SECURITIES & INVESTMENT INSTITUTE

SECURITIES & INVESTMENT INSTITUTE DIPLOMA

SUMMER 2008

CHIEF EXAMINER'S REPORT – INTERPRETATION OF FINANCIAL STATEMENTS

Most students made a fair attempt at the paper. As ever more careful reading of questions would have benefitted a good number of students.

Part A - Question 1

This question is based on Lavendon Group's Annual report and Accounts 2007. Assume you work for a competitor of Lavendon and are writing a report for your manager, the commercial director. Your report should include the following information.

a. Present a numeric and discursive overview of Lavendon and its performance over the last year. (6 marks)

Generally reasonable answers. Some were just words with no numbers, a few just numbers with no words. Many did not mention the increased gearing alongside the acquisitions – clearly a key change and potential issue.

At first glance, Lavendon had an amazing increase in sales and profits, but much of this comes from expansion by acquisition. It presents itself as a multinational and it has indeed made some steps in this direction in 2007. 57% sales are now from the UK (65% in the previous year) and 60% of profits. Much of the expansion has been in Germany and UK and German sales together make up 83% of sales in 2007, the same as 2006.

Overview	*Lavendon*	
	2007	2006
Turnover	186,000	124,740
% increase	49%	
EBITDA	64100	38300
% increase	67%	
Operating Profit	26,181	12,665
	107%	
Profit for the year (earnings)	15,043	7,078
	113%	
Operating Cashflow	48,646	29,604
Change	64%	
Capital and Acq. Expenditure	62,203	27,598
% increase	125%	
Total Debt	202,447	109,323
	85%	
Employees	1702	1224
% increase	39%	

All of the measures above are showing strong growth (there are others that would be equally good), although it is very difficult to assess the organic growth, as opposed to the acquired increase in sales. Acquisition expenditure in 2007 was high and total debt rose 85%. Profits increase more dramatically than sales supporting the argument presented in the OFR of high operating leverage.

b. Carry out a ratio analysis of Lavendon group, discussing the meaning and interpretation of the ratios calculated. Focus on the following ratio categories:
   i) Performance (10 marks)

Generally good answers. Reasonable ratios usually correctly calculated. Comments were rather short on a few scripts.

Performance	*Lavendon*	
	2007	2006
Return on capital employed	8.55%	6.30%
Return on CE (pre exceptionals)	9.37%	6.30%
Gross margin	46.56%	44.21%
Operating profit margin	14.08%	10.15%
EBITDA margin	34.46%	30.70%
Asset Turnover	0.61	0.62
Sales per Employee	£109,283	£101,912
Profit per Employee	£16,856	£10,347

(Note: I do not expect all of the above ratios –one margin would be fine- and will also accept other valid calculations, pre or post exceptionals for example)

All of the above measures are improving apart from asset turnover. ROCE has risen by about 50%, but the OFR suggests that the company is still not happy with this level.

All of the improvement in ROCE has come from improvement in margins, a good proportion of which is from a relative reduction in admin. expenses.

Asset turnover has stayed the same – suggesting there has been no change in the utilisation (hire rate) of equipment. The late acquisition at the end of the year will have distorted this figure downwards.

Both sales and profit per employee have risen above inflation. Three possible causes: a) the workforce in the acquired businesses were more efficient than the new parent's ones, b) there has been improvement in productivity, c) price rises.

ii) Liquidity and solvency (10 marks)

Also well answered. A number of candidates did not work out a gearing ratio or interest cover.

Liquidity and Solvency

	2007	**2006**
Current Ratio	0.58	0.66
Acid Test	0.55	0.64
Interest Cover	3.46	2.50
Gearing	1.70	1.16

The current ratio and acid test show reductions in the relative amounts of current assets compared to current liabilities. This would seem to be primarily due to the increase in short term borrowings rather than gain in working capital efficiency. This debt may need to be renegotiated, perhaps not an easy or cheap option in a time of credit tightness.

Despite the rise in debt (possibly much of it late in the year, explaining relatively low interest during the financial year), interest cover rose showing more profit available to cover each £ of interest.

