC	12
(4)	Referring the Sunami bid to the shareholders (recognising governance issues in the event of a takeover bid)	4
Total marks		40

(1) **Major strategic risks and risk management methods**

(a) Product pipeline risks

As a pharmaceuticals company, Kramp needs to maintain a continual flow of new products. There must always be products in the development pipeline.

Product pipeline risk is the risk that one or more development projects may fail (and so be abandoned) or suffer delays. The company cannot afford to have too many product failures, although some projects will inevitably not succeed.

Delays and failures may be caused by factors such as:

- Difficulty in obtaining regulatory approval for new products (in formal testing procedures).
- Failure to secure adequate patent protection.

Product pipeline risks can be managed in a number of different ways. These include:

- Committing sufficient resources and expenditure to the product pipeline and development work, so that there are new projects in progress at all times.
- Strengthening the pipeline through recruitment of top R&D talent, and scientific alliances with universities and centres of research excellence: this should also help to achieve a steady stream of products in the development pipeline.
- Active management of patent rights, to ensure that suitable patent protection is obtained for developing products as a protection against potential competition.

(b) Commercialisation and business execution risks

When new products have been developed and authorised for sale by the regulators, they must be marketed and sold. Commercialisation and business execution risk is the risk of failure to exploit a new product profitably.

Failure to exploit a new product commercially may be due to factors such as:

- Competition from similar products marketed by rival companies.
- Price controls imposed by regulators.
- Demand less than anticipated, leading to loss in overall market share.

Commercialisation and business execution risks can be managed in a number of different ways. These include:

- Focusing on products in areas of medicine where Kramp has research strength and a successful track record of profitable products.
- Training sales staff to demonstrate the value of medicines and health economics to potential buyers.

However the company should have ethical selling policies; otherwise it may be exposed to investigation and possibly legal action by regulatory bodies.

(c) Supply chain and delivery risks

These are the risks of failures in the supply chain of products from external suppliers to Kramp. These include the risks that external suppliers may go out of business, or may fail to deliver orders on time, or may fail to deliver products to the required specification. Failures or delays in the supply chain will cause delays in the product pipeline for Kramp.

Kramp should therefore try to ensure that it is always able to obtain key materials and other resources, at a reasonable price and of a sufficient quality.

These risks may be managed through:

- Quality management systems: quality standards should be specified for purchased products and suppliers should be required to supply goods to the specified standard.
- Contingency plans: using multiple sources of supply. Even if Kramp normally uses a single supplier for certain items, it should have contingency plans to access an alternative source in the event of failure by the existing supplier.
- Holding inventories of critically important products/materials, so that if there is a temporary disruption to supply, or a temporary sharp increase in price, Kramp can use its existing stocks until supply channels are restored/normalised.

The three categories of risk described so far are strategic risks. They are unavoidable features of the pharmaceuticals industry, and Kramp needs to establish management and operating systems to manage the risks.

(d) Legal, regulatory and compliance risks

These are the risks of failure by the company to comply with regulations, rules or laws, as a result of which the company may be faced with criminal or civil legal actions and/or regulatory sanctions.

- To deal with these risks, the company should establish and maintain a strong ethical and compliance culture.
- All employees, including directors, should be given suitable training in ethical and regulatory issues.
- Management oversight, compliance controls, compliance monitoring and audit programmes should all be used to assure compliance.

Kramp's board may also wish to engage an external firm to provide assurance about the effectiveness of management's internal controls for regulatory compliance.

(2) **Offer from Sunami to acquire Kramp**

The offer from Sunami appears at the moment to be a 'friendly' offer. This allows the board of Kramp to respond to the offer without having to refer it to the shareholders. The board needs to be aware however that Sunami may make a hostile bid if its 'friendly' offer is rejected.

The board should consider what is in the best interests of the shareholders, having some regard as well to the interests of other stakeholders, particularly the company's employees (whose jobs may be put at risk in the event of a takeover).

The offer price is £20.40 per Kramp share, which amounts to £2.856 billion in total for the 140 million shares. This may rise or fall in value to some extent, since the purchase consideration would be partly in Sunami shares. Even so, it values the company much more highly than its current market price of £13.75. The offer price is at a premium of £6.65 or over 48% to the current market price. An offer at this price will almost certainly seem attractive to a large number of Kramp shareholders.

On the other hand, the offer price is only £2.40 or about 13% above the high level of £18 that the share price reached at the end of 20X1. If Kramp is able to restore profitability, it is quite possible that the share price could recover and rise above the level of the Sunami offer price – although this recovery could take some time to achieve.

If the board of Kramp decides to reject the offer from Sunami, it must have strong reasons for doing so. There should be a convincing reason why the shareholders in Kramp would benefit more from the company remaining independent than from accepting the Sunami offer.

The recent financial performance of Kramp has been disappointing. Revenue in 20X3 (£1,607 million) was 6.5% below the 20X2 level. This decline could be explained by a fall in the value of the US dollar against sterling. However there was also a fall of 5% in the cost of sales, which are denominated mainly in sterling and euros. This might suggest that the fall in revenue could be attributable to a fall in sales volume rather than currency effects.

Operating profit fell by £190 million (or 67%) to just £93 million in 20X3. The operating profit margin was therefore just 5.8% of sales revenue, down from 16.5% in 20X2.

Since the board of Kramp cannot justify a rejection of the Sunami bid on recent historical profits, any arguments against agreeing to a takeover must be based on future expectations of revenues and profits. There is only limited information about expectations for the future. There has been some improvement in the product pipeline with strong growth in sales of Arbolin and Brabalin. If revenue growth from these products continues and the company also has a continuing pipeline of new products under development, the board may be able to argue that the offer from Sunami does not take future improvements into account. A further consideration is that if sales of Arbolin in 20X3 were about £160 million higher than in 20X2 (= £400 million × 2/5) and sales of Brabalin were £120 million higher (= £180 million × 2/3), there must have been a fall in sales of some other products – perhaps products coming out of patent protection.

It is for the board of Kramp, not our firm, to make its assessment of the value of future profits. We should point out, however, that the arguments for future revenue and profits growth would need to be made forcibly and convincingly to the company's shareholders.

It might be argued that if there are realistic expectations of rapid profit growth in the future, this should be reflected in the Kramp share price already.

(3) **Valuation of BVC**

Only limited information is available for a valuation of BVC and there are many different assumptions that could be made about the probable returns on investment.

Without more information about the nature and realisable value of BVC's assets, it would be inappropriate to estimate a value based on asset values.

Dividend growth model valuation

A valuation based on the dividend growth valuation model would also be difficult. Over the past five years, BVC's owners have been delivering dividend growth of 8% per year, but earnings growth of only 5% per year. These differing rates of growth could not be sustained for long, given that dividends are already about 77% of annual earnings.

If we used Kramp's WACC (10%) and an estimated growth in dividends of 5% per annum in perpetuity, a dividend growth model valuation based on actual dividends in the year just ended would be:

£20 million (1.05)/(0.10 – 0.05) = £420 million.

EBITDA multiple valuation

Kramp's operating profit in 20X3 was £93 million or £0.664 per share (140 million shares). Its share price is £13.75. If we assume that operating profit is also EBITDA, the share price is therefore 20.7 times the annual EBITDA.

Actual EBITDA for BVC in 20X4 was £59 million. If we were to value BVC's equity on a multiple of EBITDA, a multiple below 20.7 should be used, to allow for the fact that BVC is a private company and much smaller than Kramp.

If we used an EBITDA multiple of, say, 11: Valuation = £59 million × 11 = £649 million.

The choice of EBITDA multiple would be a matter of negotiation and opinions could differ substantially.

APV method of valuation

We might assume that EBITDA will grow by just 5% next year to £62 million, and by 5% per year for a further four years, after which EBITDA will then remain constant. We can also assume that EBITDA is a reasonable estimate of annual cash flow.

Using the APV method of valuation:

(1) Calculate cost of ungeared equity: 5% + 1.2 (11 – 5)% = 12.2%, say 12%.

