Interpretation of Accounts.

2010, Question 5(b)

The Interpretation of Accounts (or 'Ratios') question has appeared as question 5 on the Leaving Cert exam every year to date. It is a vital question to master and one that can give you huge confidence as you approach the exam (particularly if you are also comfortable answering question one on the paper). These two questions between them total more than half the marks on the whole exam so getting to grips with them will bring huge gains.

The ratios question is split into three main parts…

a) Where you are asked to calculate 5/6 specific ratios.

b) Where you can use your own choice of ratios to answer a particular question; and

c) Where you are asked a theory question which relates to the interpretation of accounts.

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If we start with the easiest part, the theory questions generally asked in part (C) are covered in my 'Accounting Theory' notes. Just go back to the webpage you got these notes on and click on 'Accounting Theory'. If you scroll down on that page you'll find the ratios section.

Part (A) is also pretty straightforward in that there's not much room for confusion. You simply need to know all the relevant ratios (go back to my webpage and click on 'Ratios Sheet' to get the list) and then practice using them until you can do each one without needing to look it up. While the list might look huge, a quick look at the past exam papers will show you that really there's actually a group of the same ten or so ratios that come up year in-year out. On the day of the exam you need to work out each ratio correctly and make sure to add the correct units (i.e. If the answer is a percent make sure to have a % sign, if it's in money make sure to have a € sign, etc.).

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So the big area for losing or gaining marks is part (B). In part (B) we are asked to answer a question (see the normal ones below) and to use whatever ratios we want in order to back-up our view. There are three pretty standard questions that are asked…

- Would we buy shares in this company (or would we be happy if we currently owned shares in it)?

- Would the debenture holders (people who lend money to the company) be happy?

- If you were a bank manager, would you lend money to the company?

The good news is that the answers to each of these questions are remarkably similar so we definitely don't need to learn three totally different things. In fact the answers we will give for the 'Debenture' and the 'Bank' questions are basically the same (because they are both people who have lent money to the firm and are keen to have their interest and original loan amount repaid). To be ready for whichever option comes up therefore we need to be very comfortable working out and explaining 5 or 6 of the most important ratios (and we'll use these same ones to answer whichever question appears in part (B)). The most important areas to cover (and the ratios we will use) in our answer are…

- Profitability (Return on Capital Employed)
- Liquidity (Current Ratio & Acid Test Ratio)
- Gearing (Gearing Ratio & Interest Cover)
- Dividend Policy (Earnings Per Share v Dividend Per Share)
- Industry / Sector
- Share Price *or* Security (Depending on what the question we've been asked is)

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The crucial thing in Part (B) is to be happy that you can calculate and explain each of the above areas in relation to what you have been specifically asked. If this sounds a bit wooly don't panic, we'll work through an example shortly. First of all, a few technical points…

- Normally we are marked on six points, so don't go writing one big essay answer or making loads of tiny points. Our answer should look like six 4/5-line little paragraphs.

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- Remember the three normal options for what can be asked above? Keep it in mind that depending on which one we're asked; we need to tailor our answer slightly to suit it. For example shareholders (or people considering buying shares) will be most interested in things like the profitability of the company, the amount of dividends being paid, and the general stability of the business. People who lend money to the company on the other hand (debenture holders and banks) are most interested in knowing whether the business has many other debts and whether or not they will be repaid on time.

Ok, let's have a go at one. Here's a suggested answer to the 2010 Q5B question… I've put my answer in normal font and then a few little explanations (that wouldn't appear in the answer) in italics.

Profitability.

$$\frac{\text{Net Profit + Interest}}{\text{Capital Employed}} \times 100 \qquad \frac{65000 + 30000}{805000} \times 100 = 11.80\%$$

The Return on Capital Employed is 11.80%. This is an acceptable result since it is 3/4 times the return that could be expected on a risk-free investment. The debenture holders would certainly be happy to see that the performance of the company is positive and that the funds invested in the business are generating profits. A concern however is that the result of 11.80% has fallen from last year's figure of 13% (so the money invested is being used less efficiently this year) and if this trend were to continue it could put the firm under pressure to repay the debentures. A Net Profit % of 6.77% indicates a small margin on each sale and may be contributing to the overall dip in profitability.

We can make the same points regardless of the question being asked and obviously if the result is bad (roughly less than 10%) simply reverse the comments from positive to negative above. If the question was about buying shares or whether the shareholders would be happy, we just need to alter the last few words of the paragraph ("… if this trend were to continue it would reduce the firm's ability to provide dividends to the shareholders").