Gearing is up sharply due to the financing of acquisitions. This is despite a 20% increase in share capital. It is to be hoped that the directors' belief in many years of growth is true. A downturn with high debt and high operational gearing would be bad news.

c. Analyse the performance of Lavendon's three largest business segments (see note 2, page 52) (10 marks)

		UK	Germany	Belgium	France	Spain	***M.East***	Group
Revenue	2007	***105,894***	***48,508***	1,762	6,844	6,476	***16,516***	186,000
	2006	***81,342***	***21,799***		7,054	4,200	***10,345***	124,740
Operating profit (pre exc)	2007	***17,115***	***5,130***	204	-78	1,217	***5,101***	28,689
	2006	***12,176***	***-1,940***		-493	372	***2,550***	12,665
Operating profit (post exc)	2007	***16,815***	***2,922***	204	-78	1,217	***5,101***	26,181
	2006	***12,176***	***-1,940***	0	-493	372	***2,550***	12,665
Total assets	2007	***205,232***	***90,369***	65,793	15,653	43,147	***5,462***	425,656
	2006	***138,449***	***83,657***		16,017	12,435	***17,190***	267,748
Increase in sales		***30.2%***	***122.5%***		-3.0%	54.2%	***59.7%***	49.1%
Inc. in op. profit (pre exc)		***40.6%***	***NA***		NA	227.2%	***100.0%***	126.5%
Inc. in op. profit (post exc)		***38.1%***	***NA***		NA	227.2%	***100.0%***	106.7%
Change in total assets		***48.2%***	***8.0%***		-2.3%	247.0%	***-68.2%***	59.0%
Sales margin (pre exc.)	2007	***16.2%***	***10.6%***	11.6%	-1.1%	18.8%	***30.9%***	15.4%
	2006	***15.0%***	***-8.9%***		-7.0%	8.9%	***24.6%***	10.2%
Sales margin (post exc)	2007	***15.9%***	***6.0%***	11.6%	-1.1%	18.8%	***30.9%***	14.1%
	2006	***15.0%***	***-8.9%***		-7.0%	8.9%	***24.6%***	10.2%
ROTA (pre exc)	2007	***8.3%***	***5.7%***	0.3%	-0.5%	2.8%	***93.4%***	6.7%
	2006	***8.8%***	***-2.3%***		-3.1%	3.0%	***14.8%***	4.7%
ROTA (post exc)	2007	***8.2%***	***3.2%***	0.3%	-0.5%	2.8%	***93.4%***	6.2%
	2006	***8.8%***	***-2.3%***		-3.1%	3.0%	***14.8%***	4.7%
Asset turnover	2007	***51.6%***	***53.7%***	2.7%	43.7%	15.0%	***302.4%***	43.7%
	2006	***58.8%***	***26.1%***		44.0%	33.8%	***60.2%***	46.6%

Revenue %	2007	***56.9%***	***26.1%***	0.9%	3.7%	3.5%	***8.9%***	100.0%
	2006	***65.2%***	***17.5%***	0.0%	5.7%	3.4%	***8.3%***	100.0%
Optg profit (excl exc.)%	2007	***59.7%***	***17.9%***	0.7%	-0.3%	4.2%	***17.8%***	100.0%
	2006	***96.1%***	***-15.3%***	0.0%	-3.9%	2.9%	***20.1%***	100.0%

Many reasonable answers. A good number took the first three segments across the page and missed the importance of the Middle East. Many candidates seemed to think that negative margins were not meaningful or not calculable – this is not the case. Many candidates did not calculate return for some segments due to negative net assets (often explained well), but few then resorted to calculating return on total assets – a reasonable "plan b" in such circumstances.

The UK is by far the largest segment. Germany has become much more significant over the last year.

UK - Good margins and the second highest ROTA for the group (note that Lavendon have split their debt over the segments making any possible capital employed figures meaningless – deliberate?). Total asset turnover figures fell, late acquisitions in the year could be behind this.

Germany - Large growth in the year with sales increasing by more than 100%. The division has returned to profit, although still below the group average, and total asset turnover seems much improved.

Middle East - The building boom certainly enables impressive profits from this small part of the company.

(Spain seems to be the best of the rest with France appearing to retrench somewhat – losses reduced by reducing sales.)

d. Discuss the advantages and disadvantages of Lavendon's "five financial key performance indicators, and …. employee turnover" (see the Operating and Financial Review, pages 9 to 12).

(5 marks)

Some good discussions, a number were weak on disadvantages, especially the point that the company decides the measures and their calculation. The idea that the company does not have a key utilisation ratio is almost unimaginable.