(2) Discount future cash flows at this ungeared cost of equity

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 on
Cash flow (£m)	62	65	68	72	75	75
Discount factor at 12%	0.893	0.797	0.712	0.636	0.567	(1/0.12) × 0.567
PV (£m)	55.4	51.8	48.4	45.8	42.5	354.4

Total: £598.3 million

(3) PV of tax relief on interest

	Years 1–5
Interest (£650m × 7%): £m	45.5
Tax relief at 20%: £m	9.1
Discount factor at 7%	4.100

PV: £37.3 million

On the basis of the assumptions used here, a valuation based on the APV method is:

£598.3 million + £37.3 million = £635.6 million.

Conclusion

Given the many different assumptions that could be used, a valuation for BVC could vary widely. There are reasons for supporting a valuation in the range of about £420 million to £649 million.

The board of Kramp may find this a useful rough indication if they enter into negotiations about a takeover with the owner-directors of BVC.

(4) **Referring the Sunami bid to the shareholders**

The approach from Sunami to date has been a 'friendly' approach. Sunami is hoping for an agreed takeover deal, which would enable it to gain access to information about Kramp for the purpose of due diligence. As Kramp is a UK listed company, the proposed acquisition by Sunami will be subject to the rules of the UK Takeover Code.

However if a takeover offer is a friendly offer, the directors of the target company are entitled to reject the bid, although they will presumably expect to justify their decision to their shareholders.

The directors of Sunami have three options if the directors of Kramp reject their offer:

(1) Abandon their attempt to acquire Kramp.

(2) Return with an improved friendly offer.

(3) Make a hostile bid. The directors of Kramp would then be required under the takeover rules to refer this bid to the shareholders. However, the only information about Kramp on which Sunami could base its final bid would be the publicly available information, such as published reports and accounts.

This may or may not satisfy the directors of Kramp who believe that the current offer should be referred to the shareholders. (Additionally, there may be a requirement in the company's Articles of Association or in a shareholder agreement which requires that friendly bids from a potential acquirer should be referred to the shareholders.)

22 Homez Ltd

Marking guide

		Marks
(a)	Strategic, operational and financial issues on acquisition	6
(b)	Valuation of acquisition (two methods)	14
(c)	Valuation of 70% shareholding	6
(d)	Concerns about information	7
(e)	Evaluation of historical performance	9
Total marks		42

Report to: Andy Webster, Financial Accountant
From: Assistant Financial Accountant
Subject: Acquisition of Floom
Date: 21 July 20X8

(a) **Strategic, operational and financial issues**

Strategic issues

The expansion is in a related core area of the current business and thus builds upon Homez's existing core competences. Management thus has experience in the same market and common supplier relationships. This enhances the ability to add value to the new business. Within the Ansoff Matrix, this could be regarded as market penetration.

More specifically however it expands the market in a partially different geographical area. In particular, while there may be overlapping markets (see below) the acquisition gives access to in-town markets whereas all the current stores are out of town. Normally this would be a benefit in accessing new customers who cannot get out of town to shop very easily. However, given the nature of the business (cars and bicycles) it seems unlikely that a significant number of customers would not already have access to the out of town stores.

In terms of marketing strategy therefore, the major access to new markets is in the North of England. The overlapping coverage in the Midlands may mean that, as Homez tries to expand sales in the Floom chain, there may be a loss of sales in its existing stores as substitution occurs, particularly if the stores are geographically close. However, to the extent that there is access to new geographical markets, this may be regarded as market development within the Ansoff Matrix.

There is also the potential for adding car products to the Floom stores to expand further.

Aside from geographical location, the acquisition enables access to the existing customer base who may be loyal to the Floom chain and generate an element of goodwill. This leaves open the question of whether Homez would wish to rebrand the in-town stores to leverage its own brand. Alternatively, it may leave the Floom brand in place and attempt to access a different sector of the market.

It might also be noted that, in terms of the broader market, cycling is expanding and this strategy gives additional capacity in this expanding market. Also with respect to the Midlands at least, it buys out a competitor. It might be noted however that the margin on cycles is lower than that on car products.

In terms of strategic resources, the acquisition gives access to a key resource. This is not only by circumventing government planning requirements but also because the 'stores are in prime sites and this is a key to success'.

Operational issues

The acquisition of another company in the same industry enables Homez to access additional floor space without the need for local government planning permission. As a consequence, it gets around the constraint of physical capacity.

There are, however, concerns in the supply chain of the current Floom business in that half of inventory purchases and all of the property leasing are from the shareholders who are related

parties. We would need to ensure there are no binding contracts requiring Floom to continue these relationships in the long term where they are unfavourable. Conversely, we may need to negotiate extensions on favourable contracts to ensure security of supply.

The new acquisition would give additional bargaining power with suppliers of cycles and cycle equipment which might give economies of scale.

The scale of Floom is small relative to Homez as the revenue is only about 10%. This means that, while integration is likely to be an issue, it is probably small enough to be digestible, but large enough to generate some cost savings and surplus asset sales.

Financial issues

Financing is a major concern with respect to the loans and the leasing contracts.

The loans are due for repayment or refinancing shortly and the rolled-up interest in the form of a premium on redemption will need to be refinanced as there is little spare cash (as nearly all the current assets are inventories) despite raising significant finance in the recent past. We need to ascertain whether the cash has all been reinvested or the parent has extracted funds from the business, although this does not seem apparent in recent years from the financial data presented.

Similarly, the sale and leaseback arrangement gives financing exposure on the termination of the lease as the assets and most of the business will be lost unless an extension of the lease can be arranged or alternative, equivalent premises found.

(b) **Valuation for Floom Ltd – initial bid**

Key issues affecting the bid

The context of the valuation is to make an initial bid for Floom. The estimates therefore are made on the conservative side as the opening valuation is likely to be pushed upwards during the negotiation process. Nevertheless, the figures are drawn up to be justifiable both in terms of the methodology and the estimates used.

Other key general considerations are:

- **Acquisition of entire equity or a majority holding (controlling interest)**

  It is necessary to consider whether we are bidding to acquire all of the shares, or whether a majority holding (controlling interest) would be sufficient for our objectives. If we wish to acquire all of the shares then the relevant valuation is for the equity holding overall. We may however acquire only the 70% controlling interest held by Intercycles. A key factor in acquiring only a 70% interest is that this may reduce the acquisition cost. In this case the valuation is unlikely to be pro rata to the overall valuation of the equity. This is because there is likely to be a significant control premium as we will control the financial and operating activities of the business in accordance with the group's objectives, even though the benefits may be shared with non-controlling shareholders. In this context, we can control the ability of the company to pay a dividend and this may severely diminish the value of the non-controlling equity holding. However 30% is large enough to prevent a change in the Articles of Association and could prevent a winding up. Moreover there needs to be a continued business relationship with Retro Properties through the leasing contracts, irrespective of whether or not they continue to be a shareholder.

- **Key shareholdings**

  We need to know the expectations and intentions of the vendors individually. If they are keen to sell (we know that Intercycles wishes to sell its stake) they may be keen enough to accept a lower price. Similarly, the intentions of Retro Properties are not clear.

Valuation of the entire company

A base line – net asset valuation

Statement of financial position at 30 June 20X8

Assets	£'000	**Comments**
Property – owned	50,000	At fair value. This is a key figure and independent valuations will be needed prior to any formal bid. Fair value must be measured in accordance with IFRS 13 *Fair Value Measurement.*
Stores – Operating	5,000	These are not recognised in the statement of

leases		financial position, but the contracts may have some value as the rentals appear to be £1 million pa below market rates and their fair value needs to be considered. The PV of the cost savings over the remaining seven years is (1 + AF 6 yrs) @10% × £1m = £5.355m (say £5m).
Fixtures and fittings	14,000	This is the carrying amount but the fair value will need to be assessed during the due diligence process.
Current assets	2,000	The majority of current assets appears to be inventories from Intercycles. It is of concern that while supplying half of goods, the unsold inventory is 90% from Intercycles. This might mean it is slow moving probably due to the fault on the frames. An initial prudent estimate is made of £1 million for Intercycles inventory and £1 million for other inventories.
Total assets	71,000	
Liabilities		
Loans	43,000	The carrying amount of the bonds is incorrectly recorded in the financial statements. The fair value of the bond needs to be assessed having regard to the premium on redemption (see note 1 below). Total FV = £31.62m + £5.84m + £5.4m = 42.86m say £43 million Also there may be covenants which could cause the loan to be repayable on a take-over which may cause liquidity problems. This would need to be assessed during due diligence.
Current liabilities	2,000	Use the approximate carrying amount but need to ascertain the nature of these liabilities. Say £2 million to be prudent. There is a possibility that the tax charge may be understated. Need to review tax payments and deferred tax. Can supplier terms and conditions be improved?
Total liabilities	(45,000)	
Net assets	26,000	

Ie, net asset method valuation = £26 million

Note 1 – Fair value of the loans

The implicit interest rate in the loan needs to be determined.