Liquidity.

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Current Assets : Current Liabilities	Current Assets (-Stock) : Current Liabilities
110,000 : 125,000	110,000 – 65,000 : 125,000
.88 : 1	.36 : 1

The current ratio is .88:1 and the Acid Test (Quick) Ratio .36:1, both results indicating that the company has a significant liquidity problem. The ability to pay short-term debts with current funds is hugely important and Hebe Ltd is under serious pressure in this regard (with only 36c available for every €1 owed). The debenture holders will have major concerns and will be further troubled to see that the Acid Test ratio has fallen considerably since last year (possibly as a result of 'over-trading'). If this situation is not addressed urgently it may begin to affect the ability of the firm to meet other repayments (such as the Debenture Interest).

Generally a positive Current Ratio is anything over 2:1 and a positive Acid Test Ratio is anything over 1:1. If the question was about shareholders we can pretty much say the same things and simply change the last two words of the paragraph to "...dividends to shareholders").

Gearing.

Preference Shares + Debentures : Capital Employed
50,000 + 300,000 : 805,000
.43 : 1
(or 43%)

$$\frac{\text{Net Profit + Interest}}{\text{Interest}} \quad \frac{65,000 + 30,000}{30,000} = 3.17 \text{ Times}$$

Hebe Ltd is 'lowly geared' in that less than half of its total Capital Employed has come from debt, however the result has disimproved since last year's 37%. Equally the interest cover has fallen from 4.7 times to 3.17 times, both results representing a worrying trend for debenture holders. Rising debt is likely to affect the firm's ability to make interest payments and to save for the future. The sale of the 100,000 remaining ordinary shares might be seen as a possible solution to reverse this trend. *'Gearing' essentially gives us an indication of how much of the money invested in the firm was <u>borrowed</u>. Generally a result of 50% or less is considered acceptable, or*

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'lowly' geared. We therefore want to see an acceptable result (like we had in this question) but also a consistent or improving trend (as opposed to the worsening trend we are seeing in this case). If the question was about buying shares the comment we make should reflect the fact that shareholders only receive dividends after other creditors have been paid (and so increasing debt levels are not a good sign for them). Equally, the value of a share (the price an existing shareholder could sell for) is likely to suffer if possible investors become aware of increasing debt levels.

Dividend Policy.

Earnings Per Share: $\frac{\text{Net Profit – Preference Dividend}}{\text{Number of Ordinary Shares}}$

$\frac{65{,}000 – 5{,}000}{400{,}000}$ = 15c Per Share

Dividend Per Share: $\frac{\text{Total Dividend – Preference Dividend}}{\text{Number of Ordinary Shares}}$

$\frac{50{,}000 – 5{,}000}{400{,}000}$ = 11.25c Per Share

Dividend Cover: $\frac{\text{Net Profit – Preference Dividend}}{\text{Ordinary Dividend}}$

$\frac{65{,}000 – 5{,}000}{45{,}000}$ = 1.33 Times

The debenture holders will be interested in seeing whether or not the company has a policy of reinvesting profits. The results above will therefore prove disappointing as it is clear that a significant proportion of the profits are being taken out of the firm by the shareholders, rather than set aside for the repayment of debts such as the debentures. For every 15c that each shareholder is entitled to, 11.25c has been paid out – a proportion that does not reflect well on the long-term planning of the business (last year a similar proportion of the earnings were taken out: 15c dividends out of 21c earnings). The excessive dividends are also reflected in the Dividend Cover which shows that the net profit is only 1.3 times the total that has been handed out

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(and again this figure represents a fall from last year's 1.4 times). If these trends were to continue the debenture holders would be extremely concerned.

If the question were asking for the view from a shareholder or prospective shareholder, we would need to be careful not to assume that shareholders will be delighted to see a large dividend being paid out. While shareholders obviously want to get a dividend, if they have any sense they will also be keeping an eye on the long-term stability of the business (which is much more secure if funds are consistently re-invested). Although a dividend will be nice to receive therefore, reinvesting money will increase the value of the firm and of course the value of the shares anyone holds. So shareholders gain by balancing the dividends they take out with the increase in their share price (which comes from reinvesting their earnings into the firm). As a rough guideline we generally expect to see half of the earnings handed out and half reinvested. In our question above 75% of the earnings are being handed out – Too much!

