INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

April 2012 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 who are 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. Although Examiners have access to the Core Reading, which is designed to interpret the syllabus, the Examiners are not required to examine the content of Core Reading. Notwithstanding that, the questions set, and the following comments, will generally be based on Core Reading.

For numerical questions the Examiners' preferred approach to the solution is reproduced in this report. Other valid approaches are always given appropriate credit; where there is a commonly used alternative approach, this is also noted in the report. For essay-style questions, and particularly the open-ended questions in the later subjects, this report contains all the points for which the Examiners awarded marks. This is much more than a model solution – it would be impossible to write down all the points in the report in the time allowed for the question.

T J Birse
Chairman of the Board of Examiners

July 2012

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 April 2012 paper

Although, the general performance was slightly poorer than in September 2012, 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 concentrate their revision in these areas. The main questions that caused candidates difficulty were Q19 and 20.

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

The MCQs were done well.

11 Most individual shareholders pay income tax at their highest marginal rate when they receive any dividend income. They have very little opportunity to manage that liability and so tax will almost certainly become payable whenever a dividend is received.

If the company retains earnings then, in theory, the share price will rise. Shareholders are not taxed on that gain unless they realise it by selling their shares. That gives the shareholders an opportunity to plan their pattern of taxable gains in any given year because they can time the realisation by delaying the sale of their shares if they so wish.

In addition, individual shareholders receive an annual allowance that can reduce the amount paid on gains beneath the allowance to zero. Furthermore, the tax rate on capital gains is generally lower than that which would be suffered on income.

This question was done well by candidates with most having good knowledge of the tax system.

12 The advantages to the lender generally cause equivalent disadvantages to the borrower. Martha will have to find the cash to pay interest on the bonds during the debt phase of the instrument. While that interest may be payable at a lower rate than would be paid on an outright loan, it is still a commitment that the new business will have to make.

In the event that Martha's business succeeds, the chances are that the bondholder will convert the bond to shares. That will dilute her equity and will reduce her return from having taken the initiative to start this business and work to make it a success. Thus, the bond will impose all of the downside risks associate with borrowing when the business is at its most vulnerable and will reduce the upside risks associated with any success that the business enjoys.

This question was not done well by candidates In general points written down were too few and at too high a level.

13 Currency futures can be used to manage risk exposures. The most logical use for a future would be to manage downside risk on a future receipt or payment of foreign currency. For example, if a company had made a sale to a foreign customer and had been forced to invoice in the customer's currency there could be a risk that the rates will move adversely during the period before settlement. A currency future could be entered into so that the sum due is sold for delivery at a future date, thereby guaranteeing the company's future receipt. The only significant cost would be the interest foregone on the margin deposit that would have to be made.

Futures can also be used to create a substantial exposure for speculative purposes. An investor who predicted a significant shift in a particular currency that appears to have been mispriced could enter into a futures contract in order to obtain a more significant position than could be possible using cash reserves to buy and hold the currency itself.

This question was done badly my many candidates. Many answers were extremely brief and had very little detail.

Candidates had very little knowledge of this area. Many knew what futures were, but did not know much more and were unsure what they were for.

14 The directors are ultimately responsible for the company's administration and any relationships that it develops with third parties. They cannot make somebody else responsible for those matters even if their expertise in engineering means that they are not particularly well equipped in business or financial management. They can, of course, delegate the actual work of maintaining books or talking to banks to a financial manager if they so wish.

The company's accountant will be required to fulfil the duties that are spelled out in the contract of employment. Those duties may have to be discharged in accordance with standards imposed by the accountant's professional body. The directors will bear the ultimate legal responsibility for ensuring that the company is compliant with all relevant legislation, but the directors will be entitled to expect that the work will be completed to a very high standard of quality.

This question was answered reasonably well.

