

INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

April 2021

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.

Paul Nicholas
Chair of the Board of Examiners
July 2021

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

1. The aim of the Business Finance 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. There is now some management accounting in the syllabus so there are questions on topics such as budgeting and performance management.
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. Comments on *candidate performance in this diet of the examination.*

1. Performance was good for many candidates. Many of the questions were answered very well. The MCQ were answered very well with high marks being achieved by many candidates. Some of the short questions were answered well but others were answered poorly. There were two questions where poor performance was most noticeable, question 20 part (i) and question 12.

C. Pass Mark

The Pass Mark for this exam was 58.
1,213 presented themselves and 744 passed.

Solutions for Subject CB1 - April 2021

Q1	C	[2]
Q2	C	[2]
Q3	C	[2]
Q4	C	[2]
Q5	C	[2]
Q6	C	[2]
Q7	B	[2]
Q8	C	[2]
Q9	B	[2]
	A = 55 - 50	
	B = 55 - (50 - 12)	
	C = 50 - 12	
	D = 55	
Q10	D	[2]

Performance was very good in the MCQ; many candidates scored more than 16 marks which was excellent.

Q11

Directors' primary duty is to the shareholders, specifically the maximisation of shareholder wealth [1]

That is a suitable duty because it can be readily understood and easily communicated to stakeholders [1]

It also enables the shareholders to be confident that their wealth is being managed in a manner that is to their financial advantage [1]

It is, however, accepted that companies should also be managed in a manner that meets the needs of a wider range of stakeholders, including employees and society [1]

Those duties need not prevent the maximisation of wealth because they can be discharged by complying with the spirit of rules and laws and taking account of reputational matters. It is not, for example, in the shareholders' interests to profit from lax health and safety that reduce short-term costs [1]

Performance was very good in this question with a number of candidates scoring full marks.

Q12

The biggest difficulty is that the buyer may be unable to obtain any detailed information, beyond that which is available in the public domain [1]

The directors of the target company may be unwilling to encourage potential buyers because their jobs and, indeed, their careers may be put at risk and so may be reluctant to provide them with advice or support [1]

Takeovers are often motivated by the prospect of synergies between the buyer and the target, but those can be difficult to realise [1]

Potential synergies identified before acquisition may disappear because of issues such as the loss of expertise if the target company's staff are unhappy and choose to resign rather than remain with the company [1]

A further concern is that the predator's shareholders may not understand the business case for the takeover and so the share price might fall in the aftermath of the announcement that the takeover is planned [1]

This question was one of the least well answered. Many candidates discussed how goodwill was calculated which was not required and others discussed how a subsidiary could be shown in the financial statements which was again not required.

Q13

It seems likely that the investment in the new equipment will reduce the train company's market capitalisation because it involves an outflow with no positive result in the form of additional future inflows [1]

In that sense, the investment fails the NPV criterion because it appears to be a negative NPV investment and so it should not be selected [1]

If challenged, the board could argue that the need to comply with the safety regulations means that the revenues from the sale of tickets will become a relevant cash flow in terms of the decision to proceed [1]

Once the regulations come into effect, the company would be forced to take its trains out of service unless the equipment has been fitted, which almost certainly makes this a positive NPV investment [1]

The NPV criterion would suggest that the implementation of the investment should minimise the present value of the cash outflow. The company should delay the investment for as long as possible, ideally allowing the modifications to be scheduled to coincide with scheduled maintenance and servicing [1]

This was reasonably answered, however, many candidates failed to discuss that the company was forced to invest for health and safety reasons. Many candidates wrote generic answers on NPV.

Q14

The 14% rate is not necessarily relevant to every investment opportunity. Ideally, the company should set a rate that takes proper account of the cost of capital and the risks associated with the investment [1]

Having said that, the 14% rate can be justified on the basis of the outcomes of projects that have been accepted and rejected in the past. If the company has been accepting too many projects, or projects that have failed then the policy is not working [1]

Setting specific rates for projects would still require subjective judgements that could be viewed as invalid with the benefit of hindsight [1]

The 14% threshold requires the company to prepare a formal statement of relevant cash flows in order to determine an IRR, which would require detailed consideration of the assumptions underlying the decision [1]

The 14% criterion would be relatively easy to communicate to shareholders and other stakeholders, who would be able to consider whether that seems like a realistic target for a company in this industry [1]

This question was answered well by many candidates.

