MARK PLAN AND EXAMINER'S COMMENTARY – Advanced Level: SBM July 2015

This report includes:
- a summary of the scenario and requirements for each question
- the technical and skills marks available for each part of the requirement
- a description of how skills should be demonstrated
- detailed points for a full answer
- examiner's commentary on candidates' performance

The information set out below was that used to mark the questions. Markers were encouraged to use discretion and to award partial marks where a point was either not explained fully or made by implication.

Question 1 – Commex Cables plc

Scenario

The scenario in this question is a company which manufactures cables for the mining industry. The candidate is a junior manager working for a firm of ICAEW Chartered Accountants (MM) which acts as business advisors to CC.

CC currently only sells in Europe, but it now wishes to expand the geographical scope of its sales to Australia and SE Asia. An initial feasibility study has identified two alternative strategies. Strategy 1 is to set up an Australian subsidiary, (AMC), which will manufacture cabling equipment at a new factory in Australia for distribution to customers in Australia and South East Asia. Strategy 2 is to build a distribution centre in Australia which would hold inventories of CC's products, manufactured in the UK factory, for distribution to customers in Australia and South East Asia. Forecast data is provided for each strategy.

Strategy 2 could be financed from operating cash flows, but Strategy 1 would require significant new finance to be raised. It has been decided that most of the new finance should be debt, with only a small proportion of new equity finance. Two methods of raising debt finance have been identified. Under *Finance Method A*, AMC would raise a loan from an Australian bank in A$ with CC, as the parent company, providing guarantees to the bank. Under *Finance Method B,* CC would raise the loan from a UK bank, in £ sterling. It would then immediately make an equivalent loan in A$ to AMC.

An Australian mining company, BTZ, has made an offer of collaboration to AMC. It has offered to subscribe for 20% of the equity of AMC at par and in return has offered a guaranteed minimum level of purchases from AMC. It also requires the right to appoint a member of the AMC board as part of any agreement.

An ethical issue has arisen when the MM engagement partner visited the CC chief executive and inadvertently saw a letter from BTZ to the CEO stating that a number of BTZ shares had been transferred to him.

Candidates are required to:
- For the two alternative strategies:
    - Determine each NPV in £
    - Evaluate and explain the risks of exchange rate fluctuations including sensitivity analysis
    - Compare and evaluate the key supply chain management and distribution issues.
- Compare the two proposed finance methods, giving a reasoned recommendation and explain why the interest rate should differ between the loans.
- Explain the issues that MM would need to address in providing assurance to lenders for the debt finance methods for Strategy 1.
- Identify and explain the key financial reporting issues affecting the CC consolidated financial statements arising from each of the two potential strategies.
- Explain any ethical issues arising from: (i) the proposed collaboration between CC and BTZ; and (ii) the letter to the CEO from BTZ.

Requirements	Skills	Skills assessed
For the two alternative strategies • Determine each net present value (NPV) in £ sterling at 1 January 2016. • Evaluate and explain the risks of exchange rate fluctuations. In so doing, provide illustrative calculations of the sensitivity of each NPV to future exchange rate movements. • Compare and evaluate the key supply chain management and distribution issues.	23	• Apply working assumptions to perform calculations to determine NPV. • Perform sensitivity calculations. • Use judgement based on the sensitivity calculations to evaluate the extent of exchange rate risk. • Identify the nature of different supply chains and structure answer to address each.
Compare the two proposed debt finance methods for Strategy 1 (Exhibit 3) and give a reasoned recommendation. Include an explanation of why the interest rate should differ between the two finance methods.	10	• Structure answer around the key features of the two types of loan. • Draw comparisons between the two types of loan under each of the headings, distinguishing key differences. • Judgement to provide a reasoned recommendation which uses and follows on from the preceding analysis. • Assimilate information to provide an explanation of why the interest rate should differ between the two loans.
Explain the issues that MM would need to address in providing assurance to lenders for the debt finance methods for Strategy 1	10	• Use judgement to identify key risks to be addressed by an assurance report. • Identify issues of providing assurance over forecast information (ISAE 3400). • Address specific assurance issues with each loan.
Identify and explain the key financial reporting issues affecting the CC consolidated financial statements arising from each of the two potential strategies (Exhibit 2).	9	• Use judgement to identify and select key issues for each strategy. • Identify and explain issues relating to consolidation and foreign currency as ley issues.
"Please provide a briefing note explaining any ethical issues for John, CC and MM, arising from: (i) the proposed collaboration between CC and BTZ (Exhibit 5); and (ii) the letter to Frank from the BTZ finance director. "Also, set out the actions that should be taken by MM and me in response to both of these matters."	8	• Use ethical language and principles • Identify key ethical issues with respect to the letter to Frank from the BTZ finance director. • Set out the actions to be taken by relevant parties.
Maximum marks	**60**	

(1) Alternative strategies

1.1 NPV

Strategy 1

	1 Jan 2016	31 Dec 2016	31 Dec 2017	31 Dec 2018 & thereafter	Total PV
Initial outlay A$'000	(63,000)				
Operating CF A$'000			(100)	6,875	
DF	1		$1/1.08^2$	$1/(1.08^2/0.08)$	
PV A$'000	(63,000)		(86)	73,678	10,592
XR	1.8		1.8	1.8	
PV £'000	(35,000)		(48)	40,932	**5,884**

Strategy 2

	1 Jan 2016	31 Dec 2016	31 Dec 2017 & thereafter	Total PV
Initial outlay A$'000	(4,000)			
Operating CF A$'000			855	
DF	1		1/(1.08/0.08)	
PV A$'000	(4,000)		9,896	5,896
XR	1.8		1.8	
PV £'000	(2,222)		5,498	**3,276**

1.2 Exchange rate fluctuations

Strategy 1

The initial outlay is at a known exchange rate and therefore is, in effect, fixed in £ sterling terms. All subsequent operating cash flows are in A$ for Strategy 1. This exchange mismatch could be reflected in a significant depreciation of the A$ against the £ sterling which would make cash inflows less valuable and therefore it would be more difficult to recover the initial outflow in NPV terms.

The sensitivity calculations (see below) show that a one-off exchange rate shift of 16.8% depreciation of the A$ against the £ would generate a zero NPV based on the data provided.

Other exchange rate considerations for Strategy 1 are that revenues are generated from South East Asian countries and the revenue generated from these countries is also subject to fluctuations of their currencies against A$, and ultimately against the £, thereby increasing the exchange risk.

Strategy 2

As for Strategy 1, the initial outlay is at a known exchange rate and therefore is, in effect, fixed in £ sterling terms. The key difference is that, in absolute terms at least, the outlay is much smaller for Strategy 2 at A$4m compared to Strategy 1 at A$63m. The risk of future cash flows not covering this outlay is therefore reduced in absolute terms.

