

Examiner's report

F9 Financial Management

June 2010



General Comments

Successful candidates were able to demonstrate their wide understanding of the F9 syllabus and it was pleasing to see some very high marks being awarded. If you were not successful at this sitting, you will have learnt from your experience where you need to prepare more thoroughly, and I hope that you will be successful in the near future.

This examination paper was written when the credit crunch, the current financial crisis and deepening recession were important topics in financial management, and these were still important topics when the examination was being sat. Candidates may find it useful to bear these topics in mind as they study the suggested answers to the examination.

Specific Comments

Question One

This Part (a) required candidates to calculate expected values and probabilities from data given in the question, and to discuss the usefulness of expected value analysis.

A number of candidates lost marks by calculating the expected values of the cash flows for period 1 and period 2, but not calculating the closing balances for period 1 and period 2, which is what the question had asked for. There is clearly a difference between cash flow and closing balance.

Candidates were expected to calculate the closing balances using a probability table approach, but many candidates calculated the closing balances using an average cash flow approach. While this provided correct values for the closing balances and hence was given full credit, it did not help with calculating the probability of a negative closing balance in period 2, and it did not help with calculating the probability of exceeding the overdraft limit at the end of period 2. Many candidates were unable to calculate these probabilities because they did not appreciate the importance of the joint probabilities used in a probability table.

Candidates were then asked to discuss whether the expected value analysis could assist the company to manage its cash flows. Many candidates tended to discuss ways in which the company could manage cash flows in general, even in some cases discussing cash management models, rather than discussing the usefulness of an expected value analysis. Better answers discussed the benefits and limitations of the analysis that had been undertaken.

In part (b), candidates were asked to identify and discuss factors relevant to formulating a trade receivables management policy. While many candidates gained good marks here, there was a very strong tendency for answers to be framed around lists of ways of improving trade receivables management (a question that has been asked in the past), rather than around factors influencing trade receivables policy. Fortunately, a strong relationship exists between the two areas, and it was possible to give credit for knowledge about the management of trade receivables.

Part (c) asked candidates to discuss whether profitability or liquidity was the primary objective of working capital management. Many candidates answered appropriately that both profitability and liquidity were important: profitability because it related to the overall objective of wealth maximisation and liquidity because of the need to meet liabilities as they became due for settlement.

Question Two

Many students gained good marks on parts (a) and (b) of this question, while not doing as well on parts (c) and (d).



In part (a) of this question, candidates were asked to calculate the after-tax cost of debt of a redeemable bond.

Many candidates gained full marks here by using linear interpolation to calculate the after-tax cost of debt.

Some candidates calculated a bond issue price, but this was unnecessary, as the question stated that the bond was issued at par, i.e. the bond was issued at \$100 per bond. Other candidates wrongly used the redemption value of \$110 as the issue price, or wrongly used a redemption value of \$100, when the question said that redemption was at a 10% premium to par. Occasionally, an answer used the annual before-tax interest payment of \$9 per year, but the correct calculation of the after-tax cost of debt uses the after-tax annual interest payment of \$6.30.

Weaker answers offered a monetary value for the after-tax cost of debt, rather than a percentage figure, or offered the annual after-tax interest rate as the cost of debt, or divided the annual interest by the market value of the bond, as though the bond was irredeemable rather than redeemable.

Part (b) asked candidates to calculate and comment on the effect of the bond issue on the weighted average cost of capital (WACC), clearly stating any assumptions made.

Since candidates were asked to calculate the effect on the WACC, answers needed to offer two values for the WACC, one before the bond issue and one after the bond issue. Many answers calculated the post-issue WACC, and then implied rather than calculated the pre-issue WACC. Some answers discussed, occasionally at length, optimal capital structure theory in support of a claim that issuing the bonds would cause the WACC to fall, since debt is cheaper than equity. This was much more than the question, which was worth 5 marks, was asking candidates to do.