If the interest rate were zero then the rate would be $(137.1/100)^{1/4}$ = 8.2%

However as 2% interest is being paid then the implicit rate must be higher. Try around 2% higher ie 10%.

£25 million bond

Year	Bal b/f	Interest 10%	Paid	Bal c/f
1	25,000	2,500	500	27,000
2	27,000	2,700	500	29,200
3	29,200	2,920	500	31,620
4	31,620	3,162	500	34,282

34,282/25,000 = 1.371, so the implicit rate is exactly 10%.

£5 million bond

Year	Bal b/f	Interest 10%	Paid	Bal c/f
1	5,000	500	100	5,400
2	5,400	540	100	5,840
3	5,840	584	100	6,324

4		6,324	632	100	6,856

6,856/5,000 = 1.371, so again the implicit rate is exactly 10%.

Earnings based valuation

An assessment of normalised future earnings needs to take place and, as far as it is possible from the information provided, earnings need to be adjusted to cash flows.

	Workings	20X8 Draft £'000	20X9 (Forecast) £'000	20Y0 and thereafter (Forecast) £'000
Revenue	(W1)	36,300	41,926	48,425
Cost of sales	(W2)	(18,800)	(20,680)	(22,748)
Gross profit		17,500	21,246	25,677
Operating expenses	(W3)	(12,000)	(13,000)	(13,000)
Marketing	(W4)	–	(2,000)	(2,000)
Adjusted profit from operations		5,500	6,246	10,677
Finance costs	(W5)	(700)	(4,000)	(4,300)
Profit before tax		4,800	2,246	6,377
Tax	(W6)	(1,440)	(674)	(1,913)
Adjusted profit for the period		3,360	1,572	4,464
Add back depreciation			2,000	2,000
Less capex			(3,000)	(3,000)
Sale of surplus assets			1,500	–
Cash flow			2,072	3,464

WORKINGS

(1) **Revenue**

20X9 36,300 × 1.05 × 1.1 = 41,926
20Y0 41,926 × 1.05 × 1.1 = 48,425

This allows for the increase in selling price and sales volumes

(2) **Cost of sales**

20X9 18,800 × 1.1 = 20,680
20Y0 20,680 × 1.1 = 22,748

This allows for the increase in sales volumes

(3) **Operating expenses**

For the operating leases, in the later arrangements the lease rentals can be initially assumed to be at arm's length (although this needs to be verified).

However the initial lease rentals on the first 25 stores appear to be below market rates as (a) they are lower than the £80,000 pa paid on the later agreements (b) the up-front payment was only for £1.7 million per store which is less than their fair value.

Operating costs are assumed to increase therefore by (80,000 – 40,000) × 25 stores = £1 million. (This is a simplifying and rather pessimistic assumption as the lease contract has a few years to run but it presents a prudent estimate of market value rentals in steady state for negotiating a price. Alternative assumptions are feasible.)

Other operating costs are assumed to be fixed.

(4) **Marketing expenses**

The marketing costs are incremental.

(5) **Finance costs**

It may be that as positive cash flows are generated even after capex then debt may fall and thus finance costs may fall. A prudent assumption of basing finance costs at their 20X8 level has however been made.

However, the statement of profit or loss and other comprehensive income does not reflect the full cost of finance, but only the 2% cash interest paid. Using the data in **Note 1** above, the full cost of finance is as follows:

20X9 (based on 20X8 full cost of finance)

£2,920k + £500k + £540k = £3,960k

Use £4 million as a prudent estimate

20Y0 (based on 20X9 full cost of finance)

£3,162k + £540k + £584k = £4,286k

According to the calculations the finance cost will carry on rising from 20Y0. However given the positive operating cash flows this may reduce the debt outstanding and the finance charge is assumed to be maintained at its 20Y0 level (say £4.3 million).

(6) **Taxation**

The same effective tax rate of 30% is used as for 20X8. This is however a crude assumption and tax due diligence will need to examine this figure. In particular, the current tax obligations would need to be separated from the deferred tax. Only the former are cash flows and are therefore relevant to the valuation exercise.

The computation has multiplied the effective tax rate by the adjusted profit figure after depreciation as the effective tax rate is based on financial reporting profit. Given the uncertainties and the prudent nature of the estimation being made however the actual tax rate could be used before depreciation, but after capital allowances.

(7) **Depreciation**

Depreciation is not a cash flow and thus should not be discounted into the valuation.

Valuation calculation

Using the 10% working assumption, then the value of the equity is:

$$£2{,}072{,}000/1.1 + \frac{£3{,}464{,}000 / 0.1}{1.1}$$

= £33.375m = £33 million approx

Qualifying assumptions

The stores held under operating leases only have a limited remaining life, whereas the above assumption is based on the fact that their leases will be renewed at the end of this period. Assume a scenario where the leases will not be renewed and that these stores will be discontinued and that similar replacements cannot be found. It seems unlikely that no replacement premises will be found so assume that the 25 stores subject to the initial sale and leaseback cannot be replaced (but the later ones can be renewed on equivalent terms) then the loss in annual value is approximately as follows:

	Working	**£m**
Revenue	£48,425,000 × 25/70 stores	17.295
Cost of sales	£22,748,000 × 25/70 stores	(8.125)
Lease rentals	£80,000 × 25 stores	(2.000)
Lost contribution		7.170
Tax at 30%		(2.151)
		5.019
		Say £5m

For simplicity, ignoring the other items as fixed costs, then the present value of these stores in the terminal calculation of present value at 20Y0 should have been:

£5m × 1.1^2 × AF10% 6 yrs ÷ 1.1^3

$$= \frac{£5m \times 4.355}{1.1}$$

= £19.8m

The amount at which the stores were actually included in perpetuity was:

$$\frac{£5m}{0.1 \times 1.1}$$

= £45.45m

This undoubtedly overstates the contribution as finance costs are ignored but from these crude calculations it can be seen that potentially there is a loss of £25.65 million if the leases are not renewed. The market value on an earnings basis would therefore be significantly below the asset value. It is clear therefore that the renewal of the leases is a key issue in the negotiations for the takeover.

Explanation of the general approach

The approach is to value the future cash flows to Homez as a result of the acquisition. While some of the estimations are conservative, an alternative approach would be to estimate the worth of the company to the present owners in discounted present value terms, ie, as an indication of a price to sell. There seems to be insufficient data to do this but as an opening bid it seems appropriate to commence significantly below £33 million, as the current owners are unlikely to experience the same growth rate as Homez.

Crudely, if profit stays at its current level and a 10% discount rate is used:

	£'000
Profit after tax	3,360
Add depreciation	2,000
Capex (steady state)	(3,000)
Cash flow	2,360

Valuation = £2.36m/0.1 = £23.6m

This valuation is below the net asset value of £26 million. Thus the present owners may be willing to sell at anything above a net asset exit value. This should therefore form the basis for an initial bid.

Weaknesses in the approach

- The 10% growth assumption in volume and 5% in price needs to be ascertained in terms of market conditions.
- The impact of general inflation on the data has been largely ignored (unless it is partially included in revenues in the 5% growth, but even this is only for 2 years). The most obvious explanation is that the 10% is a real rate of interest.
- There may be additional cost savings when the company is brought into the group. For example, there may be synergies from administration costs which may be common to both companies (eg, only one head office may be needed).