However, our working assumption is that the operating cash outflows are all in £ sterling, whereas the revenues are generated in A$. There is therefore a currency mismatch as if the A$ depreciates against the £ then revenues in sterling terms fall while costs remain constant.

The sensitivity calculations (see below) show that a one-off exchange rate shift of only 6% depreciation of the A$ against the £ would generate a zero NPV based on the data provided. This makes Strategy 2 more sensitive than Strategy 1 to exchange rate movements based on the assumptions of the illustrative calculation.

Sensitivity calculations

Strategy 1

Initial outlay	=	A$63,000		
PV inflows (at £1 = A$1.8)	=	A$73,592 (73,678 - 86)		
Break even exchange rate	=	(73,592/63,000) x 1.8	=	2.1026
% sensitivity 2.1026/1.8	=	16.8% depreciation of A$ against £		

Proof (not required)

	1 Jan 2016	31 Dec 2016	31 Dec 2017	31 Dec 2018 & thereafter	Total PV
Initial outlay A$'000	(63,000)				
Operating CF A$'000			(100)	6,875	
DF	1		$1/1.08^2$	$1/(.08^2/0.8)$	
PV A$'000	(63,000)		(86)	73,678	10,592
XR	1.8		2.1026	2.1026	
PV £'000	(35,000)		(41)	35,041	**0**

Strategy 2

All costs are incurred in £ sterling and are therefore unaffected by exchange rate movements. (Note: some professional scepticism may be applied to this working assumption that all costs are incurred in £s. It seems implausible, as some costs must be incurred in A$. Nevertheless, for calculation purposes it is accepted as a working assumption).

Only revenues are affected:

PV revenues (at £1 = A$1.8) = $\frac{A\$9{,}000}{1.08/0.08}$ = A$104,167

NPV in A$	=	A$5,896		
Break even exchange rate	=	(104,167/(104,167 - 5,896) x 1.8	=	1.908
% sensitivity (1.908 – 1.8)/1.8	=	6% depreciation of A$ against £		

1.3 Supply chain management and distribution

Supply chain management is the planning and management of all activities involved in sourcing and procurement, conversion, and all associated logistics and distribution activities. Supply chain activities therefore include: procurement, inventory management, production, warehousing, transportation, customer service, order management, logistics and distribution.

For CC and AMC different types of products and services can be identified which require different types of supply chain management. Specifically:

Goods (mining cables):
- Standard products (supplied from inventory)
- Made-to-order products

Servicing and maintenance:
- Routine maintenance and servicing
- Emergencies

All activities in the supply chain should be undertaken with the customers' needs in mind; and, to this end, all supply chains ultimately exist to ensure that a customer's needs are satisfied. The way that customers can be satisfied differs for each of the above choices. The relative merits of Strategy 1 and Strategy 2 therefore depend on the type of product or service being considered.

For CC and AMC, made-to-order products and emergency services require a response to a customer order or request. This is a supply chain 'pull' process as it is demand driven.

Key factors include:

- being aware of customers' needs and keeping in communication. With made-to-order products, the holding of adequate raw materials and components to make the goods is essential as, if these need to be ordered from CC's or AMC's own suppliers, then this may lengthen the lead time significantly. Strategy 1 has a greater strategic presence in the geographical location of the customer (Australia and SE Asia) hence may have a comparative advantage in this respect.
- flexible manufacturing systems are also key to being able to commence manufacture as soon as a bespoke order is received. The UK factory used in Strategy 2 is larger and more established and may therefore provide an advantage in terms of flexible manufacturing over the factory in Strategy 1.
- transportation is perhaps the greatest difference between the two strategies. The maximum scope of Strategy 1 is 4,000 kilometres, with many customers being much closer within Australia. In contrast, in order to supply the Australian market under Strategy 2 the goods need to be transported across the world. As they are significant in size they need to be transported by ship which takes many weeks.

Similarly, to supply emergency maintenance there needs to be a significant local presence with associated expertise. This seems more likely with a factory that makes the goods located in Australia, particularly if some components are needed as part of the maintenance. The maintenance group is also larger with Strategy 1 than Strategy 2.

Overall therefore Strategy 1 is very much favoured for made-to-order goods unless the customer knows significantly in advance of delivery which products are needed and therefore the lead time becomes unimportant. Thus, for instance, if a cable breaks unexpectedly and needs to be replaced it would be difficult under Strategy 2 to make and supply the item within a reasonable timeframe as there is no local manufacturing facility.

For standard goods and routine maintenance the problems of supply chain management are different. For standard goods, the 'push' model is appropriate and the response to uncertainty in customer orders can be to hold inventories to reduce lead time and improve customer service. In the 'push' model, CC or AMC can produce goods according to schedules based on historical sales patterns. At first, as Australia is a new market, demand may be hard to predict but, once demand patterns have become established, Strategy 2 may be able to accommodate this type of demand by holding sufficient inventories in its distribution centre.

Strategy 1 can similarly hold inventories but, as it can fine tune inventory levels more quickly from local factory production, it has a more flexible system of supply and distribution and inventory management. Thus the levels of inventory and associated holding costs are likely to be lower.

For routine maintenance there appears little difference between the two strategies as appropriately skilled staff can be employed under either option with adequate human resource planning.

Overall, the essence of the decision for the most appropriate supply chain and distribution system is a balance between responsiveness and efficiency. Strategy 1 seems superior in being able to satisfy customer needs. While the initial cost of Strategy 1 is much greater than Strategy 2 it reduces transport costs for the delivery of finished goods to the customer. Raw materials and components are also supplied locally with Strategy 1 and so it is independent of deliveries of any inventories from Europe. Also, revenues are higher under Strategy 1, presumably because more types of products can be supplied to customers to meet local needs and supplies are more efficient with a much shorter lead time for many types of product.

Overall for the above reasons Strategy 1 seems the preferred choice.

(2) Methods of Finance

The key differences in the methods of debt finance for Strategy 1 are:

- The currency in which the debt is denominated
- Whether the parent should raise the loan or AMC
- Differences of detail in the terms of the loan arrangements

<u>Currency</u>

A key difference is that with Method A the loan is raised in A$ while with Method B it is raised in £ sterling.

The key currency risk is the risk to the group rather than the risk to the subsidiary, as ultimate ownership rests with the group.

Strategy 1 is generating operating profits in A$, therefore this presents a currency risk to the parent as it is based in the UK. The functional currency of the parent is likely to be the £ as all costs are incurred in £s, even though more revenues are earned in euro.

Borrowing in A$ therefore provides a hedge against A$ denominated net operating cash inflows. Also, however, assets are based in Australia and are therefore valued in A$. Having a A$ denominated liability would therefore also provide a hedge against exchange rate movements affecting asset values.

Thus borrowing in A$ (Method A) is a more effective method of hedging than borrowing in £ (Method B).

