

EXAMINATION

April 2006

Subject CT2 — Finance and Financial Reporting Core Technical

EXAMINERS' REPORT

Introduction

The attached subject report has been written by the Principal Examiner with the aim of helping candidates. The questions and comments are based around Core Reading as the interpretation of the syllabus to which the examiners are working. They have however given credit for any alternative approach or interpretation which they consider to be reasonable.

M Flaherty
Chairman of the Board of Examiners

June 2006

Comments

Individual comments are shown after each question.

- 1 D
- 2 A
- 3 A
- 4 C
- 5 A
- 6 D
- 7 C
- 8 A
- 9 D
- 10 D

Comments on question 1–19: Generally Q1–10 were well done by most candidates.

- 11** Return on capital employed is normally regarded as the most reliable measure of profitability. Given a certain level of investment, it is always better for the business to generate the highest possible return on that capital. A high ROCE demonstrates efficient use of a scarce resource. Other ratios might give an insight into profitability, but they can be difficult to interpret in isolation. For example, the lower gross profit % in the company implies that it makes less profit from every £1 of sales. That does not necessarily mean that the company is poorly managed because it could be for example pricing its sales aggressively in order to increase market share. In spite of the lower net and gross profit the company has a high return on capital employed. This suggests that the company is generating good profits from the capital employed in the company. The capital employed must be relatively lower than others in the industry and is being used effectively.

Comments on question 11: This question was answered well by most candidates. Very good knowledge of the return on capital employed ratio was displayed by many candidates.

- 12** As the company normally pays a steadily increasing dividend it would be a bad signal to the shareholders if it decided to pay no dividend. The shareholders may lose confidence in the company and decide to sell their shares. Borrowing to pay a dividend may not help because the shareholders might interpret this as a sign that the company is “living beyond its means”. The suspended dividend would really only draw attention to the fact that the company is in a period of poor profitability. Borrowing would also increase gearing which would make the downturn in profit appear all the more alarming. The interest on any borrowing will also have to be paid out of future profits, making the return to a normal dividend all the more difficult. The only advantage to borrowing is that the directors might be able to argue that the need to repay the loan indicates that they are confident of returning to profit.

Comments on question 12: This question was also very well answered by most candidates. Excellent knowledge of the agency problem was demonstrated.

- 13** Agency theory, which considers the relationship between a principal and an agent of that principal, includes issues such as the nature of the agency costs, conflicts of interest (and how to avoid them) and how agents may be motivated and incentivised. These issues arise because the shareholders must put the directors in a position of trust, but the directors will usually have an incentive (or at least a perceived interest) to act in his or her own interests at the expense of the principal's. For example by taking a high salary from the company and paying a lower dividend. The need to rely on directors arises because of the development of a commercial environment which requires the separation of ownership and control. The directors run the company on behalf of the shareholders who own it. Many companies are simply too large and complex for them to be funded by a small group of shareholders and managed by the same small group.

The principals often have to rely on monitoring the actions of the agents with the underlying threat of some penalty for failure or poor performance. The annual report is often viewed as a means of the agents (directors) demonstrating their stewardship of the principals' (shareholders') investment. However it is often difficult to determine whether the directors have improved matters short term but have sacrificed long term gains to achieve this.

***Comments on question 13:** This question was also very well answered by most candidates. Excellent knowledge of the agency problem was demonstrated.*

- 14** In theory, incorporation would limit the liability of the actuaries. Lenders would have a claim against the company's assets but not those of the individuals who own it. This advantage could prove costly though. Lenders will perceive a higher risk. They might respond by charging a higher rate of interest which will, eventually lead to lower profits for the consultants. They might also seek additional security over assets, thereby imposing some constraints on the consultants' freedom to trade. They might even demand personal guarantees from the consultants so that they become liable for the loans despite the incorporation.

Even if the lenders did not take action to protect themselves, limited companies are subject to some additional regulatory requirements that have to be set against the benefits of limited liability. For example, limited companies are subject to some reporting and filing requirements that partnerships are not. This would involve paying to put trading information in the public domain, where it might prove useful to competitors or other parties. It appears that incorporation would be costly and may not result in limited liability.

***Comments on question 14:** Again this question was answered well. Many candidates also discussed the benefits of a limited liability partnership, which demonstrated a good knowledge of the core reading and its application to different scenarios.*

- 15** Firstly, the directors will have to appoint a suitable finance house to make the necessary arrangements and to provide advice and support as required. The timing of the issue will have to be considered, as well as how much is required to be raised. Ideally, the funds will have to be raised just before they are required, although there could be issues associated with timing such as the state of the markets or the uncertainties created by other matters (such as a forthcoming earnings announcement) that might upset the markets. The directors will have to decide on the size of the discount to be offered. In theory, this should have no effect on the shareholders, but there could be some market psychology at work. The directors will also have to decide whether or not to have the issue underwritten.

Comments on question 15: This question was answered well.

