Examiner's report

P4 Advanced Financial Management March 2018



Introduction

Many candidates performed well in this exam, particularly on some of the numerical parts. It was noticeable that Question 3 was by some distance the least popular optional question and also the question that was done least well. This suggested that many candidates may have chosen wisely in not attempting this question. However, future candidates and tutors are reminded that from September 2018, all questions in this exam will be compulsory and it will not be possible to avoid questions that appear unappealing.

General Comments

The exam was in two sections. Section A consisted of a compulsory question for 50 marks. Section B consisted of three questions of 25 marks each, from which candidates had to answer two questions. All of the questions in the exam consisted of a mixture of computational and discursive elements to varying degrees.

This is an advanced level exam, which builds upon the knowledge and skills examined in F9, Financial Management. At this advanced stage candidates will be required to digest data quickly, and apply relevant knowledge and skills, using a relevant methodical approach. Candidates are expected to use the professional judgement expected of a senior manager in recommending financial management decisions that will have a significant impact upon the whole organisation. Section A particularly will include a complex business scenario, where candidates are expected to understand, deal with and communicate strategic issues that a senior financial manager may encounter.

This exam also includes a significant number of technical computations to test candidates' ability to perform them. Generally, candidates need to assess the findings of technical computations in the context of the question scenario.

Senior managers work under tight deadlines. To reflect this, prioritising and managing time is crucial to performing well in examination conditions.

Professional skills are relevant across the whole Professional level. This exam specifically rewards professional skills in Question One, but candidates should realise that they underpin good performance throughout the exam. Core skills include appreciating why information in scenarios will impact upon the decisions being taken, understanding the viewpoints of those interested in the decisions, and communicating recommendations concisely and clearly.

The main reasons for candidates performing less well in this exam were as follows:

- (i) Poor time management. Perhaps time management was less of an issue in this exam than other recent sittings. However, there were still too many instances of question parts being missed out and others appearing to be answered in a rush. An essential part of preparation is question practice, both of individual questions and full practice exams, under the time limits that apply in this exam.
- (ii) Candidates' performance in a number of the written parts of this exam was unsatisfactory. Candidates' preparation for this exam must include proper consideration of its written elements and question practice of written parts is important. Candidates must expect to provide analysis



- that focuses on the businesses described in the scenario and views decisions from the viewpoints of management and finance providers. Questions will sometimes expect explanations containing some detail, and single line bullet point responses will not be sufficient.
- (iii) When answering written parts, some candidates did little more than copy out details in the scenario. Marks are awarded for providing insights about the information. Failing to add anything to scenario detail meant that sometimes candidates wrote a lot down but did not score well.
- (iv) Candidates sometimes limited their marks by failing to respond fully to question requirements or take account of details in question scenarios that established the parameters of the answer. Candidates must read question scenarios carefully and pay particular attention to the wording in question requirements. Again these are skills that question practice will help develop.
- (v) An unsystematic approach to numerical questions. A methodical approach with clear and easy to follow workings was particularly important for a number of the computation questions in this exam. Candidates whose approach was disorganised often missed out stages that would have gained marks and made markers' work more difficult.
- (vi) Question 3 in particular exposed gaps in candidates' knowledge, but answers to other questions also highlighted areas where knowledge was lacking, including areas covered in F9 Financial Management. Candidates are reminded that topics covered in F9 are assumed knowledge for this exam.

Specific Comments

Section A

Question One

This was the 50-mark compulsory question, which focused on the appropriate acquisition strategy for a business in the pharmaceutical industry and the methodology to use to establish a fair value for the target company and the combined business.

Part (a) required a comparison of the viewpoints of two directors and a discussion of possible synergy benefits. Some candidates did little more than repeat the directors' views. Other answers provided further explanation of the directors' opinions, highlighting that unsystematic risk would be reduced, but failed to question them sufficiently. Few candidates pointed out that institutional investors would already be diversified, meaning that they did not need the company to diversify. Answers on synergy benefits were better, but sometimes candidates needed to provide more explanation about the synergies they had identified. It is not sufficient, for example, to just say that economies of scale will arise, some explanation is needed of how they will apply.