Parent or Subsidiary

Leaving aside the above currency argument, the parent as an established entity may be better placed to raise a loan (Method B) than the subsidiary, which lacks a track record or a significant asset base. It also has a forecast income stream that is deferred for at least one year (or two years with a year-end operating cash flows assumption). CC is also likely to have a longer term relationship with the bank. These factors would reduce the risk to the lender and might reduce the cost of borrowing.

The fact that CC is offering the bank guarantees under Method A would reduce the reputational risk difference as CC as parent is standing behind the subsidiary. However the terms of the guarantee would need to be considered (eg whether there are limits or restrictions on the guarantee).

Differences of detail

It is apparent that the parent can borrow at a lower interest rate than AMC. This is discussed further below.

Another difference is the term of the loan. Under Method A the term of the loan is 15 years, whereas under Method B it is only 10 years. This favours Method A as it improves liquidity in not having to refinance a major loan after 10 years, in a new venture.

Method B has another problem. CC is borrowing over 10 years but relending to AMC over 15 years. The terms of the two loans are not therefore matched and CC could be exposed to repaying a loan in 10 years without receiving the repayment of its loan from AMC for a further 5 years.

There may be other differences which would need to be verified. These may arise from different national laws, difference tax allowances and reliefs and different covenants in the loan agreement.

Difference in interest rates

There may be many reasons for the difference in interest rates of 5% and 4.8%. These include:

- The loans are denominated in different currencies. Interest rate parity would suggest that currency markets would compensate for expected differences in foreign currency movements by adjusting interest rates to leave an investor indifferent when considering where to invest surplus cash (taking both interest rates and currency movements into consideration).
- The risk on the loans may be different due to the company which is undertaking the borrowing, the security being offered or different covenants in the loan agreements.
- The time periods of the loans are different and therefore the term structure of interest rates would suggest that liquidity preference risk for the lender would be higher on a longer term loan and therefore the rate of interest would be higher. A further factor to consider is expectations where the long term yield curve is a function of the market's expectations of future interest rates. Changes in the supply of debt may also influence interest rates.

Recommendation

More information is needed (on covenants, tax, forward currency rates) but based on the information available a preliminary recommendation is that Finance Method A is to be preferred, despite the slightly higher interest rate of 5% compared to 4.8%.

The key factors are that it provides better currency matching with Australian operations; the longer term of 15 years provides more long term liquidity; and the issue of mismatching terms of the loan for CC is avoided (although this latter issue can also be avoided by changing the internal refinancing arrangement rather than the selection of the external loan).

(3) Assurance report

Many of the assurance issues are common to both methods of finance. These common issues are therefore considered first, then issues specific to each financing proposal are addressed.

Two key risk issues for the bank are:

1. Assurance over whether the business is viable and whether sufficient cash flows will be generated from operations in order to repay principal and interest over time (debt servicing ability)
2. If the repayments cannot be made are there sufficient assets that can be realised on liquidation to repay the loan (security in the event of default).

Providing assurance in respect of forecasts is covered by ISAE 3400, The Examination of Prospective Financial Information.

Prospective financial information means financial information based on assumptions about events that may occur in the future and possible actions by an entity. This would relate to the forecasts of cash flow and profits made by AMC to support its application for finance.

In this respect, a forecast is defined as prospective financial information based on assumptions as to future events which management expects to take place and the actions management expects to take (best-estimate assumptions).

The areas where MM needs to obtain sufficient appropriate evidence are:

- MM needs to satisfy itself that CC management's best-estimate assumptions on which the prospective financial information is based are not unreasonable and, in the case of the hypothetical/working assumptions, that such assumptions are consistent with the purpose of the information, (ie to raise new loan finance). This will require ascertaining that AMC sales volumes are realistic for the prices being charged in the markets being accessed (eg existing market prices and revenues generated by rivals selling cabling products in Australia and South East Asia). To be able to do this MM will need clear evidence (eg market research) collected by AMC staff (perhaps during the feasibility study) to support the forecasts provided.
- The prospective financial information is properly prepared on the basis of the assumptions i.e. that the financial information produced (ie AMC's revenues, costs, cash flows) is consistent with the assumptions in amount and timing.
- The prospective financial information is properly presented and all material assumptions are adequately disclosed, including a clear indication as to whether they are best-estimate assumptions or hypothetical/working assumptions
- The prospective financial information would normally need to be prepared on a consistent basis with historical financial statements, using appropriate accounting principles. However this is not possible as AMC is new to the Australian and South East Asia market and hence there is no historical information to support the assumptions and forecasts. This is a key risk issue.

It is clear that as prospective financial information is subjective information, it is impossible to give the same level of assurance regarding forecasts for AMC, as would be applicable to historic financial information for its historic performance. In this instance, limited assurance, in the form of a negatively expressed opinion, is the best that could be achieved.

<u>Finance Method A</u>

Providing security for the loan in the form of available assets that can be sold on liquidation is a key issue. In this case however the asset base comprises not just the assets of AMC but also those of the parent, CC, which has guaranteed the loan.

A key issue would be the type of charge taken over the assets. If there is a fixed charge over the factory then this would need to be valued by an expert in property valuation. However, at the time the loan is taken out it may be that only the land is owned, and may be not even that.

If there is a floating charge, then the assurance report would need to consider all assets falling under the floating charge.

Given the infancy of AMC at the time the loan is to be raised, then the parental guarantee is crucial. The assurance report needs to assess the validity of the terms of any agreement from the perspective of the bank and the ability for CC to fulfil these terms from its own asset base.
Another key concern is the high level of financial gearing resulting from the low proportion of equity, which means that the bank is subject to significant risk.

Finance Method B

Providing security for the loan in the form of available assets would in this case mean assessing the value of CC's assets that form the basis of any fixed or floating charge. It would also need to be considered what other charges are held over these assets by other lenders.

A particular issue is the going concern of CC and therefore its ability to fulfil any guarantees. A risk in this respect is that CC wishes to borrow from the bank over a 10-year term but has made a loan to AMC for the amount borrowed for a 15-year term. CC's ability to repay the loan to the bank in 10 years therefore needs to be assessed.

(4) Financial Reporting

Strategy 1

Consolidated financial statements

AMC is a subsidiary of CC (either wholly owned or 80% owned depending on whether the offer from BTZ is accepted – see below).

For the preparation of financial statements, AMC needs to determine its functional currency which is likely to be the A$. At the year end, however, it is necessary for AMC to translate its results into the presentation currency of CC, which is the £, in order to be included in CC's consolidated financial statements.

Variations in the £/A$ exchange rate will impact upon the consolidated results so, for example, if the A$ depreciates against the £ then the value of A$ denominated revenues will fall when expressed in the presentation currency of the group (ie the £).

Intra group items will need to be adjusted on consolidation. There is little trading between group companies as AMC sources it raw materials and labour locally. However there may be group management charges.