Industry / Sector.

Hebe are a manufacturer in the dairy industry, a sector which is usually considered relatively stable since day-to-day consumer goods are less likely to be affected by economic conditions than luxury or hi-tech industries.

Increasing competition from abroad and difficult economic conditions however are having an impact on almost every industry and the debenture holders will be concerned about this. They will be very keen to keep an eye on the efficiency with which Hebe uses the funds available to it.

The good news about the 'Industry / Sector' heading is that we can pretty much say the same thing no matter what the industry is – i.e.: There have been good prospects in the past but competition from abroad and poor economic conditions are a cause for concern'.

Share Price *or* Security.

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For our final point we are going to talk about one of these two areas: 'Share Price' or 'Security', depending on what the question asks us. If the question is about lenders (debenture holders or a bank) we'll talk about security, whereas if the question is about shareholders or prospective shareholders we'll talk about the share price. I've done both below but remember to only do one or the other in your answers…

Security.

The debentures of €300,000 fall due in 5 years and are secured on the fixed assets of the firm. The debenture holders will therefore be interested in the value of these fixed assets to ensure that their debt can be covered (if it can't be repaid). Although the tangible assets are recorded as €520,000 in the accounts (i.e. comfortably higher than the €300,000 debentures), there is no mention of depreciation (and so the debenture holders would be interested in clarifying this). In addition, the investments seem to have fallen in value from €120,000 to €95,000 and this may fuel questions about the investment policies of the firm.

The current profit and loss balance of €55,000 does not indicate a level of saving that is preparing for the repayment of the debenture and when combined with the disappointing dividend policy mentioned earlier, the debenture holders would have cause for concern.

Don't forget: If the question is about a bank considering lending money to the firm it is still fine to mention the above point. A bank will be very interested in other debts (such as debentures) that a firm has and how comfortable it will be for the business to cover these.

If the question is about current shareholders or people considering buying shares, don't use the above point. Use the one below instead…

Share Price.

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The share price has fallen from €1.80 last year to €1.50 this year, a fall of 16.67%. The shareholders would be very concerned with this as it reflects a lack of confidence in the business amongst the public. The Price: Earnings ratio also indicates that it would take 10 years to recover the share price, suggesting that it may in fact be over-priced.

Conclusion.

You don't have to have a conclusion point but I think it can help tie-up all the loose ends).

The denture holders of Hebe plc will have several concerns. Although the company is profitable, the serious liquidity problem and an overly generous dividend payout rate are signs of poor financial management. There is little evidence of forward planning to prepare for the repayment of the debentures.

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Some Final Info.

Wording of the Question.

Normally the question simply asks us something like 'Would the debenture holders be happy' (like the question we did above), or 'If you were a bank would you lend the firm money'). If the question is fairly open like that, plough ahead and just use the 6/7 points explained above. From time to time however you'll spot a more specific question like "Would they be happy with the performance, state of affairs and prospects of the company". Don't let this freak you out – it's simply requesting that you lay your answer out in a certain way. Instead of working through our 6/7 points in random order, this type of question wants you to deal with your 6/7 points under their three headings..

Performance:
'Profitability' (and maybe talk about Dividend Per Share' also).

State of Affairs:
'Liquidity' and 'Gearing'

Prospects:
"Sector', 'Dividend Policy', and 'Security' (or 'Share Price').

What if there are two part 'B's?

In recent years there have been a couple of occasions when we've actually been asked two questions in this topic. In other words, while we normally only get asked one of these (Would you buy shares/ Would you be happy as a debenture holder / Would you lend them money), if you look at 2010 question 5 for example you'll see that one of these questions is asked in part (b) and another in part (c)!

The advice here then is to pay close attention to the marks going for each part. If there is only one question asking for your view, your answer should be roughly the length of the answer we did above. If there are two questions you can still make all the relevant points for each one, but change the amount of discussion and explanation you give based on the marks awarded (for example in 2010 part 'b' should have been a full answer as above, whereas part 'c' would have been very short bullets for each of the 6/7 points we normally make).

Theory Questions.

Finally, in most years there is a short part 'c' which asks us to provide an answer to some theory question about ratios. The answers to these are outlined in my 'Accounting Theory' notes. Just pop back to the page you got these notes from, click on 'Accounting Theory', scroll down till you see the bold 'Ratio Analysis' heading and everything you need should be there.

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