EXAMINATIONS

September 2002

Subject 108 — Finance and Financial Reporting

EXAMINERS' REPORT

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.

K G Forman
Chairman of the Board of Examiners
12 November 2002

1 B

2 B

3 C

4 C

5 D

6 D

7 C

8 C

9 C

10 D

There were no particular problems with the objective test questions, with most candidates scoring a reasonable mark.

11 The statement of net assets is similar to a balance sheet, but is simpler in that it merely lists the investments, cash balances, any other assets that the fund has and any immediate liabilities that it owes.

The statement of net assets does not show the long term liability due to the scheme's members. This is omitted because it is difficult to measure with any certainty and also because it will not arise until some time in the distant future. Such considerations have not, however, prevented liabilities from being disclosed in the financial statements of limited companies.

The special regulations for pension funds arise because a pension is likely to be a major component of any individual's wealth. Unlike stocks and shares, it is virtually impossible to diversify one's pension arrangements in order to spread the risk of bad luck, fraud or mismanagement. Whereas a company can afford to plan for the short to medium term future, a pension scheme has responsibilities to pensioners which might not crystallise until they retire in the distant future, when the fund must be in a position to meet its commitments in full.

This question was designed to test basic understanding of one of the primary accounting statements of a pension fund. This question was generally answered poorly, with many candidates displaying little or no knowledge of the statement of net assets. Others made no attempt to compare the statement with the balance sheet of a limited company.

12 A bank overdraft is a loan drawn against a facility offered by the bank. The bank will provide the business with the ability to write cheques until the balance reaches a predetermined maximum. The company may have to pay for the overdraft facility itself, but will pay interest only on the balance outstanding at any given time. The overdraft may remain outstanding for many years, but it is always repayable on demand.
A loan is a predetermined amount that will normally have to be repaid in accordance with a prearranged schedule. The borrower will pay interest in accordance with the agreed basis specified in the loan agreement, but this will normally be a percentage of the capital balance outstanding.

Overdrafts tend to be an expensive source of finance. This means that it will usually be cheaper to take out a loan if the company needs cash for a specific length of time. An overdraft will be cheaper if the amount required varies throughout the loan period and will also offer flexibility if the company runs short of cash.

This question was answered well, demonstrating awareness of two of the principal sources of short-term finance.

13 (i) The methods give different rankings because each stresses different criteria. Payback is concerned only with cash flows during the early part of the project. Internal rate of return is concerned only with the interest rate implicit in the project. Net present value is concerned with the increase or decrease in wealth resulting from the project. A relatively short-term project could, therefore, favour payback. One with a high yield over a short period or on a small initial investment could favour IRR.

(ii) The company should choose project 1 because it has the higher net present value. Project 1 will have the greatest positive impact on shareholder wealth. Project 2 is less attractive in the long term, although it does offer the opportunity of a higher rate in the short term if the company is faced with capital rationing.

Many candidates failed to recognise that the primary consideration is the impact on the owners' wealth. That means that net present value will normally provide the correct ranking of mutually exclusive projects. Many answers consisted of little more than a regurgitation of the points raised in the core reading with respect to the different investment criteria.

14 (i) Consolidated statements are necessary because the individual company statements will usually include a mixture of balances and transactions involving fellow group members as well as third parties. This will make it difficult, if not impossible, to get any real indication of the overall size of the group or the extent of its operations. Even if there was no real interaction within the group, it will be far easier and more convenient to work with the group accounts than to deal with the individual statements and have to work out group totals.

(ii) The **goodwill** figure is the difference between the cost of the group member and the underlying reported assets acquired. When the group member is first acquired the holding company will normally have paid a premium over the cost of the assets shown in the subsidiary's balance sheet in order to acquire such assets as the company's reputation and its work force. This balance is then amortised over the life of the goodwill and so the balance shown in the consolidated statements is the unamortised balance remaining.

The **minority interest** figure is the equity in subsidiary companies that is owned by outside investors. There is no need for the holding company to hold more than a proportion of the shares in order to have control. Any amount remaining in the hands of third parties is a source of finance for the group, but it does not impose the same duties on the holding company as a direct investment in the holding company's shares.

This question produced some very good answers. Candidates tended to be aware of the issues associated with consolidations, although a minority of answers provided very weak explanations.

15 (i) If the business is a partnership then both partners will be jointly and severally liable for the debts owed by the business. This means that if the business fails then they will have to make up any shortfall from their own pockets. It also means that if one partner cannot or will not make settlement then the other will be liable for the unpaid share and will have to make that good as well. This implies the individuals trust each other, but in this case they have known each other for a short time.

If the business is a limited company then the owners will not be directly liable for its debts. If the business fails then both will be able to walk away and leave the unpaid creditors to gather as much as they can from any assets remaining in the company. The company will, however, require more time and effort to administer. If turnover grows they may also be forced to have an audit.

(ii) Maude's initial finance should be treated as a loan, for which she should be paid a realistic rate of interest. If she receives additional shares then this might mean that she will enjoy a disproportionate amount of profit if the company grows and succeeds. It will also mean that she will receive nothing in recognition of her advance while profits are poor. They should split the equity equally between them.

The owners should agree on salaries to provide them with some cash to support themselves on a day to day basis. This will ensure that they do not take excessive amounts.

The remaining profit will then be available to pay dividends, although this will require the agreement of the owners, who should consider the need to leave adequate funds in the business to ensure that it can grow in the future.

