

INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

September 2013 examinations

Subject CT2 – Finance and Financial Reporting Core Technical

Introduction

The Examiners' Report is written by the Principal Examiner with the aim of helping candidates, both those who are sitting the examination for the first time and using past papers as a revision aid and also those who have previously failed the subject.

The Examiners are charged by Council with examining the published syllabus. The Examiners have access to the Core Reading, which is designed to interpret the syllabus, and will generally base questions around it but are not required to examine the content of Core Reading specifically or exclusively.

For numerical questions the Examiners' preferred approach to the solution is reproduced in this report; other valid approaches are given appropriate credit. For essay-style questions, particularly the open-ended questions in the later subjects, the report may contain more points than the Examiners will expect from a solution that scores full marks.

The report is written based on the legislative and regulatory context pertaining to the date that the examination was set. Candidates should take into account the possibility that circumstances may have changed if using these reports for revision.

D C Bowie
Chairman of the Board of Examiners

December 2013

General comments on Subject CT2

This paper examines basic finance including raising funds by a variety of methods, taxation, net present value and project appraisal and other topics, it has both calculations and essay type questions on these topics. The paper also examines financial reporting including preparation of the main financial statements and interpretation of financial statements it also considers the basis of the preparation of statements and the information needs of a variety of end users of financial statements.

Different numerical answers may be obtained to those shown in these solutions depending on whether figures obtained from tables or from calculators are used in the calculations but candidates are not penalised for this. However, candidates may be penalised where excessive rounding has been used or where insufficient working is shown.

Comments on the September 2013 paper

The general performance was similar to results in the past, well-prepared candidates scored well across the whole paper. As in previous diets, overseas candidates did not perform quite so well as UK candidates. The comments that follow the questions concentrate on areas where candidates could have improved their performance. Candidates approaching the subject for the first time are advised to include these areas in their revision. The main problems were Q19 and 20, although many candidates scored high marks in all questions.

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

Workings for Question 5

$$A = (40 - 8)/(200 + 300 + 22) = 6.1\%$$

$$B = (40 - 8)/(200 + 300) = 6.4\%$$

$$C = 40/(200 + 300 + 22) = 7.7\%$$

$$D = 40/(200 + 300) = 8.0\%$$

Questions 1–10 were done well by most candidates.

- 11** The LLP structure protects the members from claims against their personal wealth. The LLP is a separate legal entity and its creditors cannot pursue the partners if the LLP's assets prove insufficient. That is a significant advantage because the partners in a traditional partnership are jointly and severally liable in a personal capacity. The actions of one partner could impose enormous personal liabilities on all of the others. The only real exception is when an individual partner behaves recklessly or dishonestly. In that case he or she may be personally liable to compensate any injured party.

This question was done well by most candidates.

- 12** Dividend policies tend to attract shareholders on the basis of their tax preferences. A company that pays little or no dividends will attract shareholders who prefer to receive capital gains. A share buyback would possibly leave the shareholders open to a claim for capital gains tax, but the funds released would not be income. There is a further issue with respect to signalling. The buyback does not imply that future dividends will be increased and so there is no question of misleading and inconvenient signals being sent to the shareholders.

This question was done reasonably well by most candidates.

- 13** The investor's portfolio is not properly diversified. The capital markets do not offer any return for accepting unsystematic risks because they can be diversified away. This investor has accepted the risks borne by the oil and gas industry, but there will be no benefit in the form of a higher return for this risk. The portfolio offers some geographical diversification, but even that will be restricted to the countries that have quoted oil or gas companies. This policy is only sound if she can genuinely identify mispriced securities in this industry. Such an investment strategy is speculative.

There were some very good answers by candidates to this question.

- 14** One problem is in determining a value for those benefits. In some cases that could be linked to the costs involved. For example, providing access to a company gym could be viewed as a fringe benefit, but it will be very difficult to measure the value obtained. This can lead to complicated arrangements, such as those relating to the personal use of company cars in the UK, where records have to be maintained and the tax authorities have to dictate the basis upon which the benefit should be provided.

There will be compliance problems because it may be difficult to maintain adequate records of all of the benefits enjoyed by each of the employees.

There may also be motivational issues, if employees do not perceive the full value of the benefit, but do see a cost in the form of a higher tax charge.

This question was not done very well by some candidates. In general candidates found it difficult to write more than a short sentence or two. Benefits in kind are an important part of the tax system.

- 15** Strictly speaking, the acceptance of a positive NPV project should increase the share price. That will only be the case if the acceptance of the project is known and understood and the shareholders agree with the directors' evaluation. The company may not wish to furnish the markets with details of this project for fear of attracting competition. If the directors make an unsupported statement that profits are expected to rise then the shareholders may dismiss that as self-serving disclosure by the board. The decline in profits and cash flows in the short term will be observable and those may affect the share price.

This question was answered well by many candidates. The link between positive NPV, share price and the problems of disclosure was discussed reasonably well.

- 16** The comparison of the opening and closing balances can reveal a net cash inflow or outflow, but cannot show the reasons for that change. A cash flow statement provides the reader with details of the extent to which the operating activities are generating (or consuming) cash. The cash flow statement also shows the other cash flows, broken down into relevant categories. Thus, the cash flow statement can highlight the fact that a net cash inflow occurred because the company has raised fresh borrowings. The statement can also show how that cash inflow was applied. The cash flow statement

makes it easier to reveal whether the net movement was attributable to the working out of a business strategy (e.g. the deliberate investment of surplus cash) or the first sign of a problem (e.g. cash flow problems).

