INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

September 2017

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.

Luke Hatter
Chair of the Board of Examiners
December 2017

A. General comments on the *aims of this subject and how it is marked*

1. The aim of the Finance and Financial Reporting subject is to provide a basic understanding of corporate finance including knowledge of the instruments used by companies to raise finance and manage financial risk and to provide the ability to interpret the accounts and financial statements of companies and financial institutions.

2. 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.

3. 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 lose marks where excessive rounding has been used or where insufficient working is shown.

B. General comments on *student performance in this diet of the examination*

As usual candidates found the large finance question challenging. The marks were low for question 20. The marks were also lower than usual for the MCQ questions. Very few candidates scored full marks for the MCQs and a number of candidates scored low marks which was unusual.

C. Pass Mark

The Pass Mark for this exam was 60.

Solutions

Q1	B	[2]
Q2	A	[2]
Q3	A	[2]
Q4	B	[2]
Q5	D	[2]
Q6	B	[2]
Q7	B	[2]
Q8	A	[2]
Q9	B	[2]
Q10	A	[2]

These questions were not done particularly well. Some candidates did achieve full marks but many scored less than 10marks.

Q11 A personal allowance may be a fairer basis for taxing a population that has a wide range of incomes. [1]

Individuals who have low incomes may pay little or nothing in tax because up to 100% of their earnings might be taken out of the tax system. [1]

The effective rate of tax for an individual who earns a little more than the personal allowance threshold will be far smaller than the basic rate of tax, while a high income individual will obtain relatively little benefit in terms of marginal rates. [1]

It is frequently argued that progressive tax systems are fairer and more just because they take a larger proportion of income from those who can afford it the most. [1]

Personal allowances can simplify the collection of tax. [1]
Individuals on a low income may not have to pay any tax, thereby reliving the tax authorities from the administrative burden of taxing them and collecting the tax. [1]
[Max 5]

This question was done reasonably well by most candidates. Most candidates clearly understood personal allowances and their effect.

Q12 The parent's shareholders have invested in an economic entity that controls 100% of the group members' assets. [1]

The NCI is essentially a source of equity finance that funds some of the assets owned by subsidiary companies. [1]

The parent shareholders will have to share the profits created by any partly-owned subsidiaries with the NCI, which may prove expensive. [1]

The NCI may also have certain rights in the event that the subsidiary is being managed in a manner that puts the group's interests before those of the subsidiary shareholders. [1]

The entry in the consolidated financial statements may serve as a warning to the parent shareholders that their control of the subsidiaries should not be abused. [1]

Ultimately, the NCI is a source of finance for which the parent shareholders should make the group's senior management accountable. [1]

Profitability should reflect the finance invested by the NCI. [1]

[Max 5]

This question was done poorly by many candidates. It appeared that candidates had limited knowledge of non-controlling interest.

Q13 Any assets' expected life is an estimate that will almost certainly run for years into the future. [1]

It is almost inevitable that any such estimate will prove to be incorrect when the asset is eventually disposed of. [1]

Those errors will be apparent to the shareholders and the company may be queried as to why depreciation has been under or overstated. [1]

There is a particular problem with this type of asset because some asset lives are determined by wear and tear while others are a matter of technological obsolescence. [1]

A computer network may have a very long potential physical life, but will almost certainly face replacement when a more cost-effective technology is introduced. [1]

So the factors that affect this estimate are almost wholly outside of the consultancy's control. [1]

[Max 5]

This question was done well with most candidates demonstrating knowledge of depreciation and assets.

Q14 The whole point of preparing financial statements is to inform decisions. [1]

There would be no point to accountants or accounting if the statements that are produced are not used. [1]

Meeting user needs implies knowing who the users are, so that their interests can be determined and addressed. [1]

Different user groups have different needs. [1]

For example, equity investors need to understand whether management decisions are enhancing their wealth and so the focus is on profits and gains. [1]

Lenders are more interested in the security of their advances and so they are more interested in having prudent valuations of assets. [1]

The IASB claims that its financial statements are generally useful to all designated user groups, arguing that financial statements developed for equity investors will meet the needs of all other interested parties. [1]

[Max 5]

Many candidates scored a bare pass for this question. Candidates could have discussed the uses of financial statements more clearly.

