

# **INSTITUTE AND FACULTY OF ACTUARIES**

## **EXAMINERS' REPORT**

April 2011 examinations

### **Subject CT2 — Finance and Financial Reporting Core Technical**

#### **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.

T J Birse  
Chairman of the Board of Examiners

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**General comments**

*This exam had some excellent results. There was a high pass rate and some candidates scored highly.*

*The parts of the exam which were done poorly tended to be the finance sections rather than the accounting questions. Most candidates who intend resitting are likely to benefit from concentrating their revision on the finance topics.*

*The answers to the questions were mixed, some were excellent but others, particularly questions 13, 15, 17, and 19 were poor.*

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

Working for q3:

Market capitalisation = £20m before rights issue + (2m × 1.60) = £23.2m for 12m shares = £1.93/share ✓

Average price = £1.80

Workings for q8:

Correct answer =  $5,000 - ((5,000 - 200)/10 \times 3) = 3,560$  ✓

Ignore residual =  $5,000 - ((5,000)/10 \times 3) = 3,500$

Add residual =  $5,000 - ((5,000 + 200)/10 \times 3) = 3,440$

Subtract residual from cost =  $(5,000 - 200) - ((5,000 - 200)/10 \times 3) = 3,360$

Working for q10:

Correct answer =  $(700,000 + 48,000)/(400,000 + 470,000 + 600,000) = 51\%$

Wrong return =  $700,000/(400,000 + 470,000 + 600,000) = 48\%$

Exclude retained earnings =  $(700,000 + 48,000)/(400,000 + 600,000) = 75\%$

Exclude liabilities =  $(700,000 + 48,000)/(400,000 + 470,000) = 86\%$

***The MCQs were done very well by most candidates. No one question appeared to cause a significant problem for candidates.***

- 11** The shareholders enjoy any profits after interest and tax and are keen to see the company prosper. The lenders wish to have their agreed interest and repayments. Neither party will necessarily benefit if the other suffers. If the company is unable to repay its lenders then the shareholders may lose everything. If the company does not make a profit then it may prove difficult to meet loan repayments.

There is a difference in risks, which could have an impact on the differences between the shareholders and the lenders. The shareholders enjoy upside risks, whereas there are no real upside risks for lenders. Thus, lenders may have no incentive to encourage significant risk-taking on the part of the companies that they lend to. There may be times when shareholders have very little downside risk. For example, if the company is in difficulties then the shareholders may feel that there is little to be lost if the company takes risks in order to deal with the problem. If the company is going to fail anyway then the risks will cost them nothing if the risky strategies fail but the lenders may suffer if the funds that would be used to meet their repayments are lost.

*This question was done very well by many candidates.*

- 12** Admitting a partner is a serious matter. The new partner will be entitled to an agreed share of any profits, which could prove expensive to Simon. Simon will also be jointly and severally liable with the new partner, even if the liabilities arise from an act or omission on her part.

Presumably the new partner will be expected to buy her way into the equity and that could generate long term funding for the business.

Granting a partnership should avoid the risk of this person leaving Simon's practice. That may be a good enough reason for the partnership in itself if Simon has become dependent on this individual. She will also be more highly motivated by the fact that she has a personal stake in this business.

*This question was also done well with a number of candidates scoring full marks.*

- 13** Preference shares are only equity in the legal sense of the relationship between the company and the shareholder. Preference shares carry a fixed dividend, which has exactly the same impact on the ordinary shareholders' returns as borrowing. If the preference dividend is suspended then the rights are likely to be carried forward, so the dividend will be paid eventually. Shareholders are also likely to have additional rights in the event that the preference dividend is in arrears.

Historically, preference shares have often been designed to avoid showing debt in the statement of financial position. It has become important to show them as debt because that has been the motive for issuing them.

*This question was not done very well by candidates which was disappointing. Most candidates got the points about the fixed dividend but few mentioned that a fixed return was similar to debt.*

- 14** Depreciation requires highly subjective judgements that can be exploited to manage the resulting depreciation figure. If depreciation could be charged as an expense then the company could virtually determine its own tax charge.