Also, a key intra group item is financing under Financing Method B. Here there is an intra group loan from CC to AMC denominated in A$. This would cancel on consolidation with exchange gains and losses netting off.

Foreign currency transactions

AMC will enter into transactions denominated in a currency other than its own functional currency (the A$) eg from sales in SE Asia. It must translate these foreign currency items into its own functional currency according to IAS 21, in its individual company financial statements. Thus, for example, sales made in South East Asia and any receivables outstanding in respect of these, as monetary items, will need to be translated into A$ in the individual company accounts of AMC. These in turn will then be translated into £s as the group presentation currency, as noted above.

Construction costs

The first year following incorporation will be spent constructing the factory. These costs will be capitalised but also the interest on borrowing to build the factory will be capitalised with an offset for interest earned on unused funds.

Related parties

If BTZ acquires 20% of the share capital of AMC (see below) then potentially it could have significant influence and AMC would need to be treated as an associate of BTZ. If this is the case then transactions with BTZ would be treated as related party transactions, including any transaction with the directors.

Contingent liability

The guarantee for the bank loan under Finance Method A may need to be disclosed as a contingent liability.

Operating segment

AMC is largely independent of CC, which is a listed company. AMC would, in accordance with IFRS 8, therefore qualify to be treated as an operating segment in the group financial statements. Under IFRS 8, para 5, AMC would qualify as an operating segment from 2016, even though no revenues are expected to be earned in that year. As an operating segment, there would be separate disclosure of AMC's operating results (revenue, expenses, segment profit), assets and liabilities, in the group financial statements.

Strategy 2

Under this strategy, the division is part of CC for accounting purposes so its results, assets and liabilities are treated as those of the CC parent company.

The foreign currency translation issues relating to the division therefore relate to transactions and balances being translated into the functional currency of CC (most likely, but questionably, the £). The issue of presentation currency does not arise as there is no issue of consolidation.

Assuming that the CC functional currency is the £ then the Australian and South East Asian revenues are required to be recognised in £s at the spot exchange rate at the date on which the transaction took place. The date of the transaction is the date on which the transaction first satisfied the relevant recognition criteria. If there are a high volume of transactions in foreign currencies by the division, translating each transaction may be an onerous task, so an average rate may be used.

The new distribution centre represents a foreign currency asset which is a non-monetary asset. Non-monetary items will not require retranslation so those acquired on 1 January 2016 will be translated at £1 = A$1.8 and would not be retranslated. Their value in the statement of financial position of CC would not therefore be affected by subsequent exchange rate fluctuations.

Receivables represent another foreign currency asset but they are a monetary asset. These assets will need to be translated into £s as CC's functional currency at each reporting date.

Monetary assets would therefore be affected by subsequent exchange rate fluctuations and resulting exchange gains or losses impact on profit.

The division would also probably qualify as an operating segment in accordance with IFRS 8 (see above).

(5) Ethical issues

Proposed collaboration between CC and BTZ

BTZ became aware of CC's intentions in Australia due to one of our ex-employees on the feasibility study team joining them. This may be regarded as a breach of confidentiality but more information would be needed on employee obligations in the employment contract to form a firm conclusion. If the ex-employee is a member of a professional body such as the ICAEW then disciplinary procedures may be appropriate as a breach of confidentiality.

The email from the BTZ procurement director is making a commercial offer. The declared intention not to purchase goods from AMC unless BTZ is allowed to acquire a 20% shareholding may be regarded as part of normal business negotiation. It is directed towards the company rather an individual so could not reasonably be considered to be an intimidation threat.

An ethical risk is however that the offer to acquire shares at their nominal value is likely to be below market value and not at arm's length. The nominal value on incorporation is only A$9m so 20% would only be a consideration of A$1.8m (or £1 million). This is unlikely to be helpful in financing AMC.

While more facts are needed there are potential ethical risks arising from conflicts of interests between the personal interests of directors and those of their companies.

The procurement director has control over purchases including any from AMC. He is also suggesting that he should have a seat on the AMC board, and perhaps receive personal remuneration for this. The ethical risk is therefore that he will treat AMC favourably to the detriment of his company, BTZ, in return for inflated remuneration for his services to AMC as non-executive director.

The appropriate action would be transparency so the BTZ board is aware of all arrangements between AMC and the procurement director.

<u>BTZ letter to Frank</u>

The letter to CC's chief executive may suggest a further conflict of interest between the personal interests of a director and the company. In accepting the transfer, Frank may have received a personal benefit in the form of BTZ shares, although more information is needed.

The risk here is that Frank may approve the acquisition of a 20% shareholding in AMC by BTZ (even though it is likely to be a poor commercial transaction for CC) as he is receiving a personal benefit.

Unfortunately, the manner in which this information was acquired is itself ethically questionable on the grounds of integrity and confidentiality in looking at private information.

The most appropriate action would be to disclose to Frank the means by which the information was acquired but then require an explanation of the letter. Informing the CC chairman of the facts would be appropriate.

There is an additional ethical risk that the two conflicts of interest may be illegal particularly with reference to the Bribery Act. Legal advice should be acquired once the facts are established.

Examiners' comments

Requirement 1 – Analysis of the two strategies

NPV
Most candidates made a good attempt at this element of the question, although only a minority presented a completely correct answer. The most common errors made were in respect of the cash flow timings. Subsequent marks were however awarded for discounting consistently with the candidates' own cash flow timings. Many candidates were not able to discount the perpetuity correctly. Some weaker candidates recalculated the cash flows, even though these were clearly given in the question scenario.

Sensitivity analysis
Calculations: Some candidates made sensible attempts to try to calculate the sensitivity of the NPV to future exchange rate fluctuations. Some candidates ignored the guidance given in the question that the rate change would not occur until 1 January 2017 and therefore calculated sensitivity based on an immediate change. Other candidates correctly set up the sensitivity calculations, but were unable to solve for the sensitivity rate. Common errors were for candidates to either: choose an exchange rate and discuss the change in NPV of the project (rather than calculate the exchange rate which would result in a 0 NPV): or to calculate the IRR of each project.
Explanation: Most candidates made reasonable comments about exchange rate fluctuations. A lot of candidates used an approach of looking at exchange rate risk in terms of translation risk, transaction risk and economic risk. This was a fair approach that resulted in good answers for some; however others used it to give 'textbook' answers with little or no application to the scenario. Those candidates who did arrive at a break even exchange rate, often did not then comment sufficiently on whether this meant that A$ need to appreciate or depreciate relative to the £.

Supply chain management and distribution
This requirement on supply chain management and distribution was generally well answered, with most candidates commenting on both strategies, as well as a wide range of points relating to both the inward and outward supply chains. The best answers also incorporated the different types of product and service that CC provided and how they would be impacted under each strategy. Weaker candidates gave 'textbook' answers with little or no application to the scenario. Few candidates split their answer to consider the goods and servicing aspects separately. Similarly, few candidates considered the nature of the business in that both maintenance services and emergency responses were required from customers and that these would have a different impact on the supply chain and distribution than supplying routine services or standard products.