15 The lessee may sign a lease that grants the right to use the asset for a specified period that amounts to virtually the whole of the asset's anticipated useful life. Provided the lessee makes the agreed lease payments the lessor will have little or no rights over the asset. Thus, the lessee can make full use of the asset for most or all of its useful life and thereby enjoys the full rewards of ownership.

Such lease arrangements are unlikely to be cancellable because the lessor will normally acquire the asset to meet the lessee's specifications. The lease payments will continue even if the asset becomes obsolete or redundant because the lessee's needs change. The lessee will almost certainly have to agree to accept responsibility for any loss or damage to the asset while it is in the lessee's custody. Thus, the lessee will effectively have to pay for the cost of the asset plus interest (via the lease payments) and suffer all the risks of ownership in the process.

This question was answered well by most candidates.

16 The shareholders prefer the entity to borrow, within reason, because debt is cheaper than equity. The shareholders enjoy the benefit of the wealth created from the lenders' investment and they also enjoy the benefits of the tax shield on borrowing. The risks associated with borrowing are borne directly by the company and so the shareholders will not have to risk their personal assets in the event that the company fails.

The directors are more directly exposed to the risks of gearing. If the company fails because it cannot meet its loan commitments then the directors will face the loss of their jobs. If they issue further shares then the shareholders will be unlikely to ever have an incentive to put the company into receivership because they will lose everything that they have invested.

This question was answered very well by most candidates.

17 Relevant information is generally future-oriented. Users find information relevant if it informs decisions that have to be made and that will typically involve a comparison of the outcomes the different decisions will have. For example, the decision as to whether an asset should be retained or sold requires an understanding of the future cash flows that it will generate and also of the amount that it will realise on the open market.

Information is reliable if it can be checked easily and measured against an objective benchmark. Generally, reliable information is historical and may not necessarily have much predictive value. For example, the historical cost of an asset is a very reliable measure because it can be verified against its associated invoice.

This question was done reasonably well the part on reliable information was poorer than the section on relevant information.

18 The financial statements are prepared by the directors and audited with a view to informing the shareholders. The figures in the financial statements may be designed to report past profitability, whereas the lenders would prefer a conservative evaluation of the present position to inform decisions about collectability. The information in the financial statements is largely historical, whereas lenders are primarily interested in future cash flows to ensure that they are capable of servicing a loan commitment. The statement of financial position will list the company's debts and the assets that are available to settle them and so that gives an insight into security, but the asset values are not necessarily guaranteed in the event of a failure and associated disposal under conditions of duress.

There is also a problem in that the annual report is not sufficiently frequent for the lender to monitor the security of an advance.

This question was not done very well by candidates. The answers were usually too short and general. Many candidates only wrote two sentences. This was not enough to pass the question, as the allocation of marks available indicates.

19 (i) Depreciation is effectively the recognition of the fact that an entity consumes resources in the form of property, plant and equipment when manufacturing goods. Barton's depreciation charge is based on a percentage of the historical cost of the assets being used. Barton's assets are very old and so those historical costs have become virtually meaningless. The resulting depreciation figure is perfectly consistent with accounting regulations, but it is not necessarily representative of the costs being incurred when reporting to decision makers. Any comparable business would have to report a much higher depreciation charge because it could not acquire assets for the same price as Barton. The property is stated at historical cost and therefore the depreciation charge is likely to be lower than if it was charged on current values.

This question was done very poorly with a surprising number of candidates having little idea what depreciation is.

(ii) Notional cost of assets = £1.2m
Notional useful life = 10 years
Charge = £1.2m/10 = £120,000 per annum

This question was straightforward but was generally not answered correctly.

(iii) This charge is calculated on the basis that the replacement cost of the assets is more relevant than their historical cost. The resulting depreciation recognises the economic cost of the wear and tear.

The useful life is based on the argument that ten years is realistic when the company does not employ a craftsman such as Barton's head of production. Even if Barton has such an employee in post, there is no guarantee of retaining that person indefinitely and so the artificially long lives of the assets will be curtailed.

