



# Examiner's report

## F9 Financial Management

### June 2017

#### General comments

The F9 Financial Management exam is offered in both computer-based (CBE) and paper-based (PBE) formats. The structure is the same in both formats, but the CBE exam delivery model means that candidates do not all receive the same set of questions. In this report, the examining team share observations from the marking process, highlight strengths and weaknesses in candidates' performance, and offer constructive advice for future candidates.

- Section A objective test questions – we focus on two specific questions that caused difficulty in this sitting of the exam
- Section B case-based objective test case questions – here we look at the key challenge areas for this section in the exam
- Section C constructed response questions - here we provide commentary around some of the main themes that have affected candidates' performance in this section of the exam, identifying common knowledge gaps and offering guidance on where exam technique could be improved, including in the use of the CBE functionality in answering these questions.

Performance in the June 2017 examination diet was good and there were some excellent individual performances. Congratulations to those candidates who were successful in this examination diet. If you were not successful, I hope that you will study this report carefully as part of your preparation for your next attempt.

Overall, candidates were well prepared in some areas of the syllabus, but less well-prepared in others, and well-prepared in techniques such as calculating NPV, while less well-prepared in discussing knowledge and explaining concepts. Candidates must study the whole of the syllabus to prepare themselves adequately for the examination.

#### Section A

The objective test questions in Section A aim for a broad coverage of the F9 syllabus, hence all areas of the syllabus must be studied. Candidates preparing for the F9 examination are therefore advised to work through as many practice objective test questions as possible, reviewing carefully how correct answers were derived in any areas where they have uncertainty.

The following questions are reviewed with the aim of giving future candidates an indication of the types of questions asked and guidance on dealing with such exam questions.

Example 1 is numerical and illustrates the importance of reading the full question and understanding the difference between cum interest and ex interest.

Example 2 is a question requiring knowledge of financial management principles.

#### **Example 1**

Black Co has in issue 5% irredeemable loan notes, nominal value of \$100 per loan note, on which interest is shortly to be paid. Black Co has a before-tax cost of debt of 10% and corporation tax is 30%.

**What is the current market value of one loan note?**

- A \$55
- B \$50
- C \$76

D \$40

The correct response is A, as follows:

**A**

A 5% irredeemable loan note pays interest of  $\$100 \times 5\% = \$5$  annually

Ex interest market value =  $\$5 / 0.1 = \$50$

Therefore the cum interest market value is:  $\$50 + \$5 = \$55$

The incorrect responses are based on an imperfect understanding of how to calculate market values of debt and the inclusion of corporation tax.

**B**

Here, the dividend about to be paid has not been included and the ex interest value (above) has been given.

**C**

Here, corporation tax has incorrectly been deducted from the cost of debt.

$\$5 / (0.1 \times 0.7) = \$71$

$\$71 + \$5 = \$76$

**D**

Here corporation tax has incorrectly been deducted from the interest payment.

$(\$5 \times 0.7) / 0.1 = \$35$ .

$\$35 + \$5 = \$40$ .

**Example 2**

**Which of the following statements relating to money markets is/are true?**

- (1) Lending is for periods of greater than one year
- (2) Lending is securitised
- (3) Borrowers are mainly small companies

**A** 1 and 2

**B** 2 and 3

**C** 1 and 3

**D** 2 only

The correct response is D.

Statement (1) is incorrect as lending is for less than one year.

Statement (2) is correct as money market lending is securitised.

Statement (3) is incorrect as money markets are used by large companies.

Therefore only statement (2) is correct and the answer is D.

### **Section B**

Similarly to Section A, questions can come from any area of the syllabus.

## **General comments**

Candidates should read the question carefully and follow the instructions on how to answer the question, for example if a question asks the candidate to select two correct statements, then marks can only be awarded if two statements have been selected. There is no partial marking, so an answer which only selects one statement will be awarded no marks.

In addition, when answering a number entry question, candidates must ensure they are entering their answer in the correct format as stated in the requirement.

Issues that were noted under specific syllabus areas are as set out below.

## **Investment appraisal**

There were common errors made by some candidates on numerical investment appraisal questions. For example, some candidates did not identify correctly relevant cash flows for an investment project, or made mistakes with respect to the timing of future cash flows, or did not use the appropriate discount rate.

Candidates must read the question carefully to identify the correct timing of all project cash flows. Some candidates were not able to demonstrate appropriate methods for dealing with both risk and uncertainty.

## **Business valuation**

One common error was not identifying correctly the required rate of return when valuing shares.

Another error was not including the value of a dividend about to be paid if the share was cum dividend.

Price earnings ratio questions caused difficulties for some candidates, who did not know under what circumstances it is appropriate to adjust a price earnings ratio or who did not use sustainable future earnings in price earnings ratio valuations.