Q15 The individual partners in a traditional partnership are jointly and severally liable for the firm's obligations. [1]

That means that their personal exposure to personal liability could be potentially unlimited in the event that a claim is lodged for, say, a negligent audit report published by the firm. [1]

In the first instance, the claim would be against the firm's assets, but the personal assets of the individual partners would then be at stake if the firm's assets proved insufficient. [1]

Joint and several liability may mean that a partner could be at risk of loss for a decision taken by another partner who has acted negligently. [1]

With an LLP the members' personal wealth would not be at stake to the same extent, although individual members who had behaved negligently could be at risk of direct claims being lodged against them. [1]

A significant claim that damaged the LLP as a whole would have a negative impact on the members. [1]

The equity tied up in a successful firm could be the members' most significant assets and so the collapse of the LLP could still be catastrophic even if the downside is not as bad. [1]

[Max 5]

This question was done poorly by many candidates. Many candidates wrote about limited liability companies instead of partnerships and scored a low mark.

Q16 Agency problems arise because the interests of the shareholders and the directors diverge. [1]

If the directors are paid a salary then they have no particular incentive to seek to maximise shareholder wealth. [1]

They could become risk averse because there is no point in pursuing risky projects that could cost them their jobs in the event of failure, with the benefits going to the shareholders in the event of success. [1]

Replacing some of the salary that would otherwise be paid to the directors will give them a stake in the company and could encourage them to work harder towards a higher share price. [1]

This will be a partial solution, at best, because the board is unlikely to enjoy much more than a small percentage of any increase in market capitalisation. [1]

Thus, the effect of the incentive may be limited. [1]

The other problem is that the board cannot diversify to the same extent as the shareholders. [1]

The problem of risk aversion may not be addressed to any great extent by linking even more of the directors' financial wellbeing to that of the company. [1]

[Max 5]

This question was done very well by many candidates and probably had the highest number of candidates getting full marks of any of the short questions.

Q17 The whole point of a swap is that two parties arrange to exchange future cash flows [1]

In general, the basis for most exchanges is that they provide the parties involved with some benefit; otherwise they would be unlikely to occur. [1]

One reason for a swap may be that two parties have matching commitments that do not suit their circumstances, such as a fixed interest borrower who would prefer floating rate debt and a floating rate borrower who wishes fixed. [1]

A swap would have the effect of permitting the two parties to take over each other's cash flows, effectively converting the fixed rate to floating and vice versa. [1]

This arrangement will be far cheaper and far more profitable than repaying the debt early and taking out a replacement. [1]

Swaps can also assist borrowers to capitalise on any specific advantage in the markets. [1]

For example, banks can borrow at variable rates that are lower than for most potential borrowers. [1]

A swap arrangement would make it possible for a bank to raise variable rate debt, swap with a counterparty who has fixed rate borrowings, sharing the specific advantage that the bank has in the capital markets. [1]

[Max 5]

This question was done well by many candidates with many candidates defining swaps and giving good examples. Candidates were awarded marks for good examples.

Q18 The logic behind the suggestion depends on the likelihood of the market making that inference. [1]

If the markets believe that the board is communicating an intention to maintain the dividend per share then the scrip issue will be viewed as a sign of confidence and the share price could increase. [1]

The capital markets take account of the directors' credibility when interpreting any signals. If the directors have a good reputation then they will risk that if they deliberately send out a misleading signal and so the markets will have greater confidence. [1]

The markets will value the prospect of an increased in the context of the company's ability to maintain that payment. [1]

If the dividend is increased beyond the company's ability to maintain that growth then the board would be eating into capital and the share price could even decrease. [1]

The share price is more a reflection of the company's ability to generate net cash than its ability to pay dividends in the short term. [1]

[Max 5]

This question was done well with a number of candidates achieving full marks. Some candidates discussed rights issues instead and did not understand the difference. That was the most common error.

Q19 (i)

Current ratio 159/132 1.2:1 [1]
Quick ratio (159 – 52)/132 0.8:1 [1]
Inventory turnover 52/515*365 37 days [1]
Trade receivables turnover 105/1,000*365 38 days [1]
Trade payables turnover 104/520*365 73 days [1]

(ii) Liquidity is essentially a secondary matter for most businesses. [1]

If liquidity becomes a problem then the company could fail due to an inability to pay its debts. [1]

If liquidity is adequate then there is no great advantage in having any more tied up in working capital. [1]

The closing position with regard to liquidity can prove misleading when viewed in isolation. [1]

For example, a supermarket may have a very low current ratio, but an analysis of past trends may reveal that it has had a low but stable ratio for many years. [1]

In that case, the poor ratio is clearly adequate. [1]

Trends can also reveal the effectiveness of strategies for managing liquidity. [1]

For example, a company with excessive cash balances should be aiming for decreases in liquidity in order to put those resources to good use. [1]
[Max 4]

(iii) Fratton's liquidity is a matter of some concern. The ratios are low, but they are declining. [1]

The decreasing current and quick ratios may suggest that the company is running into increasing difficulties and that it may not be able to sustain a quick ratio of less than 1.0. [1]

