INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

April 2019 Examinations

Subject CB1 - Business Finance
Core Principles

Introduction

The Examiners' Report is written by the Chief 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

Mike Hammer
Chair of the Board of Examiners
July 2019

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

1. The aim of the Business Finance Core Principles subject is to provide a basic understanding of corporate finance including a 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. The paper includes a small quantity of management accounting mainly budgeting.

3. Different numerical answers may be obtained to those shown in these solutions but candidates are not penalised for this.

B Comments on *student performance in this diet of the examination*

Performance was very good. Many of the questions were answered very well. Questions 1-10 in particular were very good with a number of candidates scoring full marks. There were one or two questions where the performance was poor most noticeably questions 13, 18, 19 (iii) and question 20.

C Pass Mark

The Pass Mark for this exam was 60

Solutions for Subject CB1 - April 2019

1 A [2]
2 B [2]
3 D [2]
4 D [2]
5 C [2]
6 D [2]
7 C [2]

- A Parent's investment in sub
- B Parent's investment + 60% of sub's assets
- C Correct answer: sub's assets, with nothing from parent because its only asset is cancelled on consolidation
- D Parent's investment + 100% of sub's assets

8 A [2]

- A Correct answer: equity shares = 10,000 x £1.00 and …
  share premium = 10,000 x £1.50
- B - Values share premium at £2.50/share
- C - Values share capital at £2.50
- D - Values share capital at £2.50 and double counts premium

9 D [2]
10 C [2]

[Total 20]

Questions 1-10 were answered very well. Many candidates scored a very high mark which was excellent.

11 Social responsibility can be discussed from an ethical perspective. Business operations affect numerous stakeholders in a host of different ways. [1]
For example

- Externalities such as emissions can create health hazards and reduce the quality of life. [1]
- These externalities often arise because it would cost more to process Emissions before releasing them into the environment. [1]
- Companies often have to make quite delicate decisions because they may be operating in jurisdictions in which there is little or no regulation to force them to behave responsibly. [1]
- Companies should also consider social responsibility from an economic perspective. [1]
- It may be that companies can reduce costs by taking advantage of lax legislation, perhaps by establishing factories in countries where low pay is permitted. [1]
- Such behaviour can affect revenues because customers may be unwilling to buy a product that has been manufactured in such conditions. [1]

[7, Max 5]

This question was answered well. With many candidates commenting on the increase in share price for socially responsible companies.

12 Preference shares generally combine characteristics of both debt and equity and so there can be a debate about their treatment in ratio analysis. [1]
From a practical point of view, they carry a fixed rate of dividend, which has a similar impact on cash flows to borrowing. [1]
These fixed payments increase the risks borne by equity shareholders in exactly the same way as the fixed payments associated with debt. [1]
Preference shares may not carry the same degree of compulsion to pay fixed finance charges as debt. [1]
The directors may be permitted to suspend a preference dividend payment if they feel that the company cannot afford it, but there will be reputational damage (at least). [1]
The suspension of a preference dividend may also lead to other penalties, such as the suspension of ordinary dividends. [1]
In some cases, preference shares may be designed so as to carry contractual rights to dividends and the repayment of the face value on a specified date. [1]
Preference shares have been implicated in creative accounting schemes. [1]
[8, Max 5]

This question was done well with most candidates showing good understanding of the differences between ordinary and preference shares and discussing debt very well.

13 The essence of an interest rate swap is that two parties agree that they will recreate the effects of fixed and variable rate liabilities. [1]
In other words, if the variable rates are higher than fixed then the fixed rate borrower will reimburse the variable rate borrower, and vice versa. [1]
That creates the effect of the fixed rate borrower having a variable rate loan and the variable rate borrower is now effectively fixed. [1]
The parties to a swap do not actually exchange obligations. [1]
In other words, there is no direct obligation arising from a counterparty falling behind on its loan payments. [1]
The most immediate problem would be that any unpaid sum due from the counterparty could be forfeited in the event of a financial collapse. [1]
The long-term risk of a financial problem would be the possibility that the swap will collapse and will either leave an unwanted fixed/variate rate liability. [1]
That could require a fresh swap to be negotiated with a new counterparty. [1]
Credit risk may be mitigated by conducting detailed credit checks on the counterparty to the swap. [1]
The intermediary who organises the swap may take deposits or other advance payments to mitigate credit risk. [1]
[10, Max 5]

This question was poorly answered. Candidates did not demonstrate much knowledge of interest rate swaps.

