



# Examiner's report

## P4 Advanced Financial Management

December 2009

### General Comments

The structure of the paper was similar to past papers with two compulsory questions in section A, consisting of 60 marks, and three 20-mark questions in section B, of which candidates had to do two, for the remaining 40 marks.

The overall performance of the candidates was satisfactory. Although the questions had varying degrees of difficulty, a well prepared candidate would be able to obtain a pass.

### Specific Comments

In section A, question one consisted of 28 marks and question two consisted of 32 marks. Four professional marks were allocated to question two. Both questions required candidates to undertake computational and discursive parts. In section B, as per previous sittings, question four was wholly discursive, while questions three and five consisted of a mixture of computational and discursive elements.

Excellent answers were obtained from candidates who had prepared well for the examination, with the ability to apply their knowledge to the given question. The presentation of such answers was good, with clear labelling and structure. In question two especially, a clear structure and effective use of appendices enabled well structured answers to gain the maximum professional marks. Most successful candidates attempted all the parts of the questions and managed their time well between questions.

Many candidates attempted the required four questions, although there were a number of instances where parts of a question were not attempted. It seems that some candidates chose optional questions on the basis of whether they could answer part of the question, rather than the whole question. They then left other parts of the question unanswered and therefore gained fewer marks.

There were a few instances of poor time management and candidates having to rush through the latter questions. Candidates need to bear in mind that it is easier to obtain marks at the start of a question rather than towards the end of a question. It is imperative that candidates learn to manage their time effectively through practicing past exam questions under timed or examination style conditions.

Some candidates were poorly prepared for the exam in terms of their knowledge. The P4 paper has a large syllabus and numerous technical areas. Candidates need to know the syllabus well in order to apply it to the question scenario, in the exam. Poor performance was also evident where candidates did not read the content and requirements of questions. Answers need to be directed at the scenario in the question, general answers did not gain many marks.

The presentation of the answers with clear structure, labelling and workings is very important across all the questions and especially so where the question has professional marks allocated to it. Question two consisted of four professional marks and given that many candidates missed a pass by only a few marks, gaining these professional marks is vital. Well presented answers demonstrate to markers and the examiner that the candidate has the necessary knowledge and application skills.

### Question One

In part (a) this question required candidates to prepare a three-year cash flow forecast, apply correct annual inflation figures, calculate the depreciation correctly, and estimate the annual incremental working capital and taxation. In part (b) candidates were asked to estimate the value of the business

by obtaining the present value of the cash flows and the terminal value. In part (c) candidates were asked to advise the directors of the assumptions and uncertainties in the valuation. Finally in part (d), candidates were asked about how option pricing theory could be applied to give an alternative value to the business, from just considering value on the basis of the present value of future cash flows.

This question was generally done well and many candidates obtained high marks.

A clear tabular format for part (a), with a clear structure going from profit to cash flows, enabled many candidates to obtain the majority of the marks. Part (b) was done well with many candidates discounting the annual cash flows and adding the terminal value to these to obtain an estimate of the value of the business. For part (c), many candidates referred to the estimates made but fewer candidates considered the adequacy of the required rate of return. Answers to part (d) were variable, candidates who had studied this area gained the majority of the marks. Many candidates did understand the principles of limited liability and of options, but failed to put them together in a coherent explanation, thus not gaining all the available marks.

#### **Question Two**

This question, based on whether or not to acquire a company, asked candidates to consider the risks the acquirer should consider when assessing the acquisition (part a), assess the performance of the target company (part b), estimate the impact of the acquisition on the acquirer's equity investors' rate of return (part c) and finally evaluating whether or not the target was undervalued and therefore a suitable target for acquisition (part d). On the whole this question was poorly answered.

For part (a) suitable answers were given on strategic fit and valuation, but few candidates considered regulatory and disclosure related risks. Therefore, answers received for this part tended to be adequate but not excellent.

A large number of candidates demonstrated some understanding of EVA<sup>TM</sup> and other ratios in part (b), without being able to determine these correctly. Many candidates also had difficulty in estimating the relevant cost of capital for the purposes of the EVA<sup>TM</sup> calculation. Errors in the numbers used in the ratio formulae meant that fewer marks were gained.