Part (b) asked how a combination of real option methodology and net present value could establish a reliable valuation of companies. Answers were generally disappointing, mostly lacking depth, and few answers were related to valuation of pharmaceutical companies. Many candidates scored limited marks through identifying that the value of real options should be added to net present value and giving some examples of real options. However, candidates generally failed to develop their discussion by explaining the limitations of net present value and commenting that real options



valued potential rather than actual flexibility. Very few answers described clearly both the intrinsic and time value elements of real options, with many candidates focusing instead on the mechanics of the Black-Scholes model. Some candidates demonstrated a lack of knowledge of real options, by stating that they could be purchased on the stock exchange or confusing real options with real return.

Part (c) asked for a report that assessed the valuation of the target and combined company and whether overall the acquisition would be beneficial for the acquiring company's shareholders. Part (c) (i) required a calculation of the equity value of the target using free cash flows. This part was answered well, although common mistakes here were including interest in the free tax flow calculation, using the tax figure given in the question rather than calculating tax on profit before interest and tax, and not carrying out the final part of the calculation, to calculate the value of equity.

Part (c) (ii) required a calculation of the equity value of the combined company using free cash flows. Many candidates scored the majority of marks for this part. The most common mistakes were not discounting the cash flows after Year 4 back to Year 0, failing to carry out all the stages of the cost of capital calculation and, once again, not completing the calculation by estimating the value of equity.

Part (c) (iii) asked candidates to calculate whether the acquisition would provide benefits for the acquiring company's shareholders and to discuss the limitations of the free cash flow valuation method used. Some candidates did not provide any calculations for this part, others calculated the synergy benefits and premium payable, but not the benefits accruing to the acquirer's shareholders. Candidates generally discussed enough limitations to score well on this part of the question, although some limited their marks giving insufficient detail. Saying that it is assumed all figures are accurate is not enough by itself to score a mark.

Professional marks in part (c) were awarded for use of a report format, and the structure and presentation of the report. The number of candidates who scored full marks was disappointingly low. Some candidates failed to use a report format. Others did not clearly separate calculations and discussion, or give a proper conclusion.

Part (d) asked about shareholder protection and two possible defences in takeover situations. A number of candidates showed a lack of understanding of the mandatory bid rule and could not define equal treatment specifically, with some saying no more than equal treatment required all shareholders to be treated equally. As far as defences were concerned, candidates overall appeared to know more about the crown jewels defence than they did about poison pills. Many candidates limited their marks by failing to discuss the effectiveness of the defences, which the question specifically required. Consideration of effectiveness should have meant that they considered whether the defences would be popular with the target's shareholders. Some candidates also discussed other possible defences, but scored no marks for these as they were not required by the question.

Section B



Question Two

This was a 25-mark optional question and it was a popular choice.

Part (a) required candidates to undertake an investment appraisal using the adjusted present value technique, where the loan that might be used to finance the investment had significant financing side effects. Most candidates scored reasonable marks on this part. Generally the net present value calculations were done well, although candidates sometimes struggled with the time delays and the treatment of losses in the tax calculation. Some candidates failed to take the realisable value of the investment into account when calculating the balancing charge for the final year. Calculations of the discount rate were mixed, with some candidates incorrectly using the weighted average cost of capital, others stating the correct formula for calculating the ungeared cost of equity but then being unable to use it correctly. Many candidates struggled with the financing adjustments, failing to calculate issue costs on the gross finance amount and failing to take account of the time delay on the tax for both the tax shield and tax relief lost on the subsidised loan benefit.

Part (b) required candidates to discuss an alternative form of loan finance (convertible loan notes) that could be used to fund the investment. This part was often omitted and generally was not well-answered when attempted, highlighting a number of weaknesses in student performance. There was a lack of knowledge with candidates failing to discuss important features of convertible loan finance, such as a company needing to have sufficient money to redeem the notes if necessary. Candidates also failed to respond to the question verb 'Discuss', which generally requires some coverage of both advantages and disadvantages. Few answers said anything about the advantages of the convertible loan notes. Many answers failed to examine the terms from the shareholders' viewpoint, as the question required. Candidates need to consider aspects which will be particularly important to shareholders who are not directors, such as changes in the balance of shareholding if conversion took place and the level of income directors would obtain (here the interest payable was high given that the bonds have conversion rights attached).

Question Three

This was a 25-mark optional question. This was the least popular optional question and many answers were unsatisfactory.

Part (a) (i) required candidates to explain what figures shown in a Black-Scholes option pricing model calculation given in the question scenario represented. A number of candidates scored full marks for this part, but some scored zero marks as they just listed the elements of the Black-Scholes model without linking them to the figures in the scenario.