Tutorial note:

A range of reasonable assumptions could have been made to estimate a value. Alternative answers, which are justifiable, would therefore be acceptable.

(c) **Valuation of a 70% holding**

The valuation must reflect the extent to which a potential buyer of the shares can or cannot control, or influence, the company. With a 70% shareholding, there is control over the voting rights of the company but the 30% holding can prevent changes in the Articles of Association and can prevent a winding up order. In addition however RP may have further contractual rights which may enhance the value of its non-controlling interest.

In order to value the 70% majority (controlling interest) holding consider:

- The rights and prospects attaching to the shares eg the rights to appoint directors to control the company on a day to day basis.
- Whether restrictions apply (eg, to sale or dividend).
- Whether the Articles of Association may be protecting the rights of the RP non-controlling shareholding. Given that the Articles cannot be changed as there is not a 75% majority, these

rights would be effective and would add value to the non-controlling shareholders, thereby reducing the value of the 70% holding to be acquired.

- Whether non-controlling shareholders have contractual rights which would be expensive for controlling shareholders to buy out.
- The fact that the non-controlling shareholdings are concentrated in one individual company may add to their value as the voting is concentrated.

Under the revised IFRS 3 *Business Combinations,* the non-controlling shareholders are shareholders in the entity as a whole, just like the controlling shareholders. IFRS 3 Revised allows the non-controlling interest to be valued at fair value on the acquisition date, which may be different from its proportionate share of the fair value of the net assets. One approach, therefore, might be to value the non-controlling interest and deduct this from the value of the entity as a whole.

Alternatively, a general approach (which may need to be modified when detailed rights and obligations are discovered) is that a controlling interest in the region of 50% to 75% may be discounted at about 0 – 15% of the full entity value. Using 15% this would give a value (very crudely) of about £28 million (£33m × 85%).

(d) **Data provided by Floom**

Floom has incentives to provide data that may inflate the offer price. This may involve overstating profits/revenues/assets and understating costs/liabilities.

Issues from the financial statements

- The lease rentals are material and their terms need to be verified and attested in order to ensure that there are no additional penalties or rights that may create a longer term obligation for Floom (see due diligence section below). From a financial reporting perspective they would appear to be operating leases. While this may change if there turns out to be additional rights on termination, the key issue here is valuation rather than financial reporting treatment.
- RP is a related party and thus there should be disclosure of the lease contracts in the financial statements. Further details of the terms may be contained in the financial statements. Intercycles is also a related party and disclosures should be made.
- The sale and leaseback agreement in 20X5 was at below fair value. IAS 17 requires that if the sale price is below fair value any loss arising (proceeds less carrying amount) should be amortised and apportioned over the lease term if it is compensated for by future lease payments at below market price. We need more information but, if the leased assets were of similar carrying amount to those properties retained under freehold, then any profit or loss arising would have been small. Nevertheless the treatment of such profit or loss (if any) should be ascertained to ensure that the cash flow figures have not been distorted.
- The finance charge uses an incorrect treatment according to IAS 39 as it does not charge the implicit interest rate, merely charging the nominal rate. This may call into question other accounting policies and estimates. While the financial statements have not been publicly released for 20X8, the financial statements provided by Floom for 20X7 and 20X6 should be reviewed against the statutory financial statements to ensure that they are consistent (eg, they are not based on management accounts). If so an explanation of the inappropriate policy should be obtained.
- There are additions to fixtures and fittings in the non-current asset note. This needs to be verified as these costs could, in part, be normal maintenance or repairs and have been capitalised to inflate profit rather than expensed.
- The provision in 20X6 needs to be explained. We need a longer history to see if the provision was created in 20X6 (in which case that year's profit would have been affected) or existed prior to that date. An explanation of the removal of the provision in 20X7 is also needed. Was the provision released in 20X7 thereby increasing profit in that year, or was it settled by a cash expense which would not impact on profit and hence it would not impact on the profit growth trend?
- The depreciation rate on fixtures and fittings looks very low at 5–10% reducing balance, given that such assets are well utilised and are likely to have a modest useful life. This may be due to an artificial manipulation of profits. Asset lives would need to be verified.

- Review the data for reasonableness using industry norms for this type of business to see if any unusual ratios or relationships are apparent.

Other issues

- During due diligence we need to examine the Articles of Association to see if there are any constraints on the acquisition of a majority (controlling) shareholding rather than needing to acquire the entire share capital. This may reduce the acquisition cost but is likely to leave a non-controlling shareholding with rights.
- The condition of the real estate needs close inspection as the asset values are a key resource in the take-over.
- There is significant debt and the terms of the debt need close scrutiny. The loan agreements need to be examined by legal advisors to establish clearly any covenants and the repayment terms (eg, a change of ownership clause might be triggered making debt repayable or debt terms may need to be renegotiated). Otherwise there may be unexpected liquidity pressures on the Homez group.
- Even without any covenant, the major loans become repayable in one year's time. The refinancing need will therefore be substantial at £34.282 million (see Note 1). Also, the other loans in successive years. Clear evidence of refinancing plans put in place by Floom would be needed or Homez needs to establish its own plans prior to acquisition. This is a major liquidity issue.
- Tax due diligence will be required to examine the status of the taxation computations, group tax implications, change of ownership, correspondence with HMRC and any outstanding employee tax and VAT matters.
- Commercial due diligence will need to inspect the assumptions of growth having regard to local competitors.
- The lease agreements will need to be reviewed by legal due diligence to ascertain any clauses over renewal, penalties for condition of assets, rent inflation clauses etc.
- The position of the previous auditors needs to be assessed and consideration needs to be given as to whether any further adjustments are needed, other than those already noted.

(e) **Performance of Floom**

The statements of profit or loss and other comprehensive income provided can be used to generate some basic indicators although these would be subject to similar adjustments as those for the prospective figures in the valuations above.

	20X8 Draft £'000	**20X7 £'000**	**20X6 £'000**
Revenue	36,300	33,000	30,000
Cost of sales	(18,800)	(16,800)	(15,000)
Gross profit	17,500	16,200	15,000
Operating expenses	(12,000)	(11,500)	(11,000)
Additional depreciation on owned assets*	(1,000)	(1,000)	(1,000)
Lease adjustment (see (W3) above)	(1,000)	(1,000)	(1,000)
Profit from operations	3,500	2,700	2,000
% change in revenue	10%	10%	
% change in operating profit	30%	35%	
Operating profit/revenue %	9.6%	8.2%	6.7%
Number of stores	70	60	50
Revenue per store	£519,000	£550,000	£600,000
Operating profit per store	£50,000	£45,000	£40,000

* to base depreciation on fair values (assume double at £2 million rather than £1 million)

As already noted the depreciation rate on the fixtures and fittings also appears to be low and may also need to be adjusted.

It would appear that the performance of Floom has improved over the three years. A key feature has been the expansion of Floom in terms of the number of outlets. Presumably, a high proportion

of the growth can be attributed to the new outlets although it is not possible on the information provided to observe directly their marginal impact.

This increased profit by expansion is due to greater investment rather than greater operating efficiency. Nevertheless the profit per store has increased despite the fall in revenue generated per store. This may largely be explained by the increased scale taking advantage of the high fixed costs in operating expenses in the form of operating leverage.

Despite the improvement, it should be noted that Floom is still not performing well in absolute terms. At a discount rate of 10% the present value of the earnings at current levels is less than the estimated net asset value (see above). This would be consistent with the picture of deducting realistic finance costs of over £4 million which would completely eliminate profits in all years.

Overall therefore the operating performance is not even sufficient to cover the debt costs of financing.

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Marking guide

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	Balanced scorecard	6
	Appendix calculations	4
Total marks		45

(a) **Memo**

To: Claire Davids
From: John James
Subject: Harper Ltd – management bonuses

Current bonus procedures

Shane Williams has expressed concern about the need to ensure that bonus payments are calculated properly and the correct amounts of bonus are paid to management. The internal controls that he should expect to have in place are set out below.