In fact there were two possible answers about the effect of the bond issue on the WACC. If an answer assumed that the current overdraft was not included in the WACC calculation (even though the bond issue was replacing the overdraft), the bond issue caused a decrease in the WACC. However, if an answer assumed that the overdraft was included in the WACC calculation, the bond issue led to an increase in WACC, since the more expensive bond issue (after-tax cost of debt of 7.2%) was replacing a cheaper overdraft (after-tax cost of debt of 3.5%).

Many candidates did not state any of the assumptions underlying their calculations. The most obvious ones, perhaps, were the assumptions that the cost of equity was not affected by the bond issue, and that the share price was unchanged.

In part (c) candidates were asked to calculate the effect of using the bond issue to finance the reduction in the overdraft on the interest coverage ratio and on gearing.

Although the question said 'calculate', many answers chose to discuss their findings, sometimes at length. This discussion was not asked for in this part of the question and students must learn to follow the question requirement.

Since the question asked candidates to calculate the effect of the bond issue on the two ratios, values before and after the issue were required. Interest cover fell from 4.4 times to 2.6 times, compared with a sector average of 8 times indicating a substantial increase in financial risk. Gearing increased from zero to 9.8%, compared to a sector average of 10%. Many people ignored the definition of the sector average gearing given in the question (debt/equity, market value basis), and calculated gearing using their own definition. The calculated gearing values could not then, of course, be compared with the sector average gearing. The golden rule with ratios, remember, is to compare like with like.



Part (d) required candidates to evaluate the proposal to use the bond issue to finance the reduction in the overdraft, and to discuss alternative sources of finance, given the company's current position. Many answers were very brief, given the marks on offer.

Better answers recognised that the company had severe problems. Its profit before interest and tax had fallen from \$5 million to \$1 million over the last year, its interest cover was dangerously low, its bank had given it two months to reduce its overdraft by \$4 million and no other bank had been found that was willing to offer an overdraft. This was the situation forced on some companies by the credit crunch.

Recognising these problems and using the calculated ratios from part (c), better answers suggested that using a bond issue to reduce the overdraft was unlikely to be in the best interests of the company. The company would be committing to paying additional interest each year, at a time when its profitability had fallen dramatically. Better answers then went on to discuss alternative sources of finance that might be suitable, while recognising that the company's circumstances meant that the search for sources of finance might be fruitless.

Weaker answers, in contrast, ignored the company's current position, or failed to recognise the danger of taking on more debt, or discussed the relative merits of an overdraft and a bond issue (when the overdraft was being largely withdrawn), or suggested paying off the overdraft from the company's \$7 million of reserves (when the company had no cash in its statement of financial position), or proposed asking a venture capitalist or a business angel to pay of the company's overdraft.

Question Three

Many students did well on parts (a) and (b) of question 3, while finding part (c) to be more challenging.

In part (a), candidates were asked to identify and comment on any errors in an investment appraisal prepared by a trainee accountant. Candidates who did not gain full marks failed to identify clearly the errors they had identified, or did not comment on these errors, or identified errors that did not exist.

Part (b) required candidates to prepare a revised calculation of the NPV of an investment project and to comment on its acceptability.

Many candidates did well here, using the template of the NPV calculation provided in the question to prepare a corrected calculation. The contribution had to be inflated correctly, the fixed costs had to be calculated correctly, the depreciation and interest payments had to be stripped out, the tax effect of capital allowances needed to be calculated and included, and the correct discount rate had to be used.

Candidates who did not amend the provided contribution figures were not aware that inflation must be applied every year and not just in the first year. The development costs had to be excluded from the fixed costs in the investment appraisal because they had already been incurred, i.e. they were not relevant costs. Depreciation had to be stripped out because it is not a cash flow, and NPV is an investment appraisal method that uses cash flows. Interest payments had to be excluded because they would be taken account of by the discount rate.

The tax effect of capital allowances (tax allowable depreciation) could be included by any one of three methods: by using the correctly timed tax benefits of each capital allowance; by subtracting the capital allowances from taxable cash flow to give taxable profit and then adding them back after calculating the tax liability; and by carrying out a separate tax calculation.