Requirement 2 – Debt finance
Most candidates answered this question by looking at Loan A and Loan B separately, rather than comparing the different features of the two loans. This resulted in many candidates missing some of the key features to be contrasted, such as whether the loan was taken out by the parent or subsidiary company. Candidates were generally able to explain the currency issues related to each method of finance as well as discuss some of the detailed terms of each loan such, as the implications of the guarantee and security being offered or the length of each loan. Many candidates failed to answer the question regarding the differences in interest rates, and those that did often gave very brief answers. A recommendation of which finance method to take was often answered briefly by unsubstantiated assertion, or not answered at all.

Requirement 3 – Assurance
This element of the question received a mixed response. Strong candidates correctly identified that the prospective information was questionable, identified the key issues for the lenders, and how an assurance report would help the lenders. Weak candidates ignored the requirement which asked them not to give a list of assurance procedures. These candidates often answered as a list of due diligence procedures. Also, many candidates did not split their answer to look at each loan separately. A disappointing number failed to comment on the need to provide evidence of security for the loans or indeed the type of charge that might be taken out over the assets and how this would impact on the assurance work.

Requirement 4 – Financial reporting
Most candidates correctly identified some of the key financial reporting issues including the requirement for the subsidiary to be consolidated and the division not requiring consolidation. The majority were also able to discuss the need for transactions and the statement of financial position items to be translated; recognising the different translation issues for the subsidiary and the division. A number of candidates also discussed IFRS 8 in their answer. However, few candidates pitched their answers widely enough to take into account the range of other financial reporting issues that could be generated by the proposed strategies including: construction contracts, related parties and contingent liabilities.

Requirement 5 – Ethical issues
Good answers were provided for this element of the question with most candidates looking separately at the two issues and suggesting sensible actions to take. Weaker candidates either suggested few or no actions, or the actions they did suggest were extreme, inappropriate or generic such as ‘speak to the ICAEW’. Even though it is reassuring to see candidates taking ethics seriously, some candidates fail to see that this is a very sensitive area and often appear to believe they are ‘playing safe’ when they suggest the most extreme actions, when they may not be a necessary or appropriate response.

Question 2 - Paige plc

Scenario

The company in this scenario, Paige, produces processed, packaged foods. It has a number of subsidiaries, one of which is SP in which Paige has an 80% shareholding. SP produces and sells a range of milkshake products which are designed to be used as meal replacements to help consumers to lose weight. The candidate works for DBP, a firm of business advisors, which has Paige as a client.

SP's performance has declined significantly since acquisition. Two mutually-exclusive strategies have emerged in Paige's board discussions about the future of its investment in SP. *Strategy A* is to retain the investment in SP and to use SP as a vehicle to build up Paige's presence in the weight-loss market, under one or more of four possible proposals. *Strategy B* is to dispose of SP as quickly as possible and use the funds released to build up the core business of food processing.

Candidates are required to prepare a working paper comprising:

(1) An assessment of SP's market environment and an evaluation of the key risks currently facing SP.
(2) An evaluation of Strategy A (Exhibit 3). Explain the benefits and risks associated with each proposal identifying which, if any, of the four proposals are acceptable.
(3) An evaluation of Strategy B (Exhibit 4).
    (i) explain the benefits and risks associated with this strategy; and
    (ii) evaluate the acceptability of the £18 million offer that has been received from the private equity fund for Paige's 80% shareholding in SP. Determine and explain SP's cost of equity and price earnings (P/E) ratio implied by the private equity fund's offer. Determine and evaluate relevant alternative valuations and briefly note any additional information that you would require to refine your valuation.
(4) A preliminary reasoned recommendation as to which strategy Paige should adopt.

Requirements	Skills	Skills assessed
(1) An assessment of SP's market environment and the risks currently facing SP. For this purpose, ignore the proposed strategies.	8	• Identifying that UK market is saturated and Paige does not have a presence in other markets • Identification of business, product life cycle and financial risks • Evaluation of the risks
(2) An evaluation of Strategy A (Exhibit 3). You should explain the benefits and risks associated with each proposal identifying which, if any, of the four proposals are acceptable.	14	• Identify relevant risks • Identify relevant benefits • Discussion - brand value may be lost if operations are transferred to a new range of products • Use of appropriate analytical approach (e.g. Porter's Five Forces) • Proposals 2 and 3: link need for new infrastructure investment with Paige's existing high gearing • Discuss relative ROCE of SP and Paige • Discuss problems of entering new markets • Identify problems in entering new markets in developing countries • Reasoned conclusion as to the viability of each proposal

(3) An evaluation of Strategy B (Exhibit 4). You should: (i) explain the benefits and risks associated with this strategy; and (ii) evaluate the acceptability of the £18 million offer that has been received from the private equity fund for Paige's 80% shareholding in SP. Determine and explain SP's cost of equity and price earnings (P/E) ratio implied by the private equity fund's offer. Determine and evaluate relevant alternative valuations and briefly note any additional information that you would require to refine your valuation.	14	• Identify relevant risks • Identify relevant benefits • Calculation of implied value of K_e and P/E • Evaluation of relevant alternative valuations • Identification of additional information required and alternative approaches to valuation • Identify embedded point that sale of SP would mean transfer of obligations including the debt that falls due for repayment on 31 March 2017
(4) A preliminary reasoned recommendation as to which strategy Paige should adopt.	4	• Make a recommendation based upon findings in (2) and (3).
Maximum marks	**40**	

To: Josie Welch
From: Nat Ahmed

WORKING PAPER

(1) SP's market environment and key risks

Market environment

SP currently operates in a market where barriers to entry are low, and where competition has eroded its market share and profitability. Although the market for weight loss products is buoyant and likely to grow significantly, SP is not currently benefiting from the strong market. The strongest growth in the market for meal replacement products is projected to take place in relatively new overseas markets such as Asia, where SP does not have a presence.

SP's strength, such as it is, lies in the UK market which is likely to be saturated, and where competition will be keen. The company's sales and profitability have fallen, a decline which Paige attributes to the presence of new entrants in the market. While this may well be a relevant factor, other explanations are possible. For example, the company may not have been well-managed since its acquisition by Paige.

Key risks

The following risks can be identified:

Business risks:

- Barriers to entry to the market for meal replacement products are assessed by Paige as low. This means that there is a constant risk of new competitors who may be able to price their product more competitively, or advertise it more effectively, thus potentially eroding SP's market share.