His main concern is presumably that excessive bonuses may be paid out, and there should be controls to reduce this risk.

The use of return on total assets means that managers could achieve higher bonuses by inflating profits or deflating assets.

- Profits can be inflated by manipulating year-end figures so that costs that relate to the year are not accounted for until the following year. Artificially inflating sales will have the same impact.
- Assets can be deflated by carrying non-current assets at unrealistically low amounts. Assets may also be allocated wrongly to product group managers.

Shane Williams no doubt has his views on the probability that his managers may do either of these things, but the risk can be reduced by applying the following control procedures.

Control procedures

- There should be clear rules and procedures for the calculation of bonus amounts in accordance with the bonus system.

- After bonus amounts have been calculated, a second person should recalculate managers' bonuses (using the current ROTA basis) to ascertain whether they have been calculated correctly.
- The basis for allocating assets to managers should be in accordance with accounting policies and procedures of the company. There may be a check that these procedures have been correctly applied.
- Any significant changes in bonuses between one year and the next for individual managers should be reviewed by a senior person in the accounts department, to confirm that the change can be explained satisfactorily.
- Bonuses should be authorised by Harper Ltd's board before payment.
- There should be procedures for calculating and checking the cut-off of expenditure for the year. (The external auditors are likely to check whether any significant sales near the year-end have reversed after it.)

Payment of bonuses on the basis of Cost of quality

Managers will receive bonuses in accordance with their success in keeping the Cost of Quality down to or below a target amount, for example keeping the Cost of Quality no higher than 12% of net sales billed.

Provided that Harper has an appropriate costing system for measuring quality costs, it should be possible to measure with reasonable accuracy the costs of prevention and appraisal.

Procedures for measuring internal failure costs may be reliable, but this will depend on the reliability of the cost accounting system for quality costing.

The greatest concern however should be the costs identified as external failure costs. These may not occur until a long time after products have been sold to the customer, and costs of lost customer goodwill are not measurable.

Harper may use a system of provisioning for external failure costs at the year end. If so there may be insufficient provision for rectifying problems with quality. This would reduce the Cost of Quality attributable to managers, and increase their bonus payments.

Control procedures

- A system of charging failure costs to managers or cost centres should be implemented.
- Specific provisions should be made at the year end for external failure costs for known complaints or claims by customers, in accordance with approved guidelines for calculation.
- Refunds and credits to customers after the year end for complaints arising before the year end should be set against the provision to see if any related to the period before the year end.
- Management control reports should compare the level of provisions with previous years and as a percentage of revenues and quality costs, and obtain explanations for significant changes.

(b) **Sections of report**

To: Directors of Harper Ltd
From: Claire Davids
Date: July 20X8
Subject: Dividend payment and performance evaluation

(i) **Issues with payment of group dividend**

(1) **Liquidity**

The statement of financial position at 30 June 20X8 shows an immediate and possibly serious liquidity problem. The cash position at that date is just £45,000 although the bank has indicated in its letter dated February 20X8 that an overdraft facility of £250,000 would be made available.

However it is difficult to see how the company can pay the short-term liabilities of over £4 million with its current liquidity position, let alone a dividend of a further £2 million.

There may be some question as to whether or not Harper Ltd is a going concern given this liquidity situation, depending on the group company's policies for supporting subsidiaries with financial difficulties.

Furthermore the bank loan of £2.5 million will be due for repayment in 20X9 and at the current time the bank would only seem to be willing to increase any replacement loan to £2.75 million and even this is subject to a review of the position of Harper at that time.

(2) **Reasons for liquidity problem**

(a) **Profitability**

The figures in Appendix 1 indicate that whether we consider operating profit or profit after tax there has been a marked decrease in profitability levels since the year ending 30 September 20X6. This fall in profit levels will almost inevitably have had an effect on the cash flow position of the company.

(b) **Historical dividend payments**

Dividend payouts have historically been large. Harper has been profitable, but profits have not been retained within the business. Some profit could have been retained in the form of cash, to meet liability payments.

In the year to 30 September 20X7, dividend payments were almost 100% of the profit after tax. In the previous year dividends were 81% of profits after tax. With purchases of non-current assets more or less matching depreciation charges, this has meant that the company has not been retaining sufficient cash from its operations.

The dividend demanded by French plc may not be covered by your overall profit after tax. The dividend payment required is £2 million, but profit for the 9 months to 30 June was only £1.35 million. It is entirely possible that the policy of French plc is to strip cash from the business, although this would seem short-sighted if French wants Harper to continue as a viable business.

(c) **Working capital management**

As indicated above, much of the working capital is being effectively funded now out of short-term liabilities. Although the directors have an incentive to keep the level of current assets low to increase the return on total assets, there appears to be a level of permanent current assets which is not effectively supported by long-term funding. The £250,000 overdraft makes only a limited difference when Harper owes trade payables £1.5 million and the tax authorities £2.6 million.

Comparisons of working capital levels between 20X6/20X7 and 20X8 are complicated by the 20X8 date, 30 June, being during the middle of the summer sales period when the 20X7 date is at the end. The figures suggest that Harper has had some success in controlling the level of receivables. A reduction of over £1 million between 20X7 and 20X8 probably goes beyond what would be expected from seasonal variations and sales that have been less than expectations.

Inventory is more problematic. Inventory levels are over £700,000 more at June 20X8, than in September 20X7 and over £1 million than at September 20X6. Although seasonal factors may account for some of this difference, it seems that a high level of sales over the next few months may be required to arrest an increase in the level of inventory at a time when sales are declining.

(3) **Future position of Harper Ltd**

The directors need to consider the future position of Harper Ltd urgently. The cash position is weak and profitability is declining, although there is optimism for the final quarter.

The gearing level of Harper is relatively low at less than 20%, and interest cover although declining is still quite good. The total carrying value of the non-current assets at 30 September 20X7 was high at over £13 million. This may enable the company to arrange additional loan finance on the security of the non-current assets. However, machinery is often not of much security value for a lending bank.

Given the high value of the non-current assets the directors could also consider the sale and leaseback of some land and buildings in order to ease the cash flow problems.

With receivables days at just 37 days but the payables payment period of 32 days there may also be some scope for freeing up cash by improved working capital management. However inventories appear excessive at £4 million and represent nearly 3 months' cost of sales. Reduction of inventories would assist in cash management.

(4) **Relationship with parent company**

French plc acquired Harper Ltd for £30 million when the book value of Harper's net assets was approximately £13 million indicating a payment for goodwill in Harper of £17 million. The parent company policy is that group companies should be self-financing. However as at 30 June 20X7 French had a gearing level of just 3.6% indicating possible financial support from the parent if this becomes necessary to keep Harper in business.

(5) **Alternative methods of payment**

It may be possible to negotiate alternative methods of payment with the directors of French plc. The £2 million could be levied as a management charge, or possibly French could be persuaded to allow Harper to defer the payment to a later date.

(ii) **Performance evaluation**

(1) **Current position – use of ROTA**

Your current performance measurement system is that each of the three product managers are assessed on the return on total assets (ROTA) which is defined as profit before tax divided by the total of the carrying amount of non-current assets plus the value of current assets. If ROTA exceeds 18% the managers are paid a bonus which starts at a figure of 40% of basic salary.

Appendix 2 shows that in the years ending 30 September 20X6 and 20X7 this trigger of 18% was easily exceeded at a total company level; therefore we can assume that each manager achieved his bonus. For the 9 months to 30 June 20X8 the return so far is only 10.5%. However it is felt that with a good final quarter the target figures will be met and if ROTA at 30 June 20X8 is calculated based upon the budgeted figures then indeed ROTA slips just over 18% therefore triggering the bonus payment. This would indicate that the managers will be awarded their bonus even though profitability in the company is falling.