- 16** The company's stated reasons should be examined. This offer appears to offer a concession, but it may be that it is intended to help the board survive a cash shortage or some other problem with profitability. The investor should also consider the strength of the company. At present the bond provides most of the rights associated with holding loan stock. There is more security associated with leaving the investment as it is. The company's prospects should be reviewed in some detail. If the company appears to be expanding and is paying acceptable dividends then the conversion could be advantageous. If the investor converts the interest on the bond will be foregone and so the interest rate should also be factored into the decision.

Comments on question 16: This question was not answered as well as some others. Some candidates wrote about bonds in general but very little about conversion, they did not achieve high marks for this question.

- 17** Probability trees and simulations are used to organise complex decisions where the choices available at any stage will be affected by decisions made at earlier stages. For example, a company can invest in an investment opportunity. Before committing itself it can decide whether or not to purchase a report which will cost a great deal but will enable the company to make a more reliable assessment of the project. A probability tree or simulation will enable management to decide whether it is better to go ahead or abandon the project without buying the report or whether to buy the report before making a decision.

The probability tree or simulation would involve the following steps which would not be objective as they each involve subjective judgement.

- assigning estimated cash flows associated with each future possible choice
- estimating the probabilities associated with each future cash flow
- using standard expected value calculations, incorporating both the time value of money and the probabilities, to assess the optimal choices in each future time period based on the knowledge of the intervening events
- working backwards from the latest decision point to the present day in order to establish the best (e.g. highest NPV) route to follow at the outset

It is impossible for the result to be anything but an estimate when so many subjective figures are used to arrive at a result.

Comments on question 17: *This question was not answered very well. Few candidates mentioned the subjective nature of any predictions of future cash flow. Some candidates mentioned being objective but a discussion of the subjective nature of the whole model would have improved the answers.*

- 18** The P/E ratio is an important indicator of the stock market's opinion of a company's prospects. It is largely determined by the share price, which is a function of the market's expectations of future cash flows. Increasing the profit figure by adopting a new accounting policy could have no effect on share price because that will not improve the prospects of increased cash flows. Thus, artificially increasing earnings per share though an accounting change is more likely to reduce the P/E ratio because the share price is unlikely to change if everything else stays the same.

It is possible that the accounting change will lead to a short-term increase in share price while the market takes time to reflect on the effects of the new policy. In principle, if the effects of the new policy were difficult to measure then this could continue for some time, but the market is driven by analysts who have a strong incentive to find such changes and to sell over-priced securities, so the effects of accounting policy changes are unlikely to be more than short-lived.

Comments on question 18: *This question was answered very well by most delegates. Very clear discussion of the P/E ratio by almost all candidates which was good.*

- 19** (a) Portfolio theory states that the return offered by an individual investment is related to the risk associated with it. Risk is measured in the context of systematic risk only, because unsystematic risk can be cancelled by diversification. The market will not offer a reward for accepting unsystematic risk because it can be dealt with at zero cost. The fact that the investment is to be in the relative's employer makes the risks even worse because a downturn could affect both the investment and job security. There is even a cost associated with attempting to manage an investment in the active way implied by the relative. Using knowledge of the business implies a trading strategy based on gathering and evaluating information. A buy and hold strategy based on a diversified portfolio would reduce the need to make decisions about buying and selling shares and should save on information and trading costs.
- (b) The capital markets offer a return that compensates for deferring consumption (roughly 2% in real terms), plus a premium for risk. Market forces set a "fair" price for the risks taken. An investment that offered a higher return than was justified by the risk taken would be underpriced. Investors would realise this and would buy the security, thereby pushing up the price. That would reduce the return offered by the security to its equilibrium price. Speculators and arbitrageurs monitor the financial markets for mispriced securities so that they can make short-term profits. In theory, capital markets are efficient, which means that securities will always be correctly priced at all times.
- (c) The family member will be taxed on any dividend at his marginal rate of income tax. That tax will be almost impossible to avoid and he will have relatively little control over the timing of receipts and, by implication, of taxable income. The taxation of capital gains is rather more complicated. Firstly, the gain will not be taxed until the shares are sold and the gain is realised. That, in itself, gives the taxpayer more discretion over the management of payments to the tax authorities. Taxpayers also have separate annual allowances for capital gains, quite separate from allowances from income tax. If a realised gain is less than the annual allowance then the gain will be effectively tax free. In some cases, the chargeable gain will be reduced by an indexing allowance to adjust for the effects of inflation.

Comments on question 19: This question was very poorly answered. A number of candidates answered part a by discussing CAPM and did not mention portfolio theory. Few candidates appeared to have heard about efficient markets and had very poor answers for b. C was very badly answered by all but the best candidates. The best candidates gave excellent answers but the rest had difficulty with this question. It would be beneficial to have knowledge of this part of the syllabus for the future.