Within the investment appraisal, cash flows had been inflated by specific inflation rates and so the evaluation was a nominal terms (or money terms) evaluation, requiring a nominal discount rate. The real discount rate was provided in the question, together with the general rate of inflation, and the nominal discount rate could be calculated from these two pieces of information using the Fisher equation.

Part (c) tested candidates' understanding of different aspects of investment appraisal by asking what problems were faced, and how these problems could be overcome, in three different investment appraisal areas.

The first investment appraisal area related to assets with replacement cycles of different lengths. Many candidates stated correctly that the NPV method may not choose the optimum asset, and that this problem could be overcome by adopting an equivalent annual cost approach.

The second investment appraisal area related to multiple internal rates of return, a technical problem associated with non-conventional cash flows that is not experienced by NPV.

The third investment appraisal area related to investments with a different level of business risk than the investing company. Many candidates identified correctly here that the capital asset pricing model could be used to calculate a project-specific discount rate that reflected project risk.

Question Four

Candidates in general tended to find parts of this question heavy going, but well-prepared candidates picked up some straightforward marks in parts (a) and (b). Many answers to parts (c) did not focus on the question that was asked.

In part (a) candidates were required to calculate dividend yield, capital gain and total shareholder wealth, and to discuss their findings with respect to returns predicted by the capital asset pricing model (CAPM), and with respect to other financial information provided.

Many candidates were not able to calculate the capital gain (the increase in ordinary share price over a year), and did not know that the sum of the dividend yield and the capital gain is total shareholder return. Shareholder wealth is increased by capital gains and dividends, and this increase is measured by total shareholder return. Here, this was the actual return that shareholders had received (a positive return in the prior year and a negative return in the current year), while the CAPM-predicted returns were given in the question (positive in both years, but higher in the prior year than the current year). The discussion of the differences between the actual and predicted returns was generally quite weak.

The standard of the discussion with respect to the other financial information tended to be stronger. With regards to the negative return in the current year, candidates could have commented on static turnover, falling earnings per share, increasing dividends per share and, in particular, the falling share price. There was general agreement that the company was increasing its dividend per share in a situation where the market had, perhaps, doubts about its future performance.

Part (b) required candidates to calculate and comment on the share price using the dividend growth model (DGM), using firstly historical information and, secondly, information relating to a proposed change in dividend payments.

Most students calculated the historical dividend growth rate and the current share price using the DGM, although some students used the CAPM-predicted return rather than the cost of equity provided in the question. Comment on why this share price was different to the current market price was not strong. One possible explanation was that the market felt that future dividend growth would be less than historical dividend growth. It is worth remembering that analysing historical dividends is only one of several ways of estimating the future dividend growth rate, and that using this approach to estimating the future dividend growth rate depends on the (questionable) assumption that the future will repeat the past.

Fewer candidates were able to apply the DGM in the situation where no dividends would be paid for three years and then a higher dividend would be paid, with a lower expected dividend growth rate than had historically been the case. Some candidates wrongly said that the DGM could not be used if no dividends were paid: the suggested answer shows how to calculate the current share price in this situation. Many candidates calculated the share price in three years' time, but did not discount this share price to give the current share price, thereby weakening any comparative discussion of the two share prices.

Part (c) asked for a discussion of the relationship between investment decisions, dividend decisions and financing decisions, with illustrations where appropriate.

Many answers did not gain good marks because they did not focus on the key word 'relationship', and instead discussed at length a range of features of each decision area, with little or no attempt to relate the decision areas to each other.

Candidates could have gained higher marks by discussing the many practical ways in which these decision areas interact, or by discussing the theoretical views of Miller and Modigliani on the relationship between investment decisions, financing decisions and dividend decisions.

Overall Performance

Overall, performance in June 2010 was encouraging. One pleasing development was a decrease in the number of scripts gaining very poor marks, indicating that more students had made appropriate preparation for the examination.