The first part of this question was answered well, with candidates appreciating the advantages and disadvantages of the different forms of business. The second part of the question was intended to test an appreciation of the real issues associated with going into business. Very few candidates produced a realistic basis for sharing profits.

16 A company can use swaps to reduce risk by matching its assets and its liabilities. For example, a company which has short term liabilities linked to floating interest rates, but long term fixed rate assets can use interest rate swaps to achieve a more matched position. Currency swaps would be used by a company with liabilities in one currency and assets in another.

Companies can also use swaps to reduce the cost of debt. If one company has a comparative advantage in borrowing at a floating rate, while another company has a comparative advantage in borrowing at a fixed rate, they can use an interest rate swap to reduce the total cost of financing and both benefit from a lower cost of debt.

This question was generally answered well, although a minority of candidates appeared to be confused over the uses of interest rate swaps.

17 (i) Required rate of return = $3+[8].0.6$

$$= 7.8\%$$

(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 movements in exchange rates will have an adverse effect on some investments and a positive effect on others. The effect of investing in a portfolio is to reduce the overall volatility of the returns.

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.

(iii) One approach is to use the company's own beta coefficient. That is only relevant, however, if the project is subject to the same risks as the company as a whole. That would suggest that investments which will amount to expansion of the business are subject to the same degree of systematic risk.

Another approach is to use the beta of a company which is engaged in the same line of business as the project. That would be appropriate for investments which take the company into a new business sector.

A third possibility is to use historical data to estimate the betas of individual divisions or segments of the main company. These betas can then be used as a surrogate for the coefficients of individual projects which fall within their scope.

Finally, any of the above figures can be adjusted to allow for the effects of high fixed costs. These will tend to reduce the variability of expenses to changes in market conditions. In poor periods the revenues will be depressed without a corresponding decrease in expenses. That will increase the exposure of the company to changes in economic factors and will, therefore increase systematic risk.

(iv) In theory, investing in a positive NPV project will increase shareholders' wealth by the amount of that NPV. In practice, this change will only occur if the market is aware of the investment and agrees with management's estimates of the potential risks and rewards. It may be that the share price will not move in line with expectations because the market is not convinced that the risk is justified or even because the directors have withheld important information for the sake of commercial sensitivity.

If the directors wish to estimate the likely response to an investment then they should attempt to apply the same valuation models used by outside analysts and advisers in an attempt to determine how the information that they intend to publish will impact the share price. This might prove important because the company might prove vulnerable to a takeover bid if the market price of the shares is depressed by an adverse or lukewarm reaction to the news.

This question was intended to test some of the issues associated with the role of finance theory in investment decisions. It was generally answered well, with most candidates demonstrating an understanding of both CAPM and NPV. Part (iii) was, however, answered badly by many, with few practical suggestions as to how to estimate a project's beta.

18 (i) **B plc**

Profit and Loss Account for the year ended 31 August 2002

	£000	£000
Sales		2,600.0
Cost of sales		– 1,006.5
Gross profit		1,593.5
Administration	– 435.0	
Distribution	– 850.0	
		– 1,285.0
Operating profit		308.5
Interest		– 110.0
Net profit before taxation		198.5
Taxation		– 40.0
		158.5
Dividend		– 150.0
		8.5
Balance brought forward		180.0
		188.5

B plc Balance Sheet as at 31 August 2002

	£000	£000
Fixed Assets		2,463.5
Current Assets		
Stock	99.0	
Debtors	240.0	
	339.0	
Current liabilities		
Bank	– 14.0	
Proposed dividend	– 150.0	
Taxation	– 40.0	
Creditors	– 110.0	
	– 314.0	
Net current assets		25.0
		2,488.5
Loan		– 1,400.0
		1,088.5
Share capital		500.0
Share premium		400.0
Profit and loss account		188.5
		1,088.5

Note — Fixed Assets

	Cost £000	Aggregate depreciation £000	Net book value £000
Land and buildings	2,300.0	– 249.0	2,051.0
Machinery	900.0	– 487.5	412.5
	3,200.0	– 736.5	2,463.5

Workings

Cost of sales	
trial balance	800.0
Plant depreciation	137.5
Land and buildings depreciation	69.0
	1,006.5

(ii) The depreciation charge should be based on the estimated useful lives of the assets. These should reflect the underlying nature of the assets themselves and should be factually correct to the extent that it is possible for such an estimate to be so. If the directors were to distort this information with the intention of distorting the annual report then it would amount to deliberately misleading the shareholders and anyone else reading the financial statements. Apart from being morally wrong, this would be a criminal offence. The company's auditors might identify the distortion and ask for an alteration to the statements. If this was not made then they might find it necessary to qualify their audit report.

The directors are also required to disclose their main accounting policies. If they are seen to be depreciating the company's assets at a slower rate than the industry norm then their scheme will simply draw attention to the fact that profit has been overstated.

Part (i) was designed to test the ability to prepare a simple set of financial statements. This produced some very good answers, with very few candidates finding any real difficulty.

Part (ii) drew on the core reading, but also reflected some of the current unease with respect to the integrity of accounting information (which became even more topical in the period immediately prior to this diet). Many candidates correctly explained how an artificial understatement of depreciation would increase profits, but relatively few considered the associated issues of whether accounting regulations would prevent companies from doing so. Still fewer referred to the moral implications of manipulating profits.