Part (a) (ii) asked for a comparison of a cash payment with a grant of shares as methods of giving directors bonuses. Information was given to enable candidates to calculate the value of the options, but answers often did not do so. In other answers a calculation of option value was attempted, but no comparison was made with the cash bonus. Few candidates identified that what was important to the directors was not only the level of bonus, but the risks of not achieving the performance targets necessary to generate the bonus.

Part (b) required candidates to explain and demonstrate a delta hedging arrangement. Many



candidates gained limited credit by providing some explanation of the delta hedge. A number of answers again did not attempt the calculation, although the question requirements asked for a demonstration, and many attempts at the calculation were incorrect. The requirements also asked candidates to discuss limitations but very few did so.

Part (c) asked for a definition of gamma and an explanation of what a high gamma figure meant. Many candidates demonstrated a lack of knowledge of gamma by missing this question part out or providing an incorrect definition. Some answers defined gamma correctly, but then did not explain clearly what a high gamma value meant in the context of delta hedging.

Part (d) required candidates to consider whether it would be better to grant the directors put or call options. The answer was clearcut, as granting call options would encourage the directors to take actions to increase the long-term share price, whereas put options would encourage the directors to take actions to make the share price fall. Rather worryingly, some candidates suggested it would be better to grant put options. The clear choice also meant that there was no need to carry out calculations valuing the put option, but nevertheless some candidates did attempt this valuation.

Part (e) asked about how the board could take actions to deal with shareholder dissatisfaction. Marks for this part were generally low. Candidates often either discussed communication with the dissatisfied shareholders or the remuneration arrangements, but not both. The verb evaluate required a questioning approach, which very few candidates adopted. It was important to consider whether any actions the directors could reasonably take would satisfy the shareholders, given that their short-term focus was at odds with the company's strategy and the differing requirements of the powerful institutional shareholders. Candidates also needed to probe whether the proposed options package would be regarded by the shareholders as being too generous to the directors, and what changes could be made to address these concerns, but very few did so.

Question Four

This was a 25-mark optional question and it was a popular choice.

Part (a) required candidates to determine a hedging strategy, having being given the choice of money market hedging and traded futures. A few candidates wasted time by not netting off the amounts owed and owing. Many candidates remembered how to carry out money market hedging, although a number treated the amount to be hedged as if it was a payment, not a receipt. Likewise, a number of candidates scored well on the futures hedging part of the question. A surprisingly common error was that candidates did not say clearly that the company should buy futures – this should have been an easy mark. Some candidates also adjusted the calculation of the number of contracts by the time period of the hedge – this adjustment is made in interest rate futures calculations, not currency futures calculations. There were a number of versions of the basis calculation, although many candidates did calculate basis correctly.

Part (b) (i) required multilateral netting calculations for subsidiaries operating in a number of countries with different currencies. Most candidates used a systematic approach and gained the majority of marks for this part. The main weakness was failing to follow the instructions given in the question scenario. A few candidates did not use the spot mid-rate to translate amounts, as the scenario required. A lot of candidates did not specify how the group companies should settle amounts or suggested settlement arrangements that were not in line with the scenario's requirements.



Part (b) (ii) asked for a discussion of the advantages of multilateral netting. Candidates tended to focus on lower transaction costs and hedging implications, with few considering the availability of more advantageous exchange rates and central treasury administration being easier. Some candidates focused on the words central treasury function and produced the lists they had learnt of the advantages and disadvantages of treasury centralisation, which was not what the question required.

Part (c) asked candidates to consider use of market-based transfer pricing as a means of resolving disputes and providing better performance measurement within a group. Candidates scored some marks through looking at how market price could be an acceptable measure to all parties. However candidates generally failed to adopt a questioning approach to using market prices, which meant few scored high marks here. They did not discuss how difficult it would be determine market price, ask whether there would need to be adjustment to allow for internal costs of transfer being lower or consider other problems of persuading divisions to buy internally. Few answers made any attempt to discuss performance measurement implications, an aspect of transfer pricing that is important both in P4 and also in P5 Advanced Performance Management.

Conclusion

To sum up, candidates need to spend enough time studying to acquire sufficient knowledge of all areas of the syllabus and answer plenty of exam-standard questions to develop their application skills. Candidates must be able to identify what is important in scenarios, respond fully to requirements, appreciate what is important to businesses and financial stakeholders, and produce answers that are well-presented and well-structured in both written and numerical elements.