20 Trolley Ltd

Profit and loss account for the year ended 31 December 2005

| | Note | £000 |
|-----------------------------------------------|------|---------------------|
| Turnover | | 22,356 |
| Cost of sales | 1 | <u>(15,905)</u> |
| Gross profit | | 6,451 |
| Distribution costs | 2 | (1,310) |
| Administrative expenses | 3 | <u>(2,186)</u> |
| Operating profit | | 2,955 |
| Interest payable | 4 | <u>(210)</u> |
| Profit on ordinary activities before taxation | | 2,745 |
| Taxation | | <u>(500)</u> |
| Profit on ordinary activities after taxation | | 2,245 |
| Dividends paid | | (32) |
| Dividends proposed | 5 | <u>(192)</u> |
| Retained profit for the year | | 2,021 |
| Retained profit brought forward | | <u>1,360</u> |
| Retained profit carried forward | | <u><u>3,381</u></u> |

Trolley Ltd

Balance sheet as at 31 December 2005

| | Note | £000 | £000 |
|---------------------------------------------------------|------|----------------|---------------------|
| Fixed assets | | | |
| Tangible fixed assets | 6 | | 5,664 |
| Current assets | | | |
| Stock | | 1,870 | |
| Debtors | 7 | <u>1,965</u> | |
| | | 3,835 | |
| Creditors: amounts falling due within one year | 8 | <u>(2,318)</u> | |
| Net current assets | | | <u>1,517</u> |
| | | | 7,181 |
| Creditors: amounts falling due after more than one year | | | |
| 10% Debentures 2009 | | | <u>(1,400)</u> |
| | | | <u>5,781</u> |
| Share capital and reserves | | | |
| Called up share capital | | | 2,400 |
| Profit and loss account | | | <u>3,381</u> |
| | | | <u><u>5,781</u></u> |

Working Notes

| | | | | | |
|----|-------------------------------------------------------------|-----------------|----------------------------|-----------------|---------------|
| | | | | | £000 |
| 1. | Cost of sales | | | | |
| | Opening stock | | | | 1,700 |
| | Add: purchases | | | | 15,250 |
| | Factory rent rates and insurance ($438 - 6/12 \times 90$) | | | | 393 |
| | Heat and light ($426 + 6$) | | | | 432 |
| | Less: closing stock | | | | (1,870) |
| | | | | | <u>15,905</u> |
| 2. | Distribution expense | | | | |
| | Van drivers' wages | | | | 800 |
| | Advertising | | | | 350 |
| | Depreciation — delivery vehicles | | | | 160 |
| | ($20\% \times (960 - 160)$) | | | | <u>1,310</u> |
| 3. | Admin expenses | | | | |
| | Admin wages and salaries | | | | 1,240 |
| | Telephone | | | | 420 |
| | Audit fees | | | | 150 |
| | Depreciation — property ($2\% \times 3.8\text{m}$) | | | | 76 |
| | Depreciation — machinery ($10\% \times 3,000\text{k}$) | | | | 300 |
| | | | | | <u>2,186</u> |
| 4. | Interest | | | | |
| | Debentures ($10\% \times 1,400\text{k}$) | | | | 140 |
| | Bank overdraft interest | | | | 70 |
| | | | | | <u>210</u> |
| 5. | Proposed dividends | | | | |
| | Ordinary — 3.2m shares @ 50 pence | | | | 160 |
| | Preference ($((8\% \times 800) - 32)$) | | | | 32 |
| | | | | | <u>192</u> |
| 6. | Tangible fixed assets | | | | |
| | | <i>Property</i> | <i>Plant and Machinery</i> | <i>Vehicles</i> | <i>Total</i> |
| | | <i>£000</i> | <i>£000</i> | <i>£000</i> | <i>£000</i> |
| | Cost at 1 Jan 2005 | 3,800 | 3,000 | 960 | 7,760 |
| | Depreciation at 1 Jan 2005 | 500 | 900 | 160 | 1,560 |
| | | <u>3,300</u> | <u>2,100</u> | <u>800</u> | <u>6,200</u> |
| | Depreciation charge for the year | 76 | 300 | 160 | 536 |
| | WDV at 31 Dec 05 | <u>3,224</u> | <u>1,800</u> | <u>640</u> | <u>5,664</u> |

7. Debtors

| | |
|----------------------|-------------|
| | £000 |
| Trade debtors | 1,920 |
| Insurance prepayment | 45 |
| | <hr/> 1,965 |

8. Creditors due within one year £000

| | |
|---------------------|-------------|
| Trade creditors | 690 |
| Electricity accrual | 6 |
| Debenture interest | 70 |
| Corporation tax | 500 |
| Proposed dividends | 192 |
| Bank overdraft | 860 |
| | <hr/> 2,318 |

Comments on question 20:

This question was answered well apart from the accrual and prepayment, which caused some problems. Generally the question was well done and most candidates got high marks. It was good to see so many candidates can prepare a set of accounts and have awareness of the format.

Overall the paper was answered well by many candidates. There were some fairly small areas, which caused problems but overall it was heartening to see good performances by so many candidates.

END OF EXAMINERS' REPORT