Likewise, many candidates understood the principles of ungearing and regearing betas for part (c), without being able to apply these to the scenario in the question correctly. Few candidates obtained good marks for part (c).

Only a few candidates were able to evaluate whether or not the company was undervalued with reference to efficient market hypothesis and therefore assess how Polar (and Anchorage) would benefit from the acquisition. A minority of candidates started to talk about systematic risk, clearly misunderstanding the requirements of the question.

This question had up to 4 marks allocated as professional marks. Given that many candidates only fail marginally, gaining most of these marks was highly beneficial. Unfortunately, some answers assumed that simply giving a report like title was sufficient, which was not the case. Higher professional marks were awarded to answers that gave due care to the structure of the report and the presentation of the answer.

### **Question Three**

This question required candidates to consider the value of a mezzanine issue of fixed rate notes with warrants, and whether such an issue is appropriate to the scenario described. Part (a) asked candidates to calculate the value attached to warrants using the Black-Scholes Option Pricing formula, and to give the assumptions of the valuation formula used. The majority of candidates who attempted this question applied the formula correctly, although in some cases the exercise price and the underlying share price were not identified correctly. Some candidates worked out the value of an option on one share but did not consider that the warrant consisted of 100 shares and therefore the price needed to be multiplied by 100. Many candidates did not identify the assumptions and therefore did not get these marks. In a small number of cases, errors were also made in the calculation of  $d_1$  and  $d_2$ , although the input numbers were correct.

Part (b) asked candidates to identify the coupon rate of the fixed rate notes if the required rate of return was 13%. This required candidates to find the equivalent amount of the present value of the coupons and the final amount redeemed when compared to the current value of the fixed rate notes. It also required candidates to recognise and take account of the fact that the current value of the notes had to be reduced by the value of the option attached to the warrants. Few candidates attempted this part of the question successfully, with the majority of candidates unable to determine the correct method to use.

Part (c) produced a mixture in responses, with some candidates producing good answers to the advantages and disadvantages of mezzanine debt and applying it to the scenario in the question. However the majority of answers talked about the advantages and disadvantages of debt finance generally, therefore gaining fewer marks.

### **Question Four**

This question was probably the best answered of all the questions in the paper with many candidates gaining good marks for their answers.

Part (a) required candidates to discuss the factors banks would consider when assessing whether or not to issue a substantial loan. The majority of candidates gave good answers to this part of the question and made a number of relevant and detailed points. Candidates who discussed the importance of collateral, credit rating, and financial history and performance achieved high marks. The flexibility in the marking scheme allowed markers to award marks for sensible points.

Part (b) produced mixed answers. Where candidates had studied this area, good answers were provided on the relative merits of loan syndication and bonds. However, there were a number of candidates who did not understand what a loan syndicate was, and their answers gained few marks because of a lack of detail in the answers.

In part (c) the answers tended to be general and lacked detail. Only a minority of answers discussed the significance of the real option to delay.

**Question Five**

Overall this question was poorly answered.

Part (a) asked candidates to consider the choices a company could make when managing its interest rate exposure. Most of the answers for this part focussed on alternative derivative instruments that could be used to manage interest rate risk but did not consider the wider possibilities of managing risk. Also few answers made any meaningful recommendations with justifications for the course of action that could be taken. As a result answers to this part did not gain many marks.

Part (b) required candidates to calculate an effective annual rate based on the six-monthly interest rate, once the swap had been agreed. Candidates needed to firstly calculate the effective interest rate payment once the swap of payments based on LIBOR to a fixed rate based on a six-monthly payment had taken place. Candidates then had to convert the six-monthly rate into an effective annual rate. Some candidates were able to undertake the swap calculation, but in many cases this was done on a yearly basis instead of the required six-monthly basis. Even fewer candidates then worked out the six-monthly rate and the effective annual rate.

Part (c) asked candidates to estimate the VAR based on a 95% confidence level and a volatility of 150 basis points, and then to comment on the result. Very few candidates demonstrated the knowledge of how to calculate the VAR. It seems that most candidates had not studied this area well and therefore could not apply the standard formula to the scenario in the question. A few candidates did comment on the result but the answers tended to be general and not specific to the scenario.