Q15

The external auditor's duty is to evaluate and report on whether the financial statements present fairly, so that the shareholders can establish whether the financial statements can be trusted for decision making purposes [1]

The auditor is expected to base the evaluation on professional judgement, but that judgement will be informed by the company's compliance with relevant accounting regulations, including IFRS [1]

The stakeholders who will be relying on the auditor's opinion are likely to take it for granted that the financial statements comply with IFRS because those form a basis for determining whether the statements give a fair presentation [1]

The auditor will undoubtedly attempt to persuade the directors to revise the draft financial statements so that they comply with the rules [1]

If they are unable to do so then they will be required to issue a modified audit report that will state that the financial statements present fairly "except for" the figures that are deemed to be misstated because of the failure to comply with IFRS [1]

This question was answered reasonably well by many candidates.

Q16

Integrated reporting aims to provide stakeholders with a broader understanding than can be obtained from traditional financial statements [1]

It supplements the usual accounting statements and notes with non-financial information that deals with issues that will be of interest to shareholders and also to a wider range of stakeholder [1]

For example, the statements will give an insight into the approach taken to risk management, which will interest shareholders primarily because of the financial impacts but will also be relevant to the employees and customers who may be the subject of some of those risks [1]

Integrated reporting encourages company boards to consider the wider social responsibilities that all companies have [1]

Integrated reporting requires some consideration of environmental performance as well as wealth creation. That enables the shareholders to be better informed about the overall impact of their companies and enables shareholders to be satisfied that they are not profiting from harm caused to people or the environment [1]

This question was answered very well.

Q17

- Slow payment by clients will disrupt cash flows and will reduce available cash. The consultancy may have to bear additional overdraft fees and interest in order to finance its investment in receivables [1]
- Cash will have to be released from elsewhere in order to ensure that the consultancy can meet its own commitments, which may divert funds from activities that would otherwise generate profits [1]
- Managing cash flows will distract management from the business issues associated with running the consultancy [1]
- The slow payments will also require the consultancy to waste time and effort in chasing clients for payment [1]
- Clients may decide not to make payment until they are forced to pay, so that they can benefit from retaining cash within their own businesses [1]

This question was done reasonably well with many candidates discussing the detrimental effects on cash flow in detail.

Q18

- The issue here is that the consultancy has exceeded budgeted activity by charging more billable hours than had been budgeted, which has also led to additional profit [1]
- While those variances are to be welcomed, it appears that there have been corresponding adverse variances in the form of overtime payments and office running costs. The manager is likely to be very demotivated if those additional costs are regarded as inefficiencies because the company would not have earned the extra profit without them [1]
- There could be an argument that the costs should have been flexed to take account of the additional (and welcome) activity [1]
- There could be a counter-argument that the adverse variances should be at least investigated to ensure that they were unavoidable in the context of the additional billings [1]
- If adverse variances are simply disregarded then the danger is that the budgets will no longer be viewed as the basis for spending decisions [1]

This question was answered badly. This is a fairly new topic for CBI.

Q19

(i)

	2021		2020		
ROCE	$11,662/(105,792+76,000)=$	6%	$9,556/(104,706+42,000)=$	7%	[2]
	<i>Alternatively:</i> $5,582/105,792=$	5%	$6,196/104,706=$	6%	
GP%	$15,250/22,427 =$	68%	$12,091/19,502 =$	62%	[2]
Dist/revenue	$2,467/22,427=$	11%	$1,365/19,502=$	7%	[2]

(ii)

The most important point is that the company's ROCE declined slightly from last year, admittedly, by only one percentage point [1]