(2) **Problems with ROTA**

There are a number of general problems associated with using ROTA as a performance measure:

- The profit figure for each division will be dependent upon allocated overheads rather than costs which the divisional manager can control.
- The figure for non-current assets may also be notional as some may be based upon cost whereas others are revalued amounts.
- If the amount of capital expenditure for each division (ie, non-current assets) is determined by Head Office then again the divisional managers do not control that figure.
- If there is little reinvestment in non-current assets then ROTA will automatically increase without any increase in profits as the carrying amount of the non-current assets falls. This may discourage investment in non-current assets by managers if they do control this area.
- The non-current asset value must be defined – is it the year end value or average value? If non-current assets are disposed of near the end of the year then again this will serve to increase the figure shown for ROTA.

Because of the flaws in the ROTA method, new targets should be introduced to assess financial performance and quality. However care must be taken in making any change in performance measurement, as this may affect the motivation and behaviour of the managers. This may lead to a loss of goal congruence and decision making which is not in the best interests of the company as a whole.

(iii) **Return on investment**

(1) **Use of return on investment**

The measurement of Harper's return on investment to French is based upon the earnings attributable to French compared to their investment of £30 million. Based on the budgeted figures for the 9 months to 30 June 20X8 this would give a figure of 8.67%.

If we are to maximise this figure of return on investment for French plc then we must consider using this measure to measure internal performance. Appendix 1 shows that if

return on investment (return on capital employed) is used then our return has reduced from 31.20% in 20X6 to 7.83% for the 9 months to 30 June 20X8.

(2) **Problems with return on investment**

- The capital figure used appears to be static, being based on French plc's initial investment of £30 million. Harper's future ability to generate returns will be determined by how much capital is retained in the business.
- If managers' remuneration is being determined by comparisons with other subsidiaries, then it may depend on how good a price was paid to acquire these subsidiaries.
- A simple comparison between subsidiaries will also take no account of the differing risk profiles of each subsidiary and hence the level of return that could be expected.

(iv) **Costs of quality**

If costs of quality become a determinant of salary, it will mean rewarding managers in accordance with the objectives established by French's board of making high quality products and delivering superior customer service.

(1) **Use of costs of quality (COQ)**

According to the finance director's figures, costs of quality are increasing in 20X8 to date, which may indicate a lack of control and a further dent to overall profitability.

The costs are grouped into four broad categories:

- **Prevention costs** – costs incurred to prevent non-conforming units being produced. These include most costs incurred prior to production release – quality engineering interface with new suppliers, product development cost overruns and new product testing and evaluation.
- **Appraisal costs** – costs incurred to ensure that materials and products that fail to meet quality standards are identified prior to shipment. These include all costs associated with sampling of the product, including receiving and inspection, and manufacturing tests during the production phase.
- **Internal failure costs** – scrap costs and costs incurred in correcting errors caught at appraisal, before delivery of the product to the customer. These include manufacturing rework, scrap costs and production planning costs associated with excess or obsolete goods.
- **External failure costs** – the costs arising from inadequate quality discovered after the transfer of ownership from the supplier to the purchaser. These will include complaints, warranty claims and recall costs.

We can see from the analysis given by the finance director that external failure costs have fallen in 20X8 although the other three classifications of cost have risen.

Managers may be increasing prevention costs and appraisal costs in order to reduce failure costs.

(2) **Problems with use of cost of quality**

- It will be the failure costs which will be the measure of the success or not in meeting the total quality requirements of French plc.
- Spending on prevention and appraisal reduces internal failure costs, which are the largest element of quality costs at the moment.
- Internal failure costs mean that failures are identified before the customer is affected. Prevention costs, appraisal costs and internal failure costs are therefore all necessary to ensure that external costs are reduced. There is likely therefore to be some trade-off between increased levels of internal costs and reduced levels of external costs.
- Similarly there may be a trade-off between the different categories of internal costs, although this has not recently been an issue with Harper Ltd where all three categories have risen. In future though increased expenditure on prevention costs may be

desirable, meaning that problems are identified or avoided at source. This would reduce expenditure on appraisal and failure costs, and reduce management and employee time spent in dealing with the problems related to appraisal and failures.

- There needs to be an evaluation of the costs incurred against the benefits incurring those costs can bring. These include being able to charge higher prices and increase revenues on the basis of guaranteeing higher quality.

(v) **Balanced scorecard**

The balanced scorecard provides a method of reconciling financial, return on investment, measures with quality measures.

(1) **Use of a balanced scorecard**

The use of a balanced scorecard requires managers to view the business through four different perspectives:

- **Customer** linking in with targets that matter to the customers such as cost, quality and delivery. The COQ measures focus on negative aspects of this, the avoidance of customer complaints and rectification costs. More positive measures such as speed of delivery and customer satisfaction are also required.
- **Internal business** aiming to improve internal process and decision making. This may focus attention on various activities associated with COQ in a different way. It could measure whether processes such as inspection and rework are being carried out efficiently.
- **Innovation and learning** considering the business's capacity to maintain its competitive position through the acquisition of new skills and the development of new products. The increased focus on quality may imply it is strategically desirable to diversify into other garden products.
- **Financial** covering measures such as growth, profitability, market share and shareholder value.

(2) **Problems with balanced scorecard**

- Managers may not understand some of the measures used. Non-financial specialists may have difficulty understanding the financial measures and vice-versa.
- It may be difficult to gain an overall impression of the results provided and hence use the results for control action or as a means of determining the levels of bonus.
- Some measures such as product development and cost reduction naturally conflict. It may be difficult to determine the balance that will achieve the best results.

Appendix 1

Profitability measures for Harper Ltd

	9 months to 30 June 20X8	Year to 30 Sept 20X7	Year to 30 Sept 20X6
	£'000	£'000	£'000
Operating profit	2,374	5,597	8,087
Profit after tax	1,352	3,542	4,950
Performance indicators			
Operating profit/revenue %	14.03%	22.83%	28.00%
Profit after tax/total capital employed	7.83%	22.27%	31.20%
Dividend cover	0.676	1.012	1.238
Gearing level	17.05%	18.79%	18.85%
Interest cover	7.42 times	15.5 times	25.2 times
Receivables days (2,308/16,920 × 365 × 9/12)	37 days		
Payables days (1,535/13,146 × 365 × 9/12)	32 days		

Appendix 2

Financial indicators

Return on total assets (ROTA)			
2,254/(14,859 + 6,567)	10.52%		
5,236/(13,229 + 7,104)		25.75%	
7,766/(13,268 + 7,035)			38.25%
Return on total assets based on budget 3,883/(14,859 + 6,567)	18.12%		
Return on investment to French based on budget 2,602/30,000	8.67%		

24 British Flint plc

Marking guide

	Marks
The effect the scheme is likely to have both on British Flint's cost of capital and its cash position.	11
The effect the scheme is likely to have on British Flint's share price.	7
The probable impact of the scheme on the Monkridge family trust.	7
Whether the risk involved in the alloy castings project is likely to affect British Flint's beta value.	5
Prospects for success of the reconstruction scheme.	8
The corporate governance and ethical issues arising from the proposal for reconstruction.	7
Total marks	45

DRAFT REPORT

To: Mr Monkridge
From: Accountant
Date: [today's date]
Subject: British Flint reconstruction

You asked me to report to you on the impact of British Flint plc's proposed scheme of financial reconstruction. In the discussion below the numbers in brackets are references to the workings attached as an appendix to this report.

(a) **The current position**

British Flint currently has share capital of 80 million £1 ordinary shares and £100 million in 7% debentures.

One unusual feature of the business is that, although its net assets have fallen from £57,900,000 in 20X1 to £53,450,000 in 20X3, it has still managed to make a profit, even after interest, tax and dividends. The impact on retained earnings during the year was:

EBIT – Interest – Tax – Dividends

= £10,558,000 – £7,000,000 – £127,000 – £(0.015 × 80m shares)

= £2,231,000

The impact on retained earnings in the previous year (20X2) calculated in the same way was £1,018,000 (after dividends at 2.9 pence per share).

This position appears to reinforce the board's belief that the company has a sound future. It is not clear from the limited information given the way in which net assets have been reduced but more efficient use is being made of the reduced assets.