	2007	2006	2005	2004
Revenue[1] (£m)	**186.0**	124.7	100.0	108.0
EBITDA margin[2] (%)	**34.4%**	30.7%	29.8%	29.1%
Operating profit margin[3] (%)	**15.4%**	10.2%	7.3%	5.4%
Debt to EBITDA ratio[4]	**2.90**	2.58	2.07	2.83
Return on capital employed[5] (%)	**11.5%**	7.6%	4.8%	3.2%
Employee turnover[6] (%)	**20%**	25%	37%	40%

Definitions

1. Revenue = revenue as per the consolidated income statement.
2. EBITDA margin = EBITDA as a percentage of revenue. EBITDA is defined as earnings before interest, tax, depreciation, amortisation and exceptional costs, where all figures are as per the consolidated income statements.
3. Operating profit margin = operating profit before exceptional costs as a percentage of revenue. Operating profit before exceptional costs and revenue are as per the consolidated income statement.
4. Debt to EBITDA ratio = the Group's total net debt divided by EBITDA. Net debt is as per the consolidated financial statements, and EBITDA is as defined in definition 2 above.
5. Return on capital employed = operating profit before exceptional costs as a percentage of capital employed. Operating profit before exceptional costs as per the consolidated income statement. Capital employed being the aggregate of the average of the Group's opening and closing net assets and net debt, as per the consolidated financial statements.
6. Employee turnover = number of employees leaving as a percentage of total workforce on an annualised basis. All staff departures are included within the calculation, including restructures and redundancies. (Source: internal data).

The list has five financial and one employee measure, this is an interesting list. Revenue shows overall sales growth, although no split between volume and price change leaves the reader wondering what causes the growth. It is impossible to believe that they don't use some sort of utilisation ratio (%plant hired out of available plant hire days for example) that is not disclosed here.

The use of both EBITDA and operating profit margins is refreshing. Both have value, but the temptation to focus on (the always highr) EBITDA one has been resisted.

The discussion in the OFR focuses on cash quite significantly, but surprisingly perhaps cash (debt) only features as part of the Debt to EBITDA ratio. The rising and worrying trend is addressed in the discussion and the effect of late-in-year acquisitions analysed to reassure the reader.

ROCE is given as pre-exceptionals and as the average of opening and closing balance sheets. Whilst potentially valid, both of these decisions lead to a higher ROCE. Employee turnover is decreasing from very high levels in 2004. Key gap in the list is no measure of operational efficiency or utilisation.

e. On page 7, the chairman refers to "…mild winter conditions did not suppress activity levels to the extent traditionally experienced." How might such seasonality have affected the balance sheet working capital figures as compared to the previous balance sheet inventory, trade receivables and trade payables in the year?

(4 marks)

Some very good answers, others struggled to think through the consequences of a mild winter. The balance sheet date is December, so the seasonality described would imply reduced activity for the last couple of months of the year. Inventory is low and probably not very seasonal in this industry (spare parts?), debtors and trade creditors will be reduced after a period of lower activity. In 2007 the seasonal effect is said to be less than usual, so one would anticipate a rise in reported year end debtors and trade creditors. Of course the acquisitions make this difficult (impossible) to verify.

Part B - Question 2

A Z score is a composite ratio designed to assess the likelihood of company failure. One such score is derived by Altman (1983) and is calculated as follows:

$Z = 0.717A + 0.847B + 3.11C + 0.420D + 0.998E$

Where

- A is net working capital / total assets
- B is retained earnings / total assets
- C is earnings before interest and tax / total assets
- D is shareholders' equity / total liabilities
- E is sales / total assets

If Z is less than 1.20 then bankruptcy is predicted for the company being assessed. If it is over 2.90, the company is thought to be safe and if the statistic falls between 1.20 and 2.90, then the expectation is unclear (the grey area).

a) Comment on the relevance of each of the elements of Altman's score for assessing solvency. (5 marks)

Very well answered. (a) was the weakest part with candidates sometimes explaining the ratio rather than writing about its importance for solvency. The key point here is that we are looking for solvency, not success in the broader sense.

A – WC/TA – the more relative WC, the more liquidity (alternatively measured by the acid test or the current ratio

B – RE/TA – the more earnings retained the more funds likely to be available to pay creditors. Large profits fully paid out as dividends are of no value to creditors.