14 Top down budgeting involves budgetary targets being set by senior managers and imposed on more junior managers and staff. [1]
Junior managers can feed back and raise concerns, but the budget is essentially set by the time that they first see it. [1]
The budget for staff travel and accommodation will have a direct impact on the comfort and convenience enjoyed by staff when they travel for work. [1]
Under bottom up budgeting, consultancy staff might be inclined to set budgets that permit them to spend more, so that their trips are more enjoyable. [1]
For example

- they might set budgets with the intention that they will use first class rail travel and business class when they fly. [1]

Top down budgeting would make it easier for senior management to set an appropriate standard, allowing for the need to avoid false economies. [1]
There could, for example, be an argument that journeys that exceed a certain length would be unduly tiring by economy class. [1]
[7, Max 5]

This question was answered well by many candidates.

15 The most immediate impact would be that inventory levels would decline, releasing cash in the process. [1]
Unfortunately, the contents of the stationery cupboard are unlikely to be worth enough to release a material amount of cash, and so it is debatable whether the effort would be justified. [1]
Having a formal inventory management system would enable the consultancy to optimise its inventory of stationery, but that might involve all staff in additional time and effort because inventory levels would have to be monitored. [1]
Requiring staff to update records to show that they had taken a packet of staples Or a pen would distract them from their real work. [1]
Holding smaller quantities of stationery would create the risk of shortages. [1]
Running out of basic commodities, even if it happened infrequently, could cost more than the costs created by holding excessive quantities. [1]
Arguably, the system of maintaining healthy levels of inventory and replenishing well before they run out is the most efficient way to manage this asset. [1]
Insisting on an improvement could undermine the CEO's credibility. [1]
[8, Max 5]

Most candidates showed an understanding of cost versus benefit when managing stationary inventory.

16 The cash flow statement helps readers to understand the cash flows arising from operations. [1]
Given that shareholder wealth is essentially a function of net cash flows, the cash flow statement could be linked to shareholder wealth. [1]
Cash flows are also relatively objective measures of performance. [1]
The amount of cash on hand at the beginning and end of each financial year can be checked against bank statements. [1]
Accruals-based financial statements leave scope for errors and creative accounting. [1]
Measuring performance in terms of cash flows could, however, create scope for dysfunctional behaviour. [1]
If the directors do not, for example, invest in new assets then the operating cash inflows will increase in the short to medium term, although that could then lead to a shock when the assets finally need replacing. [1]
[7, Max 5]

Candidates demonstrated reasonable understanding of the cash flow statement and why it is useful.

17 The most obvious implication is that it is unclear what resources are available to the management team. [1]
The consultancy's most significant and most valuable asset is its staff. [1]
Anyone considering the strength of the business from the outside will also be left with the impression that it has little or nothing with which to generate revenue. [1]
This could also mean that there is a tendency for costs incurred in order to improve the workforce's capability is written off as a cost rather than capitalised as an asset. [1]
Money spent on, say, training or staff development will not be added to the asset of human resources. [1]
There could be wider implications for the credibility of the financial statements of an entity in this industry. [1]
If stakeholders cannot see key facts such as the value of staff then they may wonder what other omissions there might be. [1]
That could limit the value of the financial statements in any negotiations that occur. [1]
[8, Max 5]

This question was done well.

18 The first implication is that the body of IFRS may constantly seem to be incomplete and in the process of changing. [1]
Accounting standards are necessary to ensure that all companies prepare their financial statements in a consistent manner so that their results can be compared. [1]

Accounting standards are necessary to ensure that companies can prepare their financial statements in as consistent a manner as possible from one year to the next, so that their year-on-year results can be meaningfully compared. [1]
If accounting standards are not updated promptly because of controversies over accounting then there will never be a settled body of accounting standards. [1]
That will damage the IASB's reputation which will, in turn, undermine the credibility of financial statements. [1]
The fact that accounting standards are sometimes disputed could also affect the accounting treatments themselves. [1]
The need to obtain the support of preparers and other interested parties could mean that a technically sound accounting practice is set aside in order to reach a compromise. [1]

[7, Max 5]

The answers to this question were weak. Candidates did not demonstrate clear understanding of the problems of standard setting.