Errors were also made in calculating the market value of preference shares, for example by treating preference dividends as tax deductible.

Similarly to the example in Section A, there was some misunderstanding in this section about how the market value of debt should be calculated.

One further area which caused difficulty was knowing the drawbacks of the valuation models.

## **Risk management**

It was common for candidates to make errors through lacking understanding of the features of risk management derivatives. This was from both a foreign exchange and an interest rate perspective.

There were also a significant number of candidates who did not appear to understand the features of different methods of foreign exchange hedging.

There was one further area relating to interest rates which candidates struggled with, which was understanding of gap exposure, particularly what causes the types of gap and also the causes of basis risk.

## Financial management environment

A misunderstanding how government economic policy interacts with planning and decision-making in business led to errors for this part of the syllabus.

### Section C

Candidates in general performed better on calculation-based questions than on discussion questions. There were many reasonable attempts at most parts of questions, but there were also some scripts with parts of questions not attempted.

It is essential that candidates address the requirement of a question. Requirements must be read carefully and answered directly. Candidates should therefore avoid the pitfall of trying to answer the question they would have preferred and focus on the requirement before them. Candidates should also check back to the requirement in front of them on a regular basis, to make sure their answer continues to address it. If the requirement is to calculate, then carefully labelled calculations should be offered. If the requirement is to calculate and comment, do not forget to make a comment based on the outcome of your calculations. If asked to discuss, do not simply list a few points, but discuss these points in answering the question requirement.

Candidates must also exercise good time management in the examination. If four marks are offered for discussing two terms, assuming two marks are offered for each term is reasonable.

Candidates must use the information provided in a question. If the question specifies a 360-day year, it is an error to use a 365-day year. If a question specifies a 23% corporation tax rate, it is an error to use a 30% tax rate. If a question says that corporation tax is paid one year in arrears, it is an error to make tax liabilities payable in the year they arise. Remember, unforced errors mean precious marks are not earned and could be the difference between passing and failing the examination.

Candidates were presented with questions drawn mainly from the areas of:

- Management of inventories, accounts receivable, accounts payable and cash
- Determining working capital funding strategies
- Investment appraisal techniques
- Allowing for inflation and taxation in DCF
- Specific investment decisions
- Estimating the cost of capital
- Sources of finance and their relative costs
- Capital structure theories and practical considerations

### **Management of inventories, accounts receivable, accounts payable and cash**

The detailed outcomes in this part of the F9 syllabus include an understanding of the cash operating cycle: an understanding of, and an ability to apply, relevant accounting ratios; and the ability to discuss, apply and evaluate the use of relevant techniques in managing accounts receivable.

While candidates tend usually to perform well on calculation-based questions, a significant number of candidates struggled with a requirement to calculate a cash operating cycle, which is the sum of inventory days and accounts receivable days, less accounts payable days, i.e. it is measured in days or weeks. The cash operating cycle should not be confused with net working capital, which is inventory plus accounts receivable less accounts payable and hence is a monetary value.

Candidates should thoroughly understand how to explain and apply relevant working capital ratios, since miscalculated ratios can lose precious marks. This detailed outcome was assessed by a question requiring candidates to comment on a company's working capital performance relative to similar companies. Better answers established and commented on links between the two sets of working capital ratios, although few answers addressed the profitability and liquidity objectives of working capital management.

In terms of calculations in working capital management, candidates should be able to evaluate an early settlement discount and performance on a question requiring this in relation to trade receivables was usually good. Many answers adopted a cost/benefit approach and remembered to include the decrease in finance cost derived from a reduction in trade receivables. Depending on the situation, it is not necessarily appropriate to answer the question by comparing the annual equivalent percentage cost of the discount with the cost of short-term finance.

#### **Determining working capital funding strategies**

The F9 study guide sets out the detailed outcomes for this topic area and better answers to a question requiring critical discussion of this topic area therefore referred to permanent and fluctuating current assets: the relative cost and risk of short-term and long-term finance; the matching principle; aggressive, conservative and matching funding policies; and relevant management attitudes. Answers that discussed the various sources of business finance available to a company were therefore not addressing the question requirement.

#### **Investment appraisal techniques**

Candidates usually do well on investment appraisal questions requiring NPV calculations and that continued to be true in this examination diet, with many candidates gaining good marks here. Where errors were found, they were errors mentioned in previous reports, for example:

- incorrectly placing initial investment at year 1 rather than year 0
- inflating relevant cash flows incorrectly
- deflating instead of inflating
- not placing tax-related cash flows one year in arrears
- omitting the tax-related cash flows in year 5
- adding tax-allowable depreciation benefits before calculating tax liabilities
- discounting nominal cash flows with a calculated real discount rate
- not justifying financial acceptability comments by referring to the NPV decision rule

An acceptable approach to calculating tax liability is subtracting tax-allowable depreciation (TAD) from taxable cash flow to give taxable profit, then adding back TAD as a non-cash item. Some candidates failed to add back TAD, which meant they were discounting profit instead of cash.