That suggests that the directors have earned a poorer return in the resources that were made available to them, which is a significant concern with regard to their performance [1]

Having said that, the company appears to be in a transition and so the results may require further investigation before offering a final judgement [1]

The investment in property, plant and equipment increased significantly. Hopefully, that investment is expected to generate further profits in the future and will lead to an increase in ROCE [1]

In the short term, it may be that the investment in investment has depressed ROCE because the assets have not had a full year in which to yield savings or generate revenues [1]

The ratios provided above could understate the overall performance of the company and its board [1]

The company also appears to have modified the business model. Revenue has increase from 19,502 to 22,427, an increase of 15% [1]

That appears to coincide with an increase in distribution costs, both in absolute terms and as a percentage of revenues [1]

The additional spend appears to have enabled the company to inflate its mark-up on sales [1]

(iii)

The financial statements do not indicate when the new assets were purchased. The assumption is that they were acquired during the year, but they could have been purchased on the first day of the financial year [1]

It would give a clearer indication of the capital employed if there was an indication of when the assets were purchased and made fully operational [1]

There are no details of any changes to Hopplo's business model [1]

If the company has changed the nature of the products that it makes and sells then the increased gross profit % may be misleading. The increase could simply be due to the company moving to a different market segment or even a totally new market [1]

There is no information about the industry, so we cannot obtain details about the performance of similar businesses in the same industry for the sake of comparison [1]

[Total 20]

This question was answered reasonably well by many candidates, however, there were also some weak answers especially in part (iii).

Q20

(i)

The beta reflects the sensitivity of returns on equity to changes in the return on the market as a whole [1]

Generally, a lower beta equates to a lower risk for shareholders and so the decrease will be welcomed and may lead to an increase in the share price [1]

The reduction suggests that the required rate of return on the electric bicycles is relatively low compared to the rest of the business and so Drentel will find it easier to justify the investment [1]

The reduction in beta suggests that the project is more likely to have a positive NPV [1]

The shareholders could, however, derive the same benefit from investing in any other company that is investing in electric bicycles and Drentel's Board need not necessarily invest in this new product in order to create this benefit [1]

Beta measures risk from the perspective of the shareholders, whose investment is regarded as a part of a diversified portfolio [1]

The decrease in beta does not mean that the project will be a low-risk investment for Drentel itself because the company will be exposed to total risk [1]

That could leave stakeholders who cannot diversify, such as employees, exposed to the risk of significant loss [1]

Total risk could be very high even if beta is low because a low beta simply means that the returns on an asset are not well correlated with the returns on the market as a whole [1]

The directors could be taking a significant risk with their own careers if they make this investment and it proves unsuccessful [1]

(ii)

If a company is making losses then dividends have to be funded from profits earned in previous years [1]

Those retained earnings could be viewed as a long-term source of funding that was set aside to finance future growth, but is now being used to finance dividend payments [1]

Paying dividends from retained earnings is not sustainable in the long term. It erodes the funds available for investment [1]

It also implies that the directors have no strategies in place to put those funds to use in order to address the losses [1]

The company will, eventually, run out of distributable reserves. More worryingly, it may run out of cash before the distributable reserves have been exhausted [1]

The fact that the directors are maintaining the dividend could, however, be viewed as a signal of confidence [1]

The fact that the ongoing payments can only be sustained if the company returns to profit implies that they have an idea of how they are going to address the predicament that they find themselves in [1]

The fact that this signal is costly because it could cost their reputations if they cause the company's collapse through such a strategy makes the signal all the more credible [1]

The existing shareholders may be willing to retain their shares, and so reduce downward pressure on the share price, because they are willing to speculate on the continuing dividend stream [1]

If the directors can, indeed, maintain those payments then the shares will have value for that alone [1]

[Total 20]

*In general part (i) was weak; this part was missed out by some candidates and many did not achieve a high mark. Finance questions are often answered badly.
There was a general lack of understanding of beta.
Part (ii) was answered very well by most candidates.*

[Paper Total 100]

END OF EXAMINERS' REPORT