Product life cycle risks:

- Charles Digby, Paige's CEO, attributes SP's loss of profitability to a slowing down of growth in the meal replacement market. There may be a risk that meal replacement products are nearing the end of their life cycle, and that they will be replaced by other products.
- There is no indication that SP is actively researching new products, and there is a risk that competitors may be making better progress in bringing new product variants to market

Financial risks:

- The financial information provided indicates that SP is currently quite highly-geared. Taking gearing as debt/equity, the actual gearing ratio in 2015 is 1.5 (40.5/27). No information is available about the company's cash resources or cash flow, but it may be that SP is subject to liquidity risk. If SP plans to extend its presence in markets outside the UK this will potentially expose it to a greater range of financial risks, such as exchange rate risks.

(2) Strategy A: proposals for developing SP's activities in the weight loss market

Although the market for weight loss products is likely to increase substantially over the next few years, the four proposals under Strategy A require careful evaluation as there are significant weaknesses associated with all of them. The proposals are not mutually exclusive and Paige's management would have to appraise the extent to which available investment should be apportioned between the proposals.

The first proposal, is to gradually phase out the meal replacement products and to use existing sales channels to promote a range of low-calorie ready meals. A reduction in one type of product will be matched by the build-up of another, and it is even possible that the production facilities for the meal replacement products could be adapted for production of ready-meals. The second and third proposals (web-based advisory services and investment in gyms and health facilities) would both be completely new directions for SP.

The final proposal, of establishing an overseas growth strategy in developing countries, could be applied to any of the three proposed new ranges of products and services.

Strategy A involves retention of the investment in SP. Its retention would form part of a major strategic move for Paige, i.e. strengthening and building its position in the weight loss market.

Potential benefits:

- Could help to diversify risks to Paige from its involvement in the food processing business
- Could use Paige's existing experience and sales channels in the food industry to sell a new range of low-calorie meals
- The potential market for the range of products and services suggested in Strategy A is obviously very large and is growing rapidly

Potential risks:

There are several risks involved in this strategy:

- The proposed strategy is diverse in nature and potentially involves entering markets in which Paige has little or no experience and no obvious core competences: web-based advisory services, gyms and health facilities and the market for diet products in developing countries

- Paige has not, on the evidence of SP's performance figures, made an outstanding success of running SP's current product line as revenues have been falling. However, the company has produced a net profit of over 4% over that period, despite the falling revenues, suggesting that costs are under control. Strategy A would involve exiting the market for the current product range which is, at least to some extent, profitable

- If the investment in SP is retained, it will presumably remain under the control of its directors who have apparently failed to make any significant return on the investment since its acquisition. Even if the investment was 'worth' £48 million upon initial acquisition (which is perhaps unlikely) its value has dropped significantly over a period of some six years

- In the event that an effective diet pill is developed by the pharmaceutical industry, the market for conventional diet products could disappear overnight. This is considered to be an unlikely contingency, but the uncertainty does exist, and if possible the risk should be quantified

- Barriers to entry to the market for diet products and services are low and there is a high risk of effective competition taking away market share

Examining each of the four proposals in turn:

1. Gradual phasing out of meal replacement products and promotion of a range of low-calorie ready meals

SP's success has been built upon the production and sale of meal replacement products. Any brand value that it has built up is entirely associated with this range of products. Paige is proposing to exploit the brand value by transferring its operations over a relatively short timescale to a different range of products. It may be that the old and new product ranges are sufficiently similar to allow for the transfer of brand value from one to the other but this is not guaranteed, and SP may lose value unnecessarily.

The proposed strategy is radical, and may not be necessary. It seems that demand still exists for meal replacement products and SP is an established supplier. Therefore, it might be preferable to retain this range of products, adding to it, rather than substituting it.

Porter's analysis of the competitive environment for businesses identifies five forces:
- Threat of new entrants
- Threat of substitute products or services
- Bargaining power of customers
- Bargaining power of suppliers
- Rivalry amongst existing competitors in the industry

<u>Threat of new entrants</u>: The market for low-calorie ready meals may well be poised for growth because of the anticipated increases in the numbers of people worldwide who are overweight or obese. However the products themselves are not likely to be technologically very complex and can easily be imitated. Any company that has existing sales channels through, e.g. supermarkets and other retailers, would be able, like Paige, to utilise these channels for distribution of meal replacement products. The threat of new entrants is high.

<u>Threat of substitute products or services</u>: There are many food producers in the market. Many of those producers are likely to be engaged in research and development into new products or variants on old products. If one producer succeeds in bringing a marginally-improved product to market, competitors can easily imitate the innovation. The threat of substitute products or services is high.

<u>Bargaining power of customers</u>: demand for weight-loss products is high, but one product can easily be substituted for another by a customer. Customers are unlikely to develop strong attachments to one particular brand of low-calorie ready meals. Supermarkets are likely to carry several different product ranges which will be easily substitutable. From the customer's point of view there is no cost in substituting one product range for another. Therefore, it seems likely that customers collectively have a high level of bargaining power in the market for low-calorie ready meals.

<u>Bargaining power of suppliers</u>: this is likely to be very low. Suppliers of food products for low-calorie meals will probably be the same generic suppliers as are already used by Paige. Paige's position as a bulk buyer will mean that suppliers have little bargaining power.

<u>Rivalry amongst existing competitors in the industry</u>**:** where barriers to entry are low, rivalry is likely to be at a high level. The market for weight-loss products is buoyant, with many existing suppliers. Although the expected rapid future growth of the market will allow for new entrants to the market in low-calorie meals to flourish, competition is likely to remain intense and existing market leaders will be unwilling to cede their leadership positions to new rivals.

2. A range of web-based paid-for advisory services

There are already well-established players in this market, and SP would be entering it for the first time. The threat of new entrants to this market is probably lower than for reduced-calorie ready meals, because of the need for investment in infrastructure and specialist staff. Nevertheless, barriers are not insuperable, and if SP were to succeed in entering this market it would face the threat of new entrants. The threat of substitute products or services is also high.

Customers' position is potentially somewhat weaker. Although there are substitutes, if the advisory services are provided in exchange for a monthly, or annual, subscription customers' power to switch is constrained.
Rivalry with existing suppliers will be high. Existing providers of such services will be unwilling to lose market share. Because the service they are providing is, to some extent, personal, they may have been successful in

building brand loyalty. SP's potential market would probably lie in new consumers who have not previously signed up for such a service.

Entry into this market would involve potentially significant investment. Assuming that SP's cash resources are limited any new investment would probably have to be supplied by Paige. SP is already highly-geared to a point where commercial lending arrangements might not be available or would be highly-priced.

3. Investment in existing gym and health facilities

The proposal is to invest profits from other products and services into existing gyms and health facilities. This would require a great deal of further investigation. SP's current ROCE is just below 7% (based on 2015 actual figures [£4.7 million/ (£27.0 million + £40.5 million) x 100]. Therefore a threshold requirement is that any investment should be able to yield at least 7%. Paige's own ROCE is significantly higher at just over 15%. Therefore it would make sense to invest any surplus generated by SP into Paige's own operations (if marginal return on capital can match the current average return), and to invest in other activities like gyms only if there was a high probability of returns above 15%.