Capital allowances are calculated in a consistent manner, so the tax authorities know exactly what they will be. That avoids the risk that time will have to be spent checking and evaluating the calculation.

The tax system can also permit the encouragement of investment. For example, the initial rate can be as high as 100% in the first year, so that there is an additional cash flow advantage from the tax system.

*This question was done very well by many candidates. No significant problems were noted at all.*

- 15** The IRR criterion will give the same result as the NPV method in simple cases where the only matter to be decided is whether to invest in a simple investment. The disadvantage is that the computation is generally more complicated and requires trial and error or a spreadsheet for an accurate measure.

IRR can be misleading when the decision is more complicated, such as deciding between two investments. IRR makes no adjustment for the scale of the investment and so it could lead to the wrong project being selected NPV always expresses the result as an absolute value for the change in shareholders' wealth. That means that the impact of the investment is always visible.

*This question was done poorly. This should have been a straightforward question as it was knowledge based, however the level of knowledge shown was quite poor.*

*It is generally the finance questions that candidates do not answer adequately.*

- 16** The money measurement concept requires that accounting statements restrict themselves to matters which can be measured objectively in money terms. That simplifies accounting enormously because it excludes such items as the values of the company's customer base, its work force and its brand names. Such assets could be of huge interest to the shareholders, but they would be difficult to value and the valuations would be open to challenge.

The going concern concept assumes that a business will continue indefinitely in its present form. That justifies many of the limitations imposed by the cost concept because there is little harm in reporting irrelevant figures for value if the assets concerned are unlikely to be sold in the immediate future.

*Any two concepts are acceptable.*

*This question was answered very well. Usually questions on the accounting concepts are done very well and this was no exception.*

- 17** A disclaimer is an extreme form of modified audit report. Effectively the auditor refuses to express an opinion on the financial statements because of uncertainty that is so serious that it is impossible to form an opinion. In these circumstances, the auditor believes that the financial statements cannot be used for decision making purposes.

This form of qualified report would be used in extreme cases where the evidence available to the auditor is so deficient that it has led to extreme uncertainty. For example, the auditor might disclaim opinion if the bookkeeping records had been destroyed by a fire and no backups were available.

*This question was probably the least well answered in the exam. Many candidates did not know what a disclaimer report was. The level of knowledge of this area of the syllabus was poor.*

- 18** The markets are likely to read the reduction of the dividend as a sign that the company is in difficulty. Companies always try to maintain a steady dividend policy in order to demonstrate confidence.

The directors could attempt to limit the damage by stressing that the cash will be invested in a positive NPV project. If the market accepts that argument then, at least in theory, the share price may not be harmed to the same extent. The problem is that this assurance may be misread as an excuse for cutting the dividend and may not be fully believed or understood.

In any case, shareholders may be disadvantaged by this action because some will be dependent upon the dividend payment.

*This question was answered very well by most candidates, showing a clear understanding of this topic.*

- 19** (i) Gearing indicates the proportion of the long term finance provided by lenders. If the gearing ratio is high then the banks will be competing with a larger number of creditors for payment in the event of default. High gearing also indicates that the company is at an increased risk of running into difficulties.

Banks often restrict the gearing ratio so that only a minimal amount of additional borrowing is permissible. They track gearing closely in order to check that the company is not in default because they would then have the right to foreclose on the loan.

- (ii) Gearing (original figures) =  $(£11\text{m}) / (13\text{m} + 11\text{m}) = 46\%$   
Gearing (loan, unadjusted) =  $(£11\text{m} + 8\text{m}) / (13\text{m} + 11\text{m} + 8\text{m}) = 59\%$   
Gearing (loan, adjusted) =  $(£11\text{m} + 8\text{m}) / (13\text{m} + 7\text{m} + 11\text{m} + 8\text{m}) = 49\%$

*The calculations were done reasonably well.*

- (iii) Revaluing property increases a company's equity and so if the company has a bank covenant in place, it may avoid the covenant conditions being breached. The danger is that the revaluation does little to reduce the risks faced by the shareholders and the company itself. There will be no additional cash flows arising as a result of the revaluation and so the company will be no better equipped to service the larger loan.

