

# Examiners' report

## F9 Financial Management

June 2009



### General Comments

Congratulations to those candidates who were successful in passing Paper F9 in June 2009! I hope that candidates who were not successful will be encouraged to undertake further study in order to be successful at their next attempt.

Just as in December 2008, this examination paper covered many syllabus areas and candidates who had omitted some parts of the syllabus from their study may have found it to be difficult as a consequence. The pass rate, however, was similar to that in previous diets.

### Specific Comments

#### Question One

In part (a), candidates were asked to calculate the weighted average cost of capital (WACC) of a company. Many candidates gained full marks for their calculations. Some answers lost marks because they included the debt of the target company in their calculation. The WACC of one company is clearly independent of the debt of another company.

Information provided in the question enabled the cost of equity to be found using the CAPM formula. Some candidates ignored this information and attempted to use the dividend growth model instead. Other candidates ungeared and regeared the equity beta of the company, even though this was unnecessary since the equity beta was not from a proxy company. Most candidates calculated the cost of equity correctly.

The cost of debt had to be calculated using linear interpolation and most answers did this more or less successfully. Where errors arose, these involved using a shorter bond maturity than that in the question (7 years), exchanging the market value and the par value in the interpolation calculation, omitting to make the interest payment after-tax, and mixing total values and per share values in the same calculation.

Most candidates correctly used market values as weights.

Part (b) called for the calculation of the value of the target company using the PER (price/earnings ratio) method and the dividend growth model (DGM). These were not complicated calculations, although it was necessary to assume with the DGM that the dividend growth rate was the same as the earnings per share growth rate given in the question. This was a reasonable assumption, as the earnings per share growth rate and the dividend payout ratio had both been constant for several years.

Even though the question gave both the earnings per share (EPS) of the target company and an instruction to use the PER provided, some candidates made life difficult for themselves by doing something other than multiplying the earnings per share by the PER. The most common error was using the retained earnings of the target company instead of the EPS provided. Another common error was trying to calculate a PER value, rather than using the one given.

Many candidates had difficulty in calculating the dividend per share for using in the DGM. Since the target company EPS and payout ratio were provided in the question, this can only be explained by a lack of understanding of the payout ratio.

Part (c) called for a discussion of the relationship between WACC and the capital structure of a company. Some candidates incorrectly discussed the circumstances under which WACC could be used in investment appraisal, when in fact the question was asking for a discussion of optimal capital structure theory. Better answers looked

at the traditional view, the views of Miller and Modigliani, and the effect on their views of market imperfections such as bankruptcy risk and the costs of financial distress. An optimal capital structure is one that gives a minimum WACC.

This part of the question asked candidates to comment on the use of debt to finance the acquisition. Some answers were very general in nature, discussing the attractions of debt as a source of finance. Better answers calculated the current gearing of the bidding company and then considered the effect on that gearing of adding debt equal to the value of the target company calculated earlier.

### **Question Two**

Part (a) of this question asked for an identification and explanation of the stages of the capital investment decision-making process, and the role of investment appraisal in this process. Better answers identified and discussed identification: screening; analysis and evaluation; approving; implementation and monitoring. Poorer answers looked at different aspects of the analysis and evaluation stage, or went off track by discussing the relative merits of the investment appraisal methods required in part (b) of this question.

Part (b) required the evaluation of an investment project using net present value (NPV), internal rate of return (IRR), return on capital employed (ROCE) and discounted payback, incorporating inflation.

Some candidates introduced capital allowances and taxation into their answers, but this was not required by the question. There is no point in doing unnecessary work in the examination, as marks will be lost elsewhere due to time pressure.

Most candidates calculated correctly the NPV of the investment project, although some answers did not handle inflation correctly, or omitted the fixed costs, or calculated and used (unnecessarily) a real discount rate.

Many candidates calculated correctly the IRR of the investment project, although there was a tendency for some candidates to use a second discount rate that led to unnecessary inaccuracy. For example, if the NPV is positive at a 10% discount rate, there is little point in calculating the NPV at a 5% discount rate and extrapolating to find the IRR. A more accurate result would arise by using the NPV calculated at a higher rate than 10%, for example 20%, as in the suggested answers to the exam.

Most candidates were not able to calculate correctly the ROCE of the investment project. The most common error was using average annual net cash flow, rather than average annual accounting profit. Although a depreciation method was not given in the question, total depreciation could be subtracted from total net cash flow in order to give total accounting profit. Some candidates were unable to calculate the average investment.

Many candidates were able to calculate discounted payback, although some used an unnecessary amount of rounding, e.g. giving 3 years rather than 2.9 years.

Part (c) asked for a discussion of the findings from part (b) and a recommendation as to the acceptability of the investment project. Many candidates failed, either explicitly or implicitly, to recognise the superiority of the NPV method.