There is a significant risk involved in this proposal, in that Paige has no existing presence in the sector, and, presumably, lacks knowledge, experience and core competences.

A final point is that profits generated by SP are relatively insignificant. In 2016 the company is forecast to generate a net profit after tax of £2.8 million. After deducting dividend, this would leave a maximum of £1.8 million in surplus retained profits. It would take many years' to allow for significant investment in gym and health facilities businesses.

4. Establishing new markets in developing countries.

There is clearly significant potential for expansion of the market for weight loss products into developing countries, given the scale of the obesity problem across the world. However, Paige is not necessarily best placed to exploit these opportunities; it has only limited experience of expanding its markets into other countries. The group's sales are principally within the UK. It has a growing presence in other parts of Europe, but this experience of markets outside the UK would not necessarily be helpful in establishing markets in developing countries. This fourth proposal could be combined with any or all of the first three proposals.

The least risky combination is likely to be with the first proposal; Paige could explore the possibility of exporting low-calorie ready meals to developing countries without committing significant resources. It may be possible to find a partner business or businesses already well-established in the target markets. Proposals two and three, however, present much more significant challenges. The provision of web-based advisory services would have to be carefully tailored to suit cultural conditions in developing countries. Investments in gym and health facilities, as noted above, is risky, but would be even riskier in developing countries because of e.g. currency risk, and the challenge of operating successfully in distant locations.

Evaluation

The analysis of the various proposals outlined above suggests that some are higher risk than others. SP may well be able to take advantage of the forecast increase in volume in the market for weight loss products and services, but the company should be advised to be selective in its targeted growth areas. Investment in gyms and health facilities does not appear to be a viable or realistic option. Expansion into paid-for web-based advisory services carries significant risks, and should probably be rejected.

With a high level of competition and low barriers to new entrants, the SP business may not prove to be particularly profitable. There is a further problem in that Strategy A proposes an overseas growth strategy, specifically in developing countries. However, it appears that Paige has no experience in such markets and only limited experience in establishing markets outside the UK.

A final point is that a significant threat to the whole weight loss market exists in the form of a potentially effective pharmaceutical product. As noted in Exhibit 1, dieters would most welcome an effective pill. If such a product were to be developed, the market for other weight loss products and services would most likely disappear.

Although this outcome currently appears unlikely in the immediate future, it is a risk, and it should inform future strategy if Paige stays in the weight loss market.

This analysis should be firmed up by more detailed investigation of the existing and potential market for weight loss products and by detailed competitor analysis.

Strategy B: proposal to dispose of investment in SP

Potential benefits:

- The investment could realise cash of at least £20 million which would be available for investment in Paige's core business. Paige can earn a ROCE of around 15%, which is substantially in excess of SP's ROCE (which can be calculated for 2016 as [5.3/(20.0 + 40.5) x 100] = 8.8%)

Potential risks:

- Paige may have overpaid significantly for its investment in SP. Disposing of the business could have adverse reputational effects for Paige, at least in the short term
- In adopting Strategy B Paige could be exiting a highly lucrative and rapidly growing market. Although barriers to entry to this market are low, it would require time and investment to re-enter and the disposal could prove to be an error

SP's Cost of Equity and P/E ratio implied by the private equity fund's offer

Valuation of SP

A private equity fund has set an 'informal' valuation figure of £18 million for Paige's 80% holding in SP. This compares very unfavourably to the £48 million paid for the investment in 2009. The offer of £2 million for Claudia Svelte's 20% share of the company is, apparently, insufficient to induce her to sell. If the private equity fund genuinely wishes to purchase her 20% of the company it will probably have to offer more. However, the two offers taken together do allow for an overall valuation of £20 million for the company which is based on a firm offer and which is therefore a useful benchmark for further work on valuation.

SP's implied cost of equity

SP's cost of equity can be estimated using the food processing industry WACC of 7.5%, with similar gearing to SP.

First, the cost of SP's debt can be calculated as follows:

Cost of debt at 31 March 2016 (per £100 of debt) using 5% as the appropriate before tax yield and a 20% tax rate.

K_d = 5% (1-0.2) = 4%

Because WACC and Kd are known, Ke can be estimated as follows, based upon a valuation for the whole company of £20 million:

$$
\begin{aligned}
\text{WACC } (0.075) &= [K_e \text{ x } (20.0/\{20.0 + 40.5\}) + (0.04 \text{ x } (40.5/\{20.0 + 40.5\})] \\
0.075 &= (K_e \text{ x } 0.33058) + 0.026777 \\
K_e &= 0.146 \text{ (approximately)} \\
&= 14.6\%
\end{aligned}
$$

This is a relatively high cost of equity, because it reflects the high business risk attached to the entity and also the equity is subject to high gearing.

SP's implied P/E ratio can be calculated as the reciprocal of K_e as follows, using the K_e estimated above;

1/0.146 = 6.85

Valuation: income-based models

Dividend valuation model

A dividend valuation model could be used to estimate SP's value. The constant growth model is likely to be suitable given the assumption provided. This is expressed as follows:

$$P_0 = \frac{D_0(1+g)}{(K_e - g)}$$

Where:

P_0 = Market value
D_0 = Dividend
g = Growth rate in earnings and dividends
K_e = Cost of equity

Although the dividend actually paid in 2014 was £0.5 million it would be reasonable to use the intended annual future dividend of £1.0 million.

Using these values at for a 31 March 2016 valuation:

$$P_0 = \frac{(£1 \text{ million} \times 1.08)}{(0.146 - 0.08)}$$

= **£16.36** million

P/E ratio

Using the implied P/E ratio of 6.85 and the 2016 forecast earnings of £2.8 million produces a valuation of:
£2.8 million x 6.85 = **£19.18** million

Alternatively, the valuation can be estimated by using the P/E ratio of a suitable comparable company. However, neither Wensley Products nor Paige are directly comparable and therefore a valuation based on the P/E of either must be treated with caution.

There is further uncertainty regarding whether or not current levels of profitability can actually be maintained. If SP loses the contract with Purseproud Supermarkets revenue will be reduced by around £4.3 million per annum. It is not possible to estimate the effect that the loss of this revenue would have on profitability without further information about fixed and variable costs. Also, it is possible that the loss of the contract could have adverse reputational effects and other contracts may be lost.

For the reasons given above any valuation based on P/E ratios that takes projected earnings for 2016 into account must be treated with professional scepticism.

Using Wensley Products' P/E gives a valuation of 9.4 x SP's forecast profit for 2016 of £2.8 million: £26.3 million. A similar calculation using Paige's own P/E produces a valuation for the whole company of 9.9 x £2.8 million: £27.7 million. However, much depends upon the reliability of the 2016 projected profit figure. The forecast statement of profit or loss suggests an increase in revenue of over 20%, and an increase in profits of 21.7%. Increases of this magnitude, under the same management in a declining market, seem inherently implausible.

