

# Examiner's report

## P4 Advanced Financial Management

### June 2010



#### 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

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 computations and discussion. 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 applied their knowledge to the given scenario in the 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 such 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, especially in the compulsory questions. In section B, most candidates answered all the parts to the question.

In a minority of cases there was poor time management with 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 and examination style conditions.

Some candidates were poorly prepared for the exam in terms of their knowledge. This was especially evident in question three. Candidates need to be aware that for P4 it is expected that candidates develop their knowledge and the ability to apply that knowledge to current issues in finance. Question three was using the example of the recent financial crisis as a basis for knowledge application and discussion. Many candidates failed to achieve high marks due to lack of knowledge and not being able to apply that knowledge to the scenario in the question.

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. Poor performance was also evident where candidates did not read the content and requirements of questions fully. 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.

#### Specific Comments

##### Question One

This question required candidates to assess the net present value (NPV) of a long term project in part (i). It was therefore necessary for candidates to calculate annuity factors using formulae rather than using tables. Parts (ii),



(iii) and (iv) required candidates to consider the risks and uncertainties associated with the project and assessing these using sensitivity analysis and simulations. Part (ii) asked candidates to discuss the principal uncertainties associated with the project. Part (iii) asked candidates to undertake sensitivity analysis of the project's NPV to changes in various input factors. Part (iv) asked candidates to explain how simulations could be used to assess the volatility of projects.

Parts (i) and (ii) were generally done well, with many candidates achieving high marks for both parts. Those that failed to score high marks in part (i) did so because they did not get the timing of the cash flows correct and therefore used incorrect discount factors. In part (ii) most candidates displayed a good level of discursive knowledge in answering this part.

Parts (iii) and (iv) were done less well. Many candidates did not undertake the correct sensitivity analysis to show the impact on the NPV due to a change in the factors which determine the NPV. It would be advisable for candidates to study the examiner's solutions and understand how sensitivity analysis should be conducted. Many candidates confused simulations with sensitivity analysis and therefore the explanations given in part (iv) were often not relevant to the requirements. A notable minority of candidates did not attempt parts (iii) and (iv) at all.

### **Question Two**

This question required candidates to assess the value of an acquiring company (part (i)) and then use the Black-Scholes Option Pricing (BSOP) model to assess the equity value of the combined company: acquirer plus target (part (iii)). The question also required candidates to explain the use of BSOP (and its constituents) to assess the value of the company and to discuss whether the BSOP can provide a meaningful value for a company (parts (ii) and (iv)).

Overall the computational part of (i) was done well with many candidates gaining a high proportion of the marks for this part. However many candidates did not explain the assumptions made in detail and therefore failed to achieve many marks for this. Common errors in the calculations were where candidates used the \$580,000 or \$180,000 as the free cash flow, and not using the r.b model to calculate growth, resulting in fewer marks being gained.

In part (ii) many answers talked about option pricing in general, by considering the value of option on an underlying asset, such as a share, rather than specifically relating it to corporate valuation. Such answers should have explained how equity can be regarded as a call option on a company's assets written by the lenders, and therefore when it was appropriate to use it to assess the value of a company. The data required was also explained in general terms in many answers, rather than specifically to valuing a company.

Most answers in part (iii) applied the BSOP correctly, although the variables used in most cases were not accurate. It was disappointing that only in a minority of cases were the exercise and asset prices calculated or estimated correctly. Therefore although most answers gained some marks for part (iii), very few gained the full nine marks allocated for this part.

Overall answers to part (iv) were poor with few candidates able to provide a meaningful discussion. A significant number of responses did not answer this part at all. Good answers to this part considered the caveats of the BSOP and applied them to the valuation of a company.

This question had up to four 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 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 calculate the returns (income) receivable by investors for each of three tranches of a collateralised loan obligation (CLO) security (part (a)); to explain why and how the credit rating of the CLO security can be enhanced (part (b)); and finally to discuss the risks that the investors of the CLO security would face.

Overall this question was the least popular of the three optional questions and also answered less well compared to questions four and five.

In part (a), common errors included not calculating the income inflow and outflow correctly, not knowing how to treat the service charges correctly and in a few cases not treating the impact of the swap correctly. Very few answers attempted to estimate the sensitivity of the subordinated certificates to a fall in returns generated by the pool. But most of the answers in part (a) estimated the cash flows related to the A-rated and B-rated bonds correctly.

In part (b) few answers were able to explain the purpose of credit enhancement, which was basically to convert a high risk cash flow into a varying range of tranches of different risks. Most answers explained the role of credit rating agencies in credit enhancement, but few answers considered the impact of tranching and of over-collateralisation (in this case only 95% of the pool value was used as collateral) as alternative methods of credit enhancement.

In part (c) most answers discussed default and collateral risk quite well but fewer answers considered timing and liquidity risk, and correlation risk.

It is surprising that this question was not more popular given the recent financial crisis and its ramifications which continue to affect most of the economies in the world. The P4 syllabus highlights the need for candidates to be familiar with emerging issues in finance and their impact on the financial management activity in companies. It is advisable for candidates to be knowledgeable about the continuing development of finance. Securitisation is an alternative to the more traditional methods of raising finance and it is likely that different forms of securities will continue to be developed.

**Question Four**

This question was the most popular and probably the best answered of all the questions on the paper with many candidates gaining a high proportion of the marks for their answers. It asked candidates to consider the issues that need to be considered when disposing a part of a company.

Candidates considered a range of relevant issues when answering this question, which were broader than the model answer. The marking scheme allowed the examiner and markers to give credit for alternative but relevant points and therefore the variety of answers did not present any difficulties when awarding marks.

Answers gaining fewer marks did not give a large enough variety of issues that needed to be considered in a disposal. Overall though, many answers gained over half marks and some cases over 70% of the total marks for this question.

**Question Five**

In part (a), this question asked candidates to convert a number of amounts owing to and owed by group and non-group companies in different currencies into a common currency (Euro), and then to undertake netting to minimise the currency transfers between the group and non-group companies. On the whole, part (a) was done well with the candidates adopting a number of different ways to achieve the netting required. Common errors for this part included not netting to the correct base currency, and in a minority of answers using the incorrect conversion rate for netting purposes.



Part (b) asked candidates to discuss the advantages and disadvantages of netting for both group and non-group companies. This part was also done reasonably well with most answers discussing a variety of advantages and disadvantages. Sometimes the answers did not explain the point in sufficient depth and sometimes the same point was repeated. In these circumstances answers gained fewer marks.