C – PBIT/TA – Making a reasonable return should give the funds to meet creditors' demands.

D – SE/TL – How does the shareholders' investment in the company compare with the amount owed? The bigger proportion SE is of TL, the less likely bankruptcy might be.

E - S/TA – Good use of assets in producing sales implies it is less likely that the funds invested in the business are being poorly used and perhaps then not generating sufficient funds to meet interest payments.

b) Calculate and interpret Altman's Z score for Morton plc for 2006 and 2007.

	Weights		
Working Capital/Total Assets	0.72	0.30	0.38
Retained Earnings/Total Assets	0.85	0.05	0.10
Profit before int and tax/Total Assets	3.11	0.12	0.19
Shareholders' equity/Liabilities	0.42	0.67	0.91
Sales/Total Assets	1.00	1.25	1.67
Altman's Z score		**2.14**	**2.99**

The company has improved from being in the grey area to forecast survival. All the relevant ratios have improved. Half of the gain comes from the rise in sales/total assets.

c) Recommend two further ratios that would assist in the evaluation of a company's financial position.

(2 marks)

The acid test, the current ratio and the interest cover ratio.

Question 3

A very popular question. Most who gave the question a reasonable amount of time answered much of the question reasonably. (e) was the weakest part of the question, with some candidates avoiding writing about financial services companies at all.

A work colleague sends you an email stating:

"Balance sheets clearly state "as at xx/xx/xx", so I assume everything in the financial statement is valued at that date".

You are concerned about your colleagues understanding of financial statements.

Write him an email addressing the following points:

a) The role and meaning of the balance sheet, comparing it to the income statement. (3 marks)

Balance sheets are to provide a snapshot of a company at a single moment, hence the new name "statement of financial position". It shows what is owed and what is owned, but the method of assessing the value to be included for each category of asset and liability is not consistent, and, probably, could never be so. The income statement tells of the performance of the company over a period of time, usually 12 months.

b) The meaning of historic cost, giving the valuation of tangible non-current assets as an example (3 marks)

Historic cost involves taking the value of an asset from the original transaction – when it was acquired. This might then be reduced by depreciation if appropriate (it will be for buildings and equipment, generally land is not depreciated). However historic cost does not reflect the current value, if market value is lower then this might be reflected in the balance sheet, but not if it is higher.

c) The meaning and application of fair value accounting, using financial assets and liabilities as examples (3 marks)

Fair value for financial assets and liabilities means "marking to market" where possible. This implies that the balance sheet value of these items will reflect the market's price at the balance sheet date.

d) The meaning of realisable value, using inventories as an example (3 marks)

Inventories are usually valued at the cost of buying them, certainly with no expected profit from sale included. However if the expected income from selling the inventory is lower than cost of purchase, then the balance sheet value should be reduced to the realisable value.

e) Briefly state the perceived problem with using fair value when compiling the accounts of financials services companies. (3 marks)

Market prices can be very volatile and in a downward market for financial assets, the balance sheet numbers will be the worst of the year. It might be argued that the company has no intention to sell the assets at such a price, so the valuation does not reflect commercial reality. On the other hand the prices might fall even further. One might also expect to see falling prices of financial liabilities offsetting the asset fall to some extent. If no one is trading then (of course) there is no market price, even though a market price may have existed in the past. A further complication arises when the balance sheet numbers are used to determine the level of liquid assets held by the company as banks need to maintain capital ratios. It is also difficult to in assess liquidity when only disclosing within 12 months and over 12 months. Average prices have been suggested, but such a move, in current market conditions, might just undermine confidence further.

(15 marks total)

Question 4

A sceptical fund manager was recently heard to say:

"Analysts tend to focus on the reported income statement when assessing company performance and potential."

Debate the strengths and limitations of relying on the reported income statement for assessing past results and for forecasting future performance. (15 marks)

Not a popular question. Generally fair explanation of financial statements, a little weaker on the problems and wider commercial issues that should be considered.

The income statement tells you about the performance of the company over the past year but is affected by:

Accounting policies - Hence may be distorted if these are not thought to be appropriate

Accruals convention - Hence any profit will not equate to a change in cash (therefore should really consider the cash flow statement too).

The competitive environment for the last year. This may not be the same for the future, so future potential may not be assumed from last year's results.