The same calculations as above based on reported 2015 figures would give the following:

Using Wensley Foods P/E: 9.4 x £2.3 million = £21.6 million.
Using Paige's P/E: 9.9 x £2.3 million = £22.8 million.

These valuations are much closer to the offer price, and may be more realistic.

Asset-based model

Net asset value can provide some indication of company value, especially if assets and liabilities are stated at fair values.

The value in use of the non-current assets is estimated by the finance director to be £68.3 million at the proposed date of sale. This is (£68.3m - £65.1m) £3.2 million above the carrying amount. Assuming that the fair value of all other assets and liabilities at 31 March 2016 approximates to the carrying amount, this gives a valuation for equity at that date of (£28.8 m + £3.2m) £32 million. However, a degree of professional scepticism needs to be applied to this figure from the finance director as the dividend and earnings models give a much lower figure of future earnings to be generated from the assets.

More realistically in terms of the value of non-current assets is the fair value less costs to sell which is £60.2m which is lower than the carrying amounts. (No impairment is required as the recoverable amount is greater than the carrying amount if the finance director's estimates are to be believed).

This is (£60.2m - £65.1m) £4.9 million below the carrying amount of the assets. Again assuming that the fair value of all other assets and liabilities at 31 March 2016 approximates to the carrying amount, this gives a valuation for equity at that date of (£28.8 m - £4.9m) £23.9 million.

Summary of valuations:

Informal private equity fund valuation	£20 million
Dividend growth	£16.36 million
P/E basis – current earnings	£19.18 to £22.8 million
P/E basis – forecast earnings	£26.3 to £27.7 million
Asset basis	£23.9 million

The information provided by the finance director allows for the application of income-based and asset-based models of valuation. There are other, potentially more useful, approaches that could be taken that would focus upon cash flow and valued-based models, but more information would be required. For the purposes of this initial report we can use a relatively limited number of approaches in order to establish a range of values, but Paige and/or ourselves should produce a more exhaustive range of valuations before any negotiations are undertaken.

Valuation: discussion

The private equity house informal valuation of £20 million may represent a reasonable starting point for negotiation. It seems from the information available that a realistic valuation for Paige's holding in SP may be in the range of about £16 million to £27 million. However, the valuation methods outlined above would require further refinement. Using the P/E model on the basis of comparable companies is valid only where a suitable comparator company can be found and neither of the P/Es cited appear more than superficially comparable.

Use of the implied P/E ratio is likely to be more reliable. The dividend valuation model is based upon the directors' intention that a dividend of £1 million, growing at 8%pa, would be paid. Although the company would appear to have been capable of paying a dividend at that level (based on profit after tax) in both 2015 and 2014 it did not actually do so. Also, there is no indication from the information given of SP's cash position.

The asset-based model can constitute a realistic approach to company valuation. However, it would require a much more rigorous valuation of the component elements of assets and liabilities. The only adjustments made so far have been in respect of the finance director's estimate of the value in use of non-current assets. These valuations would require refinement in the form of an unbiased third-party valuation.

A further, very important, point is that if SP is sold to the private equity fund, the fund will take over responsibility for SP's liabilities, and the obligation to repay the debt to Paige on 31 March 2017. This factor alone is likely to make the offer by the private equity fund worth considering. If the sale does not take place, the debt remains a substantial intra-group item.

Other approaches to valuation are possible, and arguably have greater validity. Information in the form of cash-flow forecasts for a three- to five-year period would provide the means for a valuation based on net present values.

Any valuation information that is provided in DBP's report must be accompanied by appropriate caveats and requests for further information.

<u>Preliminary reasoned recommendation</u>

The preliminary recommendation is that Strategy B should be adopted. The key argument in its favour is that Paige is capable of earning 15% ROCE, which is far higher than the comparable figure for SP. Also, if the offer from the private equity fund is accepted, a significant amount of debt, between Paige and SP due for repayment in 2017, can be removed from the Paige Group's liabilities. However, a great deal more analysis and information would be required in order to turn this from a tentative into a firm recommendation. Strategy A is muddled and contains too many proposals, none of which appear attractive on the basis of current analysis.

Examiners' comments

Requirement 1 – Market environment and key risks
This element of the question was generally well answered by the majority of candidates. Most made sensible comments on both elements of the requirement, although the market environment was usually better answered than the key risks. Some candidates used various models to answer the questions such as PESTEL or Porter's Five Forces – this usually gave good structure to the answer and ensured candidates addressed key areas. Weaker answers to this question tended to focus solely on Paige and SP without making specific reference to the market environment.

A significant minority of candidates analysed the financial information given in the question scenario. Stronger candidates then went on to make sensible comments about the market environment and the risks in using this analysis. Some weaker candidates did not separately address the two elements of the requirements 'market environment' and 'key risks' and many of these answers discussed issues more generally, without fully addressing the requirement.

Requirement 2 – Strategy A
This section received a good response by most candidates. Most addressed each possible option individually and discussed the advantages and disadvantages of each. Stronger candidates went into quite detailed discussions of the benefits and risks specific to each strategy in the context of what had been identified about SP and the market environment from the first requirement.

Some weaker candidates gave bullet point lists without developing the points raised. For example, with regards to the third option of investing in gyms and health facilities, some candidates said this would cost a lot without looking at the specific financial implications for SP. Most candidates did give a conclusion of which proposals should be undertaken, but few gave a detailed and reflective evaluation. Concluding comments tended to be brief, often just summarising what had previously been stated.

Requirement 3 – Strategy B
This section received a mixed response from candidates. Most candidates made good general comments on the potential benefits and risks of undertaking Strategy B. Only the strongest candidates specifically mentioned ROCE, with many simply saying it would be good to have the cash injection into the business and not adding much more to this in terms of the return that the extra investment would be expected to generate.

With regards to the answers on the valuation of SP, this element received very varied answers from candidates. Only the very strongest candidates were able to make good comments on a range of different valuation techniques that could be used and then summarise them appropriately.

Again, weaker candidates lacked the ability to think widely to identify and apply a range of different valuation methods, and comment on their validity. Having identified a valuation method, various errors were made and it was disappointing to see that a lot of candidates could not cope with the calculations required. Most struggled to work backwards from the WACC% to get K_e, and those who identified the correct method would often pick up the wrong values for debt and equity. Credit was given for alternative methods of finding K_e. The asset-based valuation models were generally answered reasonably well, with a lot of candidates giving accurate answers.

Requirement 4 – Recommendation
Answers to this element varied greatly. Some candidates presented quite detailed, reasoned recommendations, but some gave one sentence unsubstantiated recommendations, or failed to make a recommendation at all.