Debentures

The existing 7% debentures have 5 1/2 years to maturity and a Standard & Poor's rating of BB, which is below investment grade of BBB– or higher. The required return for securities of this type is the risk-free rate plus the appropriate credit spread, which for 5 years is 5.55% (1). The required return is therefore 10.75% (2). The market price of the debentures reflects this, being the present value of the expected cash flows discounted at this rate (3).

Equity

The current share price is 27.45 pence, and the latest dividend was 1.5 pence per share. The share price seems low when compared with the company's net asset value of £53.45 million, which gives a net asset value per share of 66.81 pence (11). Valuation using the capital asset pricing model (CAPM) and the average dividend value for the last 3 years (2.7 pence) gives a value of 22.06 pence (9); using the most recent dividend of 1.5 pence gives a value of 12.25 pence (10). Unless there is a reconstruction, the board believes that the company may be insolvent in three years, which suggests that shareholders are probably not expecting dividend increases in the future, and may well be expecting a significant fall in dividends. On the basis of dividend expectations, it is not possible to justify a share price of 27.45 pence.

The disparity between the CAPM valuation and the asset valuation marks the company as a potential target for takeover by asset-strippers. This might account for the market price premium over the CAPM valuation, since the company might be acquired at a price close to its current market value, and the assets then sold off to earn a profit for the acquirer.

A further point of interest is that the company's P/E ratio is only 6.4 (12). The general outline of the board's plans for the future are public knowledge, so this may indicate that the market is currently applying a heavy discount to the company's future plans and prospects and expects little if any improvement in dividend performance.

(b) **The reconstruction**

Debentures

The proposed new issue of debentures will have a life of 7 years and a coupon rate of 6.5%. If we assume that they will also have a BB rating and use the 7-year risk free rate and credit spread, we may compute the return required as 12.78% (6). This is higher than the existing debentures because of the extra two years of life to maturity: required yields are normally higher for longer maturities.

There is a very large difference between the coupon rate and the market rate, which is unusual. Bonds would normally be issued at (or close to) par and at the equilibrium market interest rate, taking account of the risk of the bond at the issue date.

Discounting the expected cash flows at the expected market rate gives an expected market price for the new securities of £72.03 **per cent** on issue (7). This implies maximum issue proceeds of £43.2m (8), not allowing for the costs of issue or any discount to encourage take up. **It will not, therefore, be possible for the company to raise the £49 million needed for its projects on this basis.**

No doubt the company's advisers will make this clear to the directors in due course.

It will then be for the directors to amend their scheme, either to increase the sum to be raised by £5.8 million, or to cut the costs of their projects, if either of these options is feasible.

Equity

The effect of the proposal on share capital will be to increase the number of £1 shares in issue to 180m and to increase the net assets by £100 million, the cancellation of the existing debentures impacts net assets but the new issue does not. Net asset value per ordinary share will rise to 85.25 pence (13), an increase of about 28%. It is not possible to forecast the effect of the increase in net assets per share on the share price, as the market will move by reference to the shareholders' perception of the reconstruction and its future effect. The issue of the shares to redeem the debentures will, however increase the number of shares and therefore decrease the price per share. How much this is offset by the perception of the reconstruction (if at all) is difficult to forecast.

(c) **Effect of the scheme**

It is not possible to say whether or not the cost of equity will change as a result of the scheme. The risk associated with increasing the life of the company's debt from five to seven years may well be balanced by the lower financial risk achieved by reducing the gearing. It is assumed here the cost of equity will not change, and the weighted average cost of capital has been computed on this basis.

It should be noted that the calculated cost of equity is 12.24%. This is higher than the yield on the existing bonds (of 10.75% (2)), but is lower than the estimated yield on the new bonds (of 12.78%

(6)). This is an unlikely out turn – one would expect rational risk-averse investors to require a higher yield on the riskier equity. These estimated numbers challenge the assumption that the cost of equity will remain constant, and the cost of equity may therefore rise – at least in the short term, and this would have a negative impact on the share price. Over time however the lower gearing, combined with the hoped for improvement in the company's fortunes, may cause the cost of equity to fall. This will depend on the company achieving its desired performance targets after the reconstruction.

Assuming that the share price does not change as a result of the scheme, the weighted average cost of capital will rise from 10.09% to 11.30% (16, 17). However, if we assume that the current dividend is maintained, the total cash cost of capital will fall from £6.80 million to £5.82 million, a saving of £980,000, or 14.41% (15). The real significance of this figure is revealed when it is considered in the context of the extra capital raised by the scheme of reconstruction. The company will gain a substantial injection of cash, but pay less in total for it.

Unfortunately, this is achieved at the expense of the existing debenture holders who will now be ordinary shareholders: their income per £1 nominal of capital is likely to fall significantly: if the current dividend is maintained the fall will be from 7% to 1.5% of nominal value (ie, from £7 per £100 of bonds to £1.50 per 100 shares). Shareholders are also likely to be disadvantaged, even if the current dividend is maintained, since the total number of shares in issue will increase from 80 million to 180 million, an increase of 125%. No doubt current shareholders other than the Monkridge family trust also hold some of the existing debentures that will be converted to shares. Nevertheless, it seems likely that the current pattern of ownership and control will be disrupted.

Despite this, the existing debenture holders will feel that they are bearing an unfair share of the burden of the company's current difficulties. Debentures are expected to be less risky than equity, but the financial disadvantage planned for debenture holders is far more significant than the planned dilution of equity. It seems unlikely that the debenture holders will accept the scheme: it seems probable that they would be content to rely on their security and be prepared for the company to be wound up.

Alternatively, they may accept their shares but anticipate selling them at an increased market price if a takeover bid materialises. It is difficult to see, however, that converting the debentures into shares will do anything except realise a substantial loss for the debenture holders.

If the debentures are, in fact, largely held by existing shareholders, as in the case of the Monkridge family trust, the position may be rather different. Such shareholders may accept the loss of income from their bonds as the price that must be paid to set the company on its feet again.

(d) **The position of the Monkridge family trust**

The Monkridge family trust holds both shares and debentures in the company. If the scheme goes ahead, it will lose an important element of its income in the form of debenture interest. However, if nothing is done, the company may eventually become insolvent, or be bought by an asset stripper, with a consequent potential capital loss on the shares (valuation in the latest accounts: £2.24 million).

If the company is acquired, the debentures may be repaid in full by the acquirer. The latest dividend may indicate a CAPM valuation of approximately 12.25 pence per £1 nominal share, as already mentioned, the net asset value per share is almost 67 pence. Any offer price above the current market price of 27.45 pence might seem attractive to the trust.

Under the proposed scheme of reconstruction, the trust would receive shares with a nominal value of about £6.828m (= £5,876,000/0.860528). 6,828,000 shares might have a total value of about £836,430 at a price of 12.25 pence per share. The loss on investment, given the current market value of £5.876 million for the debentures, would be about £5 million.

The financial position of the trust is, I am afraid to advise you, precarious.

The implications of the proposed reconstruction for the trust may be summarised as follows:

- The trust has a largely undiversified portfolio of investments (86% of the trust's capital is invested in British Flint). The trust will no doubt wish to consider whether a reconstruction scheme or liquidation of the company would be the more effective method of protecting the value of the investment.
- The production director at British Flint has indicated that the alloy castings project which is seen as critical to the ongoing success of the company is highly risky. If it fails to achieve the

desired returns this may raise going concern problems. This in turn will affect the financial position of the trust.

- The terms of the reconstruction do not seem to be attractive to the current debenture holders. If a large proportion of the debenture holders are not existing shareholders and therefore do not accept the scheme there is a strong possibility that British Flint will be bought or eventually perhaps become insolvent, again affecting the financial position of the trust.
- The reconstruction, in addition to reducing the value of the trust's investments, would also change the balance between equity and debt in the trust's portfolio of investments. Most (or possibly all) of the trust's investments would be equity shares, which possibly exceeds the risk preferences of the trustees.
- The reconstruction raises issues of compliance risk. The change in proportion of debt to equity may be in breach of the terms of the trust. The Monkridge trust's nominee director needs to consider his governance responsibilities. He must ensure that in agreeing to the reconstruction he is fulfilling the purpose of the trust and that the trust is not acting *ultra vires*.

