## Examiner's report

# P4 Advanced Financial Management June 2018



#### **General Comments**

This exam paper consisted of two sections. Section A contained a compulsory 50-mark question. Section B contained three 25-mark questions, from which candidates had to answer two questions. All questions in the examination consisted of both computational and discursive elements.

This is an advanced level optional paper which builds upon the knowledge and skills examined in F9, Financial Management. At this advanced stage, candidates are required to demonstrate their ability to read and quickly digest comprehensive and detailed questions, apply relevant knowledge and skills, and exercise professional judgement expected of a senior financial adviser, in recommending or making financial management decisions that are likely to affect the entire business organisation. For example, Section A normally sets out a complex business scenario in the form of a case study which requires candidates to demonstrate their ability to understand, deal with and communicate strategic issues that a senior financial manager or advisor may be expected to encounter in his or her career. As an illustration, the Section A question one in this exam paper, tested a candidate's ability to provide sound advice supported by relevant computations, in a coherent report, on investment projects considering both standard present value techniques and also real options, the discussion considered the discount rate used, assumptions made and which projects to proceed with. It required candidates to discuss and make judgements on a variety of choices.

Like a senior financial person at work, a candidate is expected to read a business brief in the form of an exam question and decide on a relevant methodical approach to meeting the brief's objectives, making notes where necessary. Senior management work under tight deadlines, and hence prioritising and good time management is crucial to performing well, under examination conditions.

Business reports and proposals are expected to be succinct, professionally written, and easy to read with clear headings and conclusions. A candidate, who does not demonstrate this approach, will fail to earn the full professional marks that are available in question one.

The hallmark of a good piece of written work is evidenced by a reasoned structure, narrative discussions that are relevant and in sufficient detail, and clear and easy to follow numerical workings supported where appropriate by brief notes. This examination also included a significant amount of technical content dispersed across the questions, to test a candidate's ability to perform them. Invariably, a candidate will be expected to assess the findings of the technical computations within the context of the question's scenario.

The main reasons for candidates performing less well were:

i) Lack of detailed knowledge of parts of the syllabus areas and leaving whole or parts of questions unanswered because of this. This was particularly relevant to this examination, where many candidates were not able to answer some questions comprehensively because they had not studied that area of the syllabus and study guide in sufficient depth;



- ii) Poor time management. This was often self-inflicted in that some candidates spent too much time in carrying out relatively simple calculation tasks, and sometimes discussing one area repeatedly without considering a range of relevant areas;
- iii) Not structuring question one, part (b) in a report format and thereby not gaining all the professional marks;
- iv) Presenting the discursive answers in brief bullet-point format, often in incomplete sentences, as statements and not as discussion-based, analytical, or evaluative, narrative;
- v) Focussing more on either the numerical parts or the discursive parts of a question, instead of a balanced approach. In order to pass, a balance between undertaking calculations and providing discursive narrative is necessary. The exam paper is designed such that both are required equally;
- vi) Not reading the requirements of the question and therefore answering the question incorrectly. It is also important to note that the answers provided should be relevant to the question asked. General answers which do not relate directly to the scenario are unlikely to attract many marks; vii) Presenting answers in brief bullet points, without adequate discussion or evaluation;
- viii) Not using exam time wisely to structure answers well and to select from the three optional questions in Section B of the exam.
- ix) Failing to take account of the marks available when answering written questions, thereby providing detailed answers for relatively minor part, but very brief answers for a question where more marks are available.

### **Specific Comments**

#### **Question One**

This was the 50-mark compulsory question where the case study scenario focused on assessing a number of projects and providing detailed calculations for one project in particular. This project was divided into two phases, where phase two only had to be undertaken in a few years' time and the company had the option not to proceed with that phase. This was very much like a follow-on real option. Candidates were asked to undertake present value computations, as well as use real options, to assess the value of the project. The question also considered the consequences of employing soft capital rationing and possible sources of additional finance.

Part (a) of the question asked candidates to discuss how real options would add to conventional net present value (NPV), with reference to the project. Whilst most candidates could explain what real options were, fewer discussed how real options could add to NPV. Only a minority of candidates could do this with reference to intrinsic and time value.

Part (b) of question one asked candidates to estimate the value of a project using conventional NPV and then real options. It then asked candidates to consider the discount rate used to finance phase two, assumptions made when using real options, and a wider discussion of which projects to accept and reject.



The conventional NPV computation of phase one of the project involving inflation, tax, working capital and estimating the relevant cost of capital based on Modigliani & Miller Proposition II was done well, although fewer candidates were able to calculate the relevant cost of capital. The conventional NPV of the phase two was done less well, with many candidates facing difficulty around different discount rates and discounting back to the present value.

The real options calculations were done well, on the whole, however, errors were often made with asset value and time.

A number of candidates did not add the results of phase one and phase two together, to get an overall value for the project.