This question was also not done well. Candidates had difficulty with the idea that having a craftsman as head of production could affect the useful life.

(iv) The negotiation of the selling price of a business is complicated by the fact that accounting regulations do not necessarily lend themselves to every situation. Barton's machinery has been fully depreciated on a historical cost valuation and the fair value of the assets is normally determined by looking at their market valuation, which is also zero. Thus, Barton's owner can claim that depreciation on production machinery is zero and such a claim is consistent with accounting regulations. If the owner insists on making the best possible use of this loophole then profit may be overstated and that could be used as an argument to inflate the selling price for the business.

This question was answered incorrectly by many candidates who felt that the market value was relevant to the depreciation calculation.

(v) The proposal involves basing the selling price on a multiple of profit. That automatically incorporates the effects of the factors that the owner has mentioned. The company's good name and customer base will have contributed to past profits and so they are included in the valuation of the company as a going concern. The fact that they are not being priced separately does not mean that they are being excluded altogether.

It could be argued that the good name will become less valuable if Barton is taken over and becomes associated with a large and modern company. Part of the reason for company's success in this niche is the fact that it is a small company manufacturing in a traditional way.

This part of the question was poorly answered with some candidates just missing it out.

20 (i) This criterion takes some account of the time value of money. It also requires all investments to achieve positive NPV using a discount rate that has, presumably, been arrived at through trial and error or on some other basis.

Perhaps the standard discount rate of 8% p.a. will not reflect the risks of any particular project, but the alternative would be to invest significant time and effort in determining a more realistic target for each investment and there is no guarantee that the resulting figures will be any more suitable. All investment decisions require subjective decisions about the risks and returns.

The fact that Manor is investing in property means that it is fairly unlikely that it will be faced with a massive risk of loss on a project, even if it is necessary to hold an investment until a market blip sorts itself out. Also, the fact that the projects have a typical life of three to five years means that using a different discount rate would have very little impact on the overall net present value. More stringent criteria would be justified in the case of a different industry with longer project lives, but the impact in this case would not be material.

This part was not done very well by candidates. They generally did not mention the scenario set out in the question at all but just discussed NPV in general terms.

(ii) There is no justification for reducing the discount rate just to make more projects appear to be profitable. It would make just as much sense to abandon project appraisal altogether and simply accept all projects on some random basis.

If the market is declining then that might suggest that it is riskier and a higher discount rate than 8% p.a. should be used.

If the shareholders discover that the company is seeking only a modest return on its investments then the share price will decline. Logically, the shareholders will evaluate projects using their own evaluation of risk and return and the share price will decline if the company accepts projects that have a negative NPV when evaluated in the shareholders' terms.

Clearly, the shareholders will not necessarily be aware of investments unless the directors inform them. Even if the fact that an investment is being made is disclosed, the directors will not publish their forecasts on NPV calculations.

If the directors do make a series of poor investments because of this strategy then the shareholders will only become aware of that when the results of those investments start to appear in the published accounts. It may take at least two or three years before a series of weak returns starts to impact on reported ROCE.

This part was done badly by almost all candidates. Candidates did not mention shareholders and did not discuss the discount rates in any detail. Where candidates discussed this in part (i) credit was given.

(iii) The most obvious risk is that any evaluation based on "best possible" is unlikely to achieve the anticipated results and is likely to be a disappointment. The shareholders will almost certainly wish the directors to evaluate any projects on the basis of the outcomes that are likely to be achieved and they may regard the use of will lead to the acceptance of best possible as a dishonest attempt to justify unsuitable investments.

It could be worth considering the best possible outcome as one aspect of decision-making. Risky projects often have an upside potential as well as a downside and so the possibility that an upside may be enjoyed is worth considering as one factor in choosing between competing projects.

This part of the question was done better than parts (i) and (ii).

END OF EXAMINERS' REPORT