19 (i)

	Gearworks	Average	
Return on capital employed, excluding debt	270/1,362 = 20%	26%	[1]
Return on capital employed, including debt	324/(1,362+600) = 17%	22%	[1]
Gross profit %	360/1,200 = 30%	25%	[1]
Current ratio	237/75 = 3.2:1	2.1:1	[1]
Inventory turnover	76/840 x 365 = 33 days	42 days	[1]
Receivables turnover	150/1,200x365 = 46 days	50 days	[1]

[Total 6]

(ii) The most important issue is that Gearworks is delivering a less attractive return on investment, with both ROE and ROCE either 5 or 6 points below the industry average. [1]
Taking this at face value, the company's board has been inefficient, although it could be argued that the company's size means that it is unable to achieve the same economies of scale as are available to some other industry members. [1]
Larger companies will be able to invest in more efficient technology or to spread operating costs over a higher unit output. [1]
Gearworks has a higher gross profit % than average. It is unlikely that this has been achieved through more effective procurement activities because it is a small company. [1]
It may be that Gearworks has been forced to charge a higher margin than average in order to cover costs, which has probably constrained revenue and also ROCE. [1]
Gearworks has a high current ratio, which implies that the company is very solvent. [1]
This also means that resources are being tied up in current assets that are unlikely to yield any return and so this will be contributing to the poor ROCE and ROE. [1]

The concerns about the current ratio are contradicted slightly by the fact that Gearworks turns over both inventory and receivables more rapidly than average. [1]
The high current ratio may, therefore, imply that excessive cash is being held (which seems unlikely) [1]
or that the company is settling trade payables too quickly, which would require further ratios to investigate. [1]

[10, Max 9]

(iii) Calculating the tax charge would give profit after tax as a measure of performance. [1]
That would enable ROCE to be based on pre or post-tax values. [1]
It could be argued that a post-tax statistic could be a more relevant measure of overall performance because it is part of the board's responsibility to manage the tax expense and to use any legal methods available to them to minimise the tax charge. [1]
The tax charge would also create a liability for Corporation Tax in the statement of financial position. [1]
That would create a potentially confusing impact on liquidity ratios because the amount would be payable within months of the year end, but would not be as urgent as the trade payables. [1]
Liquidity ratios could be less attractive, despite the fact that the company has not yet taken the necessary steps to raise cash in order to fund the payments. [1]

[6, Max 5]

[Total 20]

Part (i) was done very well with most candidates gaining a high mark. Part (ii) was reasonable with many candidates understanding what the ratio analysis showed. Part (iii) was weak with poor understanding of how taxation would change the ratios.

20 (i) The most immediate implication is that the shareholders will start to wonder why the company has this resource lying idle and not generating any revenue. [1]
This asset has arisen from the company's past profits and so it has essentially been funded by equity, which is an expensive form of finance. [1]
Raising equity and leaving the resulting assets lying unproductive could discourage the shareholders. [1]
The fact that the directors have no plans for this cash surplus suggests that they cannot justify the balance in any communications with shareholders. [1]
There does not appear to be a realistic prospect of any project getting under way to put this cash to effective use. [1]
The shareholders' return on equity will be diluted by this unproductive asset. [1]
There could even be a possibility that the capital markets will discipline the directors through the market for corporate control. [1]
Any potential bidder could afford to pay a premium over the present share price in order to obtain control. [1]
That premium could then be recouped using the cash to invest in positive NPV projects. [1]

[9, Max 6]

(ii) Diversification would reduce the total risk associated with running Central. [1]
That could be desirable to the board members, who may feel nervous about using the available funding to further increase the company's investment in the mining industry. [1]
The board members may be reluctant to invest in existing or related lines of business because their careers could be at risk if an investment subsequently goes wrong. [1]
Investing in an unrelated line of business will, hopefully, mean that Central can maintain a steady stream of profits. [1]
The disadvantage of diversification is that the shareholders will derive no benefit from that. [1]
They can and should already be diversifying for themselves in their wider context of their personal investment portfolios. [1]
If the shareholders wish to diversify for themselves then they can buy shares in leisure industry businesses. [1]
There is a danger that Central's management team will make such an investment and then mismanage it and so waste the shareholders' money. [1]
[8, Max 7]

(iii) A share buyback would be a suitable arrangement for returning the cash. The obvious alternative would be a large dividend payment. [1]
Paying a dividend would risk creating tax problems for those shareholders who have high taxable incomes. [1]
A share buyback could be structured so that shareholders could opt to be included and there may be sufficient willing participants to focus the repayment on those who would benefit from a tax perspective. [1]
The buyback would essentially involve a capital gain in most cases. [1]
There could be further issues associated with market psychology. [1]
Paying out a large dividend could be reported in the press as an example of corporate and market greed. [1]
A buyback would at least create the impression that the shareholders are sacrificing part of their investment in order to participate. [1]
There would also be little or no risk of creating an expectation that the dividend payout has increased and will run at a higher rate going forward. [1]
[8, Max 7]
[Total 20]

[Paper Total 100]

Part (i) was done very well with most candidates gaining a high mark. Part (ii) was a little weaker, candidates struggled to discuss diversification and apply it to the question. Part (iii) was also a little weak with candidates demonstrating a poor understanding of share buybacks.

END OF EXAMINERS' REPORT