The income statement does not reveal the financial situation of the company. The balance sheet can help here by showing the assets available (and giving some clue to their liquidity) and the monies owed both short and long term. This informs an opinion on financial risk and also any limitations on future expansion potential. The balance sheet can also provide information on working capital management where the income statement is silent.

So the other financial statements are important as is an understanding the commercial environment. The share price and movements in the price would also provide useful information on changing expectations of the company's prospects.

Part C - Question 5

When looking through the report and accounts of a manufacturing company you notice a large deferred tax provision. How would this particular provision have arisen? (3 marks)

Some students could explain deferred tax, others could not. Some did not grasp the implications of being a manufacturing company, but most did.

The profit and loss account will have included a tax charge based on the depreciation policy of the firm (eg. 10 years straight line). The actual tax paid will be based on Inland Revenue rules (eg. 25% reducing balance). It is usually the case that the company's depreciation rule will imply a tax liability greater than the amount due to be

paid this year. The difference is a deferred tax liability – tax owed according to the company's accounting rules, but not yet paid as the Inland Revenue's rules are more generous on the timing of the payments.

Question 6

In most published reports and accounts of quoted companies, the directors include both a Company Balance Sheet and the Group Balance Sheet. Explain the difference between these balance sheets. (3 marks)

Mixed and many confused answers. Many confused between subsidiaries and segments.

The company balance sheet is based on legal precision – the holding company owning shares in subsidiaries. The consolidated group balance sheet is drawn up based on the economic reality showing the assets and liabilities controlled by the board of directors of the holding company regardless of the corporate legal structure. Also, the company BS gives a clear indication of the distributable reserves from which a dividend can be paid to shareholders in the holding company. The group BS may be artificially rosy if profits are trapped elsewhere in the group.

Question 7

The shareholders' funds of a company at the start of a period are £400,000. During the period the following three transactions occur:

Cash received from debtors of £35,000

Debtors of £10,000 are deemed bad and written off.

Sale of stock for £80,000 on credit (stock cost £55,000)

A short-term bank loan of £70,000 is received

Work out the new figure for shareholders' funds. (3 marks)

Many correct answers. Cash received from debtors of £35,000 – no change

Debtors of £10,000 written off – shareholders' funds fall by £10,000

Sale of stock for £80,000 on credit (stock cost £55,000)- increase by £25,000

A short-term bank loan of £70,000 is received – no change

Answer is £415,000.

Question 8

A company is considering making a one for two bonus issue of shares. What impact would there be on:

a) total shareholders' funds,

b) total market value,

c) earnings per share? (3 marks)

Very well answered. (i) and (ii) should be unaltered. (iii) eps will be reduced by 1/3rd (although the previous year will be restated, so no apparent change).

Question 9

For the forthcoming year, Myrtle plc has guided the market to expect an EBIT of £20 million and interest of £10 million. The directors have just decided to spend £20 million building a new factory, starting at the beginning of the new financial year. This project will require a loan of £20 million specifically for this investment at an interest rate of 8%. It will take two years to complete the factory.

a) Using the above information, what interest charge do you expect Myrtle to report in its statutory income statement for the coming year? Calculate expected interest cover. (3 marks)

Many could calculate what might be termed the traditional UK numbers, however better students highlighted the alternative interest capitalisation approach – made compulsory by a change to the standard in March 2007 (although not having to be applied until the end of 2008)

Forecast interest will still be £10 million

Interest cover 20/(10) = 2

b) Myrtle uses straight line depreciation. Assuming a ten year life for the factory and a residual value of £5 million at the end of the tenth year, what will be the depreciation charge for the factory's first year of operation? (2 marks)

Amount to be depreciated: *20 + capitalised interest – residual value*

*20 +(2*1.6) – 5*

18.2

Ten year life, therefore one year's depreciation is £1.82 million.

Question 10

The nominal value of a share in Lavendon is 1 penny. In the last financial year 3,339,189 shares were issued and the share premium account increased from £79,787,000 at the beginning of the year to £95,347,000 at the end of the year.

What was the average issue price, net of issuing costs, of a share in the financial year?(3 marks)

Mostly answered well. Many lost marks due to wrong decimal places.

Nominal value per share	*1*	*penny*
Shares issued	*3339189*	
Rise in share premium	*£15,560,000*	
Share premium per share	*466*	*pence*
Add nominal value	*1*	*penny*
	467	*pence*