The components of working capital also suggest that the company may be running into difficulty. [1]

The increasing number of days in inventory and receivables turnover would suggest that more and more cash is being tied up in these assets, despite the fact that they do not yield any return. [1]

The key issue is that Fratton is steadily running out of cash. [1]

The declining cash balance will soon cross over to an overdraft situation. [1]

If that is not addressed in time then the company may be unable to meet its commitments to staff and suppliers and be forced out of business. [1]

[Max 6]

(iv) Trade payables are suppliers who provide trade credit. That credit is a source of short-term finance. It is not free of charge, but the cost is a fixed element of the invoiced cost price. [1]

It follows that the cost of trade credit can be reduced by delaying payments because the implicit interest will not be adjusted for any slight delay. [1]

It would appear from both the increase in the absolute amount and the increase in the turnover that Fratton is using its trade credit to make good any shortfall in cash for trading purposes. [1]

Some of the cash that is being tied up in inventory and receivables is being taken from the suppliers by delaying payment. [1]

The danger is that Fratton will take excessive advantage of its suppliers. [1]

Up to a point, suppliers wish to make sales and so they cannot afford to alienate customers, so a certain level of excessive credit will be tolerated. [1]

If that goes too far then the suppliers may decide to withdraw trade credit because they are afraid of being left with unpaid debts. [1]

They may also blacklist Fratton as a slow payer with the agencies that compile registers of slow and delinquent payers, threatening Fratton's ability to generate trade credit at all. [1]

[Max 5]

(i) Many candidates scored 5 marks which was excellent. In general this part of the question was done very well.

(ii) This section was done quite well. Most candidates understood liquidity.

(iii)Again this section was done reasonably well by many candidates. Some candidates did not mention the overdraft at

> *all.*
>
> *(iv) This question was done quite well. Some candidates did not expand their answer sufficiently to gain a high mark.*

Q20 (i) Modigliani and Miller developed a hypothesis that dividend policy had no effect on shareholder wealth. [1]

Their model relied on a host of assumptions, including the absence of tax. [1]

Shareholder tax preferences are a key factor in deciding whether to pay a dividend. [1]

In theory, withholding and reinvesting profit will yield a capital gain that may suit shareholders whose income is taxed heavily, but who face a lower effective rate on capital allowances. [1]

In Bowmax's case, it may be that the capital markets will use industry norms to infer the company's dividend policy. [1]

If the MM clientele effect does, in fact, occur then shareholders with a preference for dividend income will be disappointed if the company withholds a dividend in order to secure a capital growth. [1]

That may lead to a spurt of selling that may not be offset by a corresponding demand from shareholders with a desire for capital gains. [1]

The directors should review analyst reports and other information sources about the hotel industry to determine the market expectations concerning dividend practices in the industry. [1]

The other thing that the directors should consider is that they are newcomers to the stock exchange. [1]

The market may be reluctant to invest in a new entrant without some encouragement. [1]

Paying a sizeable dividend, in line with industry norms, will indicate some confidence on the part of the directors. [1]

The directors will be risking their careers if they pay an excessive amount that the company cannot afford and so the market would view this as a favourable signal. [1]

Regardless of these arguments, it is perfectly acceptable for the directors to determine their own view as to what level of dividend the company should pay. [1]

If they feel that a lower dividend would be appropriate then it might be sensible to brief analysts and make an announcement to that effect. [1]

The markets will be far less prone to disappointment if the board makes its plans clear from the outset. [1]

[Max 12]

(ii) The debenture issue has the effect of replacing equity with debt. [1]

In theory, that would have the effect of reducing Bowmax's WACC because the interest will be lower than the cost of equity and it will be tax deductible. [1]

Debt of $30m will leave the company with a very low gearing ratio. [1]

The company has no long term borrowings at the moment and so a small debenture issue may actually improve the capital structure. [1]

Judicious use of borrowings is a sensible way to demonstrate confidence on the part of the directors because they are signalling that they are willing to commit future cash flows to the payment of interest and principal. [1]

Conversely, an insistence on being wholly financed by equity may imply some concerns. [1]

The fact that Bowmax is in the hotel industry makes borrowing even more sensible. [1]

The company has significant property holdings that are showing a gain on valuation [1]

The lenders can secure their advances against that property and so the overall cost of borrowing should be lower. [1]

This would essentially give Bowmax an opportunity to realise some of the capital gain and return its to the shareholders through the proposed dividend. [1]

[Max 8]

(i) Many candidates did this question quite well and passed it. There were few high marks.

(ii) This question was not done very well and many candidates scored a bare pass. Candidates did not really discuss WACC very well and did not make a case for hotels borrowing money.

END OF EXAMINERS' REPORT