Relying on revaluation to support the a loan decision implies that a company is willing to risk the loss of its property in order to proceed with the loan. If that is the case then it may be of some reassurance to the lenders, but will do little or nothing to comfort shareholders. There is no great advantage in revaluing in order to comfort lenders because the accounting treatment does not affect the fact that the asset's value had increased.

*This part of the question was answered quite well.*

*Most candidates understood that revaluing an asset would possibly help the conditions of the bank's covenant.*

- (iv) The most immediate implication from the shareholders' point of view is that revaluation makes the directors more accountable for the resources that have been provided in order to generate wealth for the shareholders. When calculating return on capital employed the revaluation reserve indicates the full extent of the equity that has been entrusted to the board. If assets were left at cost less depreciation then it would possibly make the company look more efficient than it actually was.

Regular revaluations may also force the directors to ensure that they take adequate care of the company's assets. If they do not maintain the property or pay attention to market trends then the shareholders may be concerned that the company is not maintaining the property adequately or that the company is retaining an investment in property in the face of a declining market.

*This question was not answered very well as it called for application of knowledge on revaluations. It required candidates to think carefully about why assets are revalued and whether it is a good idea or not.*

- 20** (i) Required rate =  $4\% + (0.55 \times 9\%) = 8.95\%$

***Most candidates got this calculation correct.***

- (ii) The total risk associated with an investment is not particularly important in the context of a diversified portfolio. A significant proportion of the risk in most investments can be diversified away. In other words, factors such as the risk of IT failure or of the closure of the roads will be cancelled by portfolio effects.

Risk can be separated into two components: systematic and unsystematic. Systematic risk is inherent in the political and economic environment and is common to all companies. For example, a change in energy prices will affect all companies to some extent. Unsystematic risk is specific to the company. It encompasses a range of risks specific to the company such as changes in market demand for its products, stability of industrial relations, nature and location of its assets, and so on.

Systematic risk cannot be diversified away because it arises from factors which will have an effect on all companies. Thus, an increase in interest rates or oil prices is likely to have an adverse effect on all companies and will depress returns from the market as a whole. Unsystematic risk can be diversified away and, provided the investment is held in a properly diversified portfolio, it can therefore be ignored.

It is possible that a highly speculative investment will not be affected by general market conditions to any great extent. That means that it will not have a high systematic risk. The volatility will, therefore, be due to unsystematic factors that can be diversified away. That, in turn, suggests that the investment may require a very low return.

***This question is asked in various guises quite frequently. This was not answered very well. Candidates should study systematic and unsystematic risk and how the theories could be applied in different cases.***

- (iii) In theory the share price will rise by the NPV per share from the investment. Accepting positive NPV projects creates wealth for the shareholders and that should be reflected in the share price as soon as the markets become aware of the investment.

In practice, there is no guarantee that the company will release sufficient information for the market to make this evaluation. There is a commercial cost to releasing information and Porter will not wish to alert competitors any sooner than necessary.

There is also the question of whether the shareholders will agree with the board's evaluation of this project. The degree of optimism that should be shown is really a matter of opinion.

The shareholders may view any information of this nature as biased and self-serving. The directors may not be honest in terms of disclosing the risks and costs.

*This question was poorly answered with few candidates making a connection between share prices and accepting positive NPV projects.*

- (iv) Company directors are in a rather different position from shareholders. A shareholder can hold a diversified portfolio of investments and can, therefore, reduce the risks associated with a particular investment. A director will probably have only one principal employer and will, therefore, be motivated more by total risk.

This different perspective might be evidenced by a tendency to invest in relatively safe projects. This is because a disaster might be rather catastrophic for the board even though it would have relatively little impact on the shareholders.

If the board proceeds with this investment then there is also a risk that the shareholders will blame the directors for any failure in the project. Their reputations may be at stake even though the risks are known and are being taken in a considered manner.

*This part was done very poorly with few candidates making any good points.*

## **END OF EXAMINERS' REPORT**