(e) **Beta value**

The capital asset pricing model is based on the principle that the risks and rewards associated with holding a security should be commensurate. The model allows the calculation of the reward expected from a given security; from this and knowledge of the actual reward achieved, an appropriate market price may be calculated.

The total risk associated with a security may be divided into two parts: systematic and unsystematic. Unsystematic risk is unique to the security and is dealt with by holding a well-diversified portfolio. Systematic (or market) risk is associated with general market and economic factors that affect all securities. The extent of systematic risk varies between securities and the beta value of a given security is a measure of the extent to which it reflects overall market risk. The average risk of all securities in the market is unity (one); securities with betas less than one or in excess of one are respectively less or more sensitive to systematic risk factors than the average.

Systematic risk is reflected in the volatility of share prices. For example, if the total market risk rose by 10%, the market risk of a security with a beta of 1.5 would be expected to rise by 15%, while the market risk of a security with a beta of 0.5 would be expected to rise by only 5%.

The risk associated with the alloy castings project is arguably unsystematic risk, in that it is unique to the company and it should have no direct effect on the company's beta value. It is a good example of the risk that can be minimised by holding a diversified portfolio.

On the other hand, it may also be argued that the alloy castings project belongs to an aspect of the industry that has its own, different, systematic risk, and that the company's cost of capital and total value would be affected by an investment in this new area.

It is probable that the success of the project will be affected by general economic conditions which will also bring an element of systematic risk. However, this would only affect the company's beta if the project's success correlated with economic conditions to a greater or lesser degree than the rest of the company's activities do on average.

(f) **Prospects for success for the reconstruction scheme**

The current proposal for a reconstruction scheme will almost certainly fail. In a scheme of reconstruction, it should be expected that equity shareholders will suffer a greater loss than providers of debt capital. The proposals of the board, however, would protect the shareholders at the expense of the debenture holders, who would be required to suffer a substantial loss on their investment by exchanging the debentures for shares.

The debenture holders would almost certainly benefit much more from a liquidation of the company's assets or a take-over by an asset stripper.

Any financial arrangement to attract the debenture holders would have to involve them taking a much larger proportion of the company's equity. Existing shareholders would therefore be required to agree to a much greater dilution of their ownership. Shareholders may therefore benefit more from an acquisition by an asset stripper.

The only possible attraction for investors in the scheme of reconstruction is the possibility that the new investments and staff restructuring programme will result in a turnaround in the company's fortunes. There is no information about the expected cash flows from these measures, but the increase in earnings and dividends would need to be substantial.

Investors may be unwise to accept the assertions of the board of directors without evidence to support their claims.

As indicated earlier, the proposed scheme of reconstruction is likely to leave the company about £5.8 million short of the capital it needs. At an after-tax cost of 10.22% (4), the annual cost of this extra capital to the company would be about £593,000, reducing the financial viability of future investment projects.

(g) **Corporate governance and ethical issues**

Corporate governance issues

The implications of the proposed reconstruction for the corporate governance of the company may be summarised as follows:

- The proportion of the company's equity held by the trust will fall, as the current debentures are converted to equity. It is doubtful whether the trust will be able to justify its continued right to appoint a non-executive director to the company's board.
- Investor engagement by the board of directors does not appear to be satisfactory. There is no information about why the company will become insolvent if there is no reconstruction, and there is little information about the measures that would be taken to turn round the company's fortunes.
- The high risk in the reinforced alloy casting project raises questions about the risk management policies and risk appetite of the board, and whether it may be proposing to take excessive risk in order to achieve higher financial returns.
- The proposal by the board to redeem the 7% debentures in exchange for shares suggests that the board has little concern for the debenture holders, as stakeholders in the company.
- It may be argued that the board has failed to provide the leadership for the company that should be expected of it, and investors should not under any circumstances agree to a scheme of reconstruction without significant changes to the senior executive team and composition of the board.

Ethical issues

While the company's general plans for improving its operations are in the public domain, you have had access to insider information about the proposed reconstruction. You must not, therefore, deal in any of the company's securities.

Appendix – British Flint plc

					Reference
Existing debentures: nominal value				£100m	
S&P rating				BB	
Years to maturity				5	
Coupon				7.00%	
Corporation tax rate				20.00%	
Risk-free 5 year rate				5.20%	
5-year credit spread, BB-rated debt – basis points				555	**1**
Cost of debt capital = (1–T)(risk free rate + credit spread)					
= (1 – 0.20)(5.20 + 5.55)% =				8.60%	
Annual cash cost of debt [(1 – 0.20) × 7% × £100m]				£5,600,000	
Required return = (5.2 + 5.55)% =				10.75%	**2**
Value of £100 security =				£86.0528	**3**
(= PV of future cash flows discounted at 10.75%)					
Bonds – new issue: nominal value				£60m	
Years to maturity				7	
Coupon				6.50%	
Corporation tax rate				20.00%	
Risk free 7 year rate				5.89%	
7-year credit spread – basis points				689	
Cost of debt capital = (1–T)(risk free rate + credit spread)					
= (1 – 0.20)(5.89 + 6.89)% =				10.22%	**4**
Annual cash cost of debt [(1-0.20) × 6.5% × £60m]				£3,120,000	**5**
Required return = (5.89 + 6.89)% =				12.78%	**6**
Value of new debt:					
			12.78% PV factor[1]		
Year		£		£	
1-7	Interest	6.50	4.453	28.94	
7	Redemption	100.00	0.431	43.09	
				72.03	
Market value of £100 nominal value new debt =				£72.03	**7**
Therefore maximum issue proceeds = £60m × 0.7203 =				£43,218,000	**8**
Existing equity – nominal value				£80m	
Risk-free 1 year rate				4.24%	
Market rate				9.72%	
Beta				1.46	
=> Cost of equity using CAPM: 4.24% + 1.46(9.72 – 4.24)% =				12.24%	
Average dividend per share in past three years, pence				2.7	
Assuming constant annual dividend of 2.7 pence in perpetuity, the market price of equity should be:					
2.7p/0.1224 =				22.06p	**9**

[1] = $[1 – (1.1278)^{-7}]/0.1278 = 4.453$

			Reference
Most recent dividend per share, pence		1.5	
Assuming constant annual dividend of 1.5 pence in perpetuity, the market price of equity should be:			
1.5p/0.1224 =		12.25p	**10**
Net asset value per share:			
£53.45m/80m shares =		66.8125p	**11**
Assumed market price of equity in pence = 27.45			
Earnings per share, pence = (10,558–7,000–127)/80,000		4.2888	
P/E =		6.40	**12**
Cost of current dividend			
= 80m × 1.5 pence =		£1,200,000	
Equity after reconstruction		£180m	
£80m existing + £100m of debt converted at par			
Net asset value per share:			
£(53.45m + 100m)/180m shares =		85.25p	**13**
It is assumed that the new debt will increase both assets and liabilities, and therefore increase in net assets is caused by the conversion of debt to equity			
Annual cost of maintained dividend			
= 180m × 1.5 pence =		£2,700,000	**14**
Cash cost of capital			
Current (£5.60m + £1.2m)	£6,800,000		
Future (£3.12m + £2.7m)	£5,820,000		
Saving	£980,000 =	14.41%	**15**
Weighted average cost of capital			
k = [(MVe × ke) + (MVd × kd)]/(MVe + MVd)			
Existing structure:			
MVe = 80m × 27.45p = £21.96m. MVd = £86.05m			
k = [(21.96m × 12.24%) + (86.05m × 8.28%)] /(21.96m + 86.05m) =		9.34%	**16**
Proposed structure:			
MVe = 180m × 27.45p = £49.41m			
MVd = £60m × 0.7203 = £43.218m			
k = [(49.41m × 12.24%) + (43.218m × 10.22%)] /(49.41m + 43.218m) =		11.30%	**17**