Most candidates stated correctly that the investment project was acceptable because it had a positive NPV and because the IRR was greater than the nominal discount rate used by the company. Some answers suggested that the project was acceptable because the ROCE was higher than the target ROCE, but this investment appraisal method cannot be relied upon to give correct investment advice. Better answers gave reasons why ROCE cannot be relied upon. Some candidates said the investment project was acceptable because the discounted payback period was less than the life of the project. This is almost the same as saying that the project has a positive NPV

(it might not be true for a non-conventional project), but few candidates recognised this. Without a target payback period, payback cannot say whether a project is acceptable or not.

### Question Three

Part (a) required candidates to discuss the working capital financing strategy of a company. Some candidates ignored the word 'financing' and discussed working capital strategy in general. Other candidates took 'working capital financing strategy' to mean the proposals in the question to reduce the level of account receivables and inventory by operational improvements.

The question gave extracts from a statement of financial position which showed that the company was financing 83% of its current assets from short-term sources, namely a bank overdraft and trade receivables. This is an aggressive rather than a conservative financing strategy and better answers recognised this, discussing how current assets could be divided into fluctuating and permanent current assets, and linking this analysis of current assets via the matching principle to the use of short-term and long-term finance.

Part (b) asked candidates to calculate the bank balance in three months' time if no action were taken, and if the proposals were implemented. Many candidates had great difficulty in rolling forward the current cash balance (the overdraft of \$3.8 million) using the receipts and payments given in the question, while allowing for one month's interest on the balance of the account at the start of each month. Common errors included failing to recognise that the opening balance was the overdraft and therefore having no opening balance: calculating annual interest rather than monthly interest; and including cash flows other than those given in the question (for example from the credit sales and cost of sales figures given in the question). All candidates are expected to be able to prepare cash flow forecasts and the general standard of answers to this question showed that many candidates need further preparation in this important area.

Part (c) required candidates to discuss how risks arising from granting credit to foreign customers could be managed and reduced. Many candidates gave answers of a good standard, although some answers were one-sided, concentrating on exchange rate risk rather than on credit risk. Since the question referred to foreign customers, it was inappropriate to limit answers to a discussion of domestic receivables management.

### Question Four

This question provided historical information relating to a company and average values for its business sector.

In part (a), candidates were required to evaluate the financial performance of the company and to discuss the extent to which it had achieved its objectives of maximising shareholder wealth and continuous growth in earnings per share (EPS).

Many candidates had difficulty in calculating accounting ratios to compare with the sector averages provided. Accounting ratios have standard names and standard definitions and candidates should know these. Some candidates calculated profit after tax, even though the question gave annual earnings for each of four years. Some candidates averaged the four years of data provided, simply because the question provided average sector data. Some candidates calculated ratios for one year only and ignored the three other years.

Many candidates did not understand the significance of the inclusion in the question of an average sector value for the return predicted by the capital asset pricing model (CAPM). This value (14%) provided a way to assess whether the company had achieved its objective of maximising the wealth of shareholders. If the return that shareholders had received each year, in the form of capital gains and dividend, exceeded the return predicted by the CAPM, it could be argued that the objective had been achieved, since the company had outperformed the business sector as a whole. Since total shareholder return was 36%, 82% and 58%, this certainly seemed to be the case here. Some candidates argued that this objective had been achieved on the basis of inappropriate analysis, such as that the amount of reserves or the return on capital employed had increased each year.

It could be demonstrated that the objective of achieving continuous growth in EPS had been achieved by calculating the EPS figure for each year.

Part (b) asked candidates to calculate and comment on the effect of the rights issue on the company's share price, earnings per share (EPS) and debt/equity ratio. To do this, candidates had to calculate the number of shares issued by dividing the amount of cash to be raised (\$15 million) by the rights issue price (\$7.50 per share). Weaker answers were unable to do this and, instead, assumed a form for the rights issue (such as 1 for 2 or 1 for 4). Better answers calculated all three values and commented on the changes with respect to their historical values, noting that a rights issue has no effect on shareholder wealth and that a fall in the EPS does mean that shareholder wealth has decreased.

Part (c) asked for an analysis and discussion of the relative merits of a rights issue, a placing and an issue of bonds as ways of raising the \$15 million of finance needed. Better answers started with analysis and used this as the basis for discussion. The effect of raising the \$15 million of finance on gearing and interest cover, for example, had to be assessed before an informed answer could be offered.

Many answers had little or no analysis and compared the three financing methods in general terms, for example looking at ownership and control, increase or decrease in gearing and financial risk, issue costs, servicing costs and maturity.

### **Overall Performance**

Overall performance in June 2009 showed that some candidates had prepared well and some very high marks were awarded. At the other end of the spectrum, some candidates struggled to gain more than a few marks because they lacked the skills, knowledge and understanding that come from studying the syllabus thoroughly. The examination paper examines the whole syllabus and candidates cannot expect to pass if they study only a small number of selected areas. In question 2, for example, candidates not only had to be able to calculate NPV, IRR, ROCE and discounted payback (a practical skill), but they also had to understand the decision rules and the relative merits of each investment appraisal method, and the place of investment appraisal in the capital investment decision-making process (underlying theory). Both the practical skill and the theory were needed to gain high marks in the question.