This question was answered very well.

- 17** The basic problem with this case is the decision as to when a profit has been earned. The realisation concept would suggest that the sale of a policy is a significant part of recognition. The company would not sell insurance if doing so was unprofitable. Prudence would suggest that no profit be recognised on an insurance contract until such time as the company knows whether or not there will be a claim, which is likely to be shortly after the customer's safe return. The accruals concept suggests that it would be ideal if the costs could be recognised in the same period as the revenue. The easiest way to do that would be to wait until after the date of travel. It could be possible to estimate the costs of potential claims and create a provision at the time of sale. The money measurement concept would make that feasible if the estimate was deemed to be reasonably accurate.

This question was answered reasonably well by many candidates.

- 18** Groups of companies are not legal entities as such and so it is impossible to have a direct relationship with a group. Alpha's relationship will be with one group member, Global. Alpha cannot take it for granted that Mega will support Global in the event that it runs into difficulties and finds itself incapable of meeting its commitments. It may be of some comfort to know that Global is part of a large group because it may not be in Mega's interest to permit Global to fail. If Alpha really intends to rely on that possibility then it should seek written assurances that Mega will guarantee Global's future.

This question was not answered as well as expected.

- 19** (i) Paul will have the advantage of equity finance. The venture capitalist cannot demand repayment in the event of short-lived cash flow problems. Paul may also be able to request further financial support from the venture capitalist in the event of any unforeseen contingencies. The venture capitalist has an incentive to support the business because of the prospect of the capital gain in the event of it being a success.

Paul will also benefit from the provision of an experienced director, who will provide advice to the business while it is growing. That will leave Paul free to work on developing and marketing the product.

The venture capitalist has the opportunity to make a substantial return if this product proves a success. The cost of acquiring this right is linked to the cost of setting up initial manufacturing and so it may not reflect the full value of the product's patent.

Paul will be committed to this business, partly because of the contract and partly because of the right to buy back the equity. The venture capitalist would probably find it difficult to attract such an entrepreneur without offering an equity stake in this manner.

This is a risky investment, but the downside is restricted to the initial investment and there is a very substantial upside.

This question was answered very badly by several candidates. A lack of knowledge of this subject area was demonstrated.

- (ii) Both parties will be at odds with one another over the valuation. Both will wish to influence the independent valuer, who will have to draw upon internally generated information and reports in order to undertake this valuation exercise.

Paul may indulge in dysfunctional behaviour in order to lower the valuation in the lead-up to the valuation date. New products in development may not be revealed or may be made to look unprofitable.

The basic problem is that there will be no independent basis for the valuation of the company. The lack of a market price means that the valuation exercise will be highly subjective. There are likely to be a variety of different valuation models and each will provide a different figure.

This part was done reasonably well.

- (iii) One approach would be to identify one or more quoted companies that are innovators in product design in the same area as this business. These companies' price/earnings ratios will be a matter of record. The business' latest reported profit figure could then be multiplied by this comparator's P/E to give an estimated valuation.

The benefit of this approach is that it links valuation to profits and earnings, which appears to be the focus of the business. It relates the value of the shares to the most recent results of the business. It may be necessary to adjust profit to allow for the possibility that there have been unusual transactions or that there is a clear expectation of future growth.

Any valid alternative approach would be awarded credit.

This part of the question was poor with candidates finding it difficult to think of anything to discuss.

20 (i)

	June	July	August
Current ratio	1.5	1.8	2.3
Event company receivable turnover (days)	15	28	33
Credit card receivable turnover (days)	45	49	53
Inventory turnover (days)	26	26	26

Trent's current ratio actually looks healthy. The problem is the composition of current assets. The event company owes Trent a great deal of money. That appears as a current asset, but recovery times are slowing dramatically. Trent is also very exposed to the failure of the company's one credit customer.

The credit card company is also slowing down its payments to Trent. That is a further reason for the net outflow of cash.

Inventory turnover continues from month to month at a steady pace and the increase in inventory holdings is in line with production.

The overdraft is a major cause for concern because it is potentially repayable on demand. Trent could easily find itself totally insolvent if it does not improve its cash management.

The calculations of the ratios was done well by candidates the discussion was done less well.

- (ii) The first question is whether it would be possible to press the event company for more rapid payment. It looks as if the whole of August's sales remain unpaid. It may even be worth risking the loss of the company's business if Trent is going to wait so long for payment that overdraft interest swamps the profit.

Trent should also press the credit card company. It may be easier to threaten to move to another provider of this service.

It does not look as if matters are deteriorating with respect to inventory, but running inventory down to less than 26 days' holding would release cash. Once there is greater clarity about the payment stream from both receivables, Trent should consider raising finance to support the cash flow until the bank account is back in credit. That may be a matter of negotiating a larger overdraft or taking out a short-term loan. Even if the payables cannot be collected any more quickly, matters will improve when the expansion ceases and sales and cash flows settle to a steady equilibrium.

This part was done reasonably well.

END OF EXAMINERS' REPORT