Assumptions were discussed quite well, although some responses focussed more on general NPV, but not on real options, which was what was asked. The discussion on the use of the appropriate discount rate for the financing of phase two was often very brief and lacked depth. It seems that candidates can perform the techniques of NPV, but understand the discount rate less well. Reasonable marks were earned by many candidates on assessing which projects to undertake, but fewer got the higher marks available for contextualising their discussion in relation to real

Part (c) asked candidates to discuss the consequences of employing soft capital rationing. This area was done well by candidates who understood the difference between soft and hard capital rationing, but not by candidates who did not know the difference. This part also asked candidates to advise where extra finance could be obtained from, to overcome soft capital rationing. Here some candidates provide lists of possible sources, but did not offer considered advice.

In terms of professional marks, some candidates did not provide a reasonable structure in their answer, nor put the answer to part (b) in a report format. These marks are relatively easy to obtain and a well-structured response would provide candidates with a useful framework within which to provide a response. Such an approach will result in a much higher chance of success in the examination. Nevertheless, many candidates' answers were good and they earned the majority of the professional marks.

#### **Question Two**

options.

This was a 25-mark optional question which asked candidates to discuss a potential acquisition, and to value the target company using free cash flows. Asset based and price-earnings valuation methods were discussed as possible alternatives.

In part (a) candidates were asked to discuss the potential advantages and possible problems with the acquisition of a target company, based on the information provided in the narrative of the question. The majority of candidates did this part well. It was pleasing that many responses referred to the advantages and problems based on the information provided in the question and related the discussion directly to the scenario.

Part (b) asked candidates to undertake a relatively simple valuation based on free cash flows, based on a percentage growth and based on zero growth, and then to discuss the results and assumptions made. It was surprising that many candidates made errors in their calculations and as a result this part was not done as well as expected. Many candidates could not re-gear the asset beta, and then either taxed all flows (post-tax cash and pre-tax synergy benefits) or did not tax any flows. Some candidates did not use the correct figure for the post-initial period cash flows to either



grow or leave stable in perpetuity. Many used the net present value and not the latest cash flow figure. In many cases, the discussion of the results and the assumptions tended to be limited as well.

Part (c) asked candidates to discuss using alternative valuation methods: asset and P/E ratio. Responses here were mixed, and the better responses recognised that, for example, the acquirer and target were not listed and therefore obtaining a P/E ratio could be problematic. However, many responses were general, and lacked discursive depth.

#### **Question Three**

This was a 25-mark optional question which asked candidates to determine the dividend capacity of a company, and the level of dividends required from a subsidiary company, to meet the company's proposed dividend policy. Candidates were then asked to discuss the impact of the additional dividend payable by the subsidiary company.

In part (a) candidates were asked to calculate the dividend capacity of a company (based on free cash to equity method), and how much the subsidiary company would need to provide given an increase in the number of shares due to a rights issue. Only a minority of responses provided the correct answer for the initial dividend capacity. Common errors included not deducting interest before calculating the tax liability, errors in adding profit from sale of assets, cash received from sale of assets, investment in new assets and the remittances from the subsidiary company. Many responses were poorly presented and lacked evidence of a coherent approach.

Because of this, very few candidates were able to calculate how much additional profits the subsidiary company would need to provide, in part (a)(ii).

Part (b) asked candidates to discuss the consequences of the decision to increase dividends remitted back from the subsidiary company to the parent company. The benefits and problems of the decision were largely discussed well, but agency problems were discussed less well. Many candidates failed to recognise that companies face agency issues beyond just between shareholders and company's directors. Agency issues can also occur, for example, between debt holders and the company, or in this case, between the directorate of a subsidiary company and the directorate of the parent company.

#### **Question Four**

This was a 25-mark optional question and asked candidates to consider the impact of an interest hedge using futures and options contracts. And it also considered specific issues around using derivatives to undertake hedging activity.

In part (a) candidates were asked to calculate and discuss the consequences of undertaking interest rate hedging using futures and options. This part was done very well, by candidates who understood how to approach risk management/hedging questions, whether currencies or interest rates, and were able to apply good technique to a relatively straightforward question. However, this part was not done well by candidates who had not learnt risk management/hedging in sufficient depth and therefore could not apply their knowledge and understanding to the question scenario. In the main, the discussion provided was satisfactory. But candidates need to recognise that at the inception of a hedge it is not known whether the markets will move up or down. That is the point of undertaking the hedge, to ensure that the company is protected against unknown movements.



Therefore, the decision cannot be to use one type of instrument if markets rise and another type if markets fall. This statement was made by some candidates, but no credit could be given for that. Part (b) asked candidates to explain how uncertainty in option pricing is measured and discuss influences on the level of uncertainty. Part (c) asked candidates to explain a swaption and demonstrate how it could work. Both these topics are specific to the syllabus part on risk management. Unfortunately, few candidates were able to give adequate responses here because of a lack of knowledge of these areas. It is important that candidates study and prepare for the entire syllabus and all the topic areas.

#### Conclusion

To sum up, candidates need to be able to apply their understanding and knowledge of advanced financial skills to pass the P4 exam. Sustained study, over a long period of time, is an essential pre-requisite for success. In this paper, successful candidates demonstrated this clearly, while candidates, who did not achieve a pass, did not demonstrate sufficient understanding and knowledge of all the topics in the Advanced Financial Management syllabus. In addition to this, well-presented and well-structured answers, directly addressing the requirements of the question, and using time to read the question and plan for it appropriately, are essential requirements for success.