#### **Allowing for inflation and taxation in DCF**

While NPV calculations assess candidates' ability to apply real-terms and nominal-terms approaches to investment appraisal, the ability to discuss these two approaches was also examined. Answers showed that understanding in this area was sometimes not strong.

Nominal cash flows, found by inflating by specific rates of inflation, can be deflated by the general rate of inflation to give real cash flows. A nominal cost of capital can be deflated by the general rate of inflation to give a real cost of capital. The NPV found by discounting real cash flows by a real cost of capital will then be the same

as the NPV found by discounting nominal cash flows by a nominal cost of capital. Real cash flows can therefore be found by inflating by specific rates of inflation and then deflating by the general rate of inflation

The real-terms approach can only be said to 'ignore inflation' if only the general rate of inflation is on offer, as there is no need to inflate and then deflate by the same inflation rate to find real cash flows.

### **Specific investment decisions**

This topic area of the F9 syllabus includes capital rationing and answers to a discussion question on capital rationing in the context of investment appraisal were of variable quality. Better answers discussed how capital rationing led to a sub-optimal investment schedule, since a company was not investing in all investment projects with a positive NPV: how capital rationing could be hard or soft; and how to determine the optimum investment schedule for divisible and non-divisible investment projects. Weaker answers lost marks by failing to address the question requirement, for example by discussing the range of investment appraisal methods available to a company (NPV, IRR, ROCE, payback), or by discussing sources of business finance that might help a company overcome capital rationing.

### **Estimating the cost of capital**

A question requiring candidates to calculate the market value weighted average cost of capital (WACC) of a company saw many candidates gaining good marks. Errors that led to candidates losing marks have been seen in previous examination diets, as follows:

- errors in calculating a cost of equity using the dividend growth model
- errors in calculating an after-tax cost of debt of loan notes using linear interpolation
- using nominal value as the purchase price of loan notes rather than market value
- including a bank loan cost of debt on a before-tax rather than an after-tax basis
- omitting a large bank loan from a WACC calculation
- including reserves in the market value of equity
- using book values instead of market values as weightings
- making debt weightings after tax

### **Sources of finance and their relative costs**

A detailed outcome in this topic area of the F9 syllabus refers to assessing the impact of sources of finance on financial position, financial risk and shareholder wealth, and in the past candidates have tended to find questions in this area challenging. This continued to be the case with a question requiring candidates to evaluate whether a business expansion should be financed with debt or equity.

The key to answering such a question is to consider the effect of each financing choice on the earnings per share of a company and, via the price/earnings ratio, on a company's share price. Debt finance will not affect the number of shares, but will increase the finance cost, gearing and financial risk. Equity finance via a rights issue will increase the number of shares, but will not increase the finance cost, and will decrease gearing and financial risk. For debt finance, the effect on shareholder wealth can be found by comparing the revised share price with the current share price: for equity finance via a rights issue, by comparing the revised share price with the theoretical ex rights share price.

### Capital structure theories and practical considerations

Responding to a question requiring a critical discussion of this topic area, better answers linked to detailed outcomes from the F9 study guide and therefore discussed the traditional view, the views of Modigliani and Miller, the market imperfections view, and the relevance of pecking order theory to financing choices. Some answers lacked criticality because they offered, essentially, a verbal description of lines on accompanying diagrams, which were in some cases badly drawn, with unlabelled axes and unlabelled lines. Candidates should note that diagrams are not a substitute for critical discussion, although they can support a critical discussion.

Weaker answers that failed to address the question requirement discussed topics such as the range of financing choices open to a company, using WACC as a discount rate in investment appraisal, and the relative usefulness of WACC and the capital asset pricing model in accommodating risk in investment appraisal.

### Word Processing and Spreadsheet Technique

Care must be taken in entering formulae in the spreadsheet. Markers can see the formula in a cell and hence apply the own-figure rule where appropriate. However, the own-figure rule cannot be applied to calculated figures placed in spreadsheet cells (number entry) with no supporting calculations. Remember to include all your workings in your CBE answers and remember also to label all your entries in a spreadsheet: markers can struggle to understand calculated figures if candidates offer no guidance as to their meaning.

### Guidance and Learning Support resources to help you succeed in your exam

There are many resources available to candidates to help with the F9 exam. Many of the common themes discussed in this report regarding exam technique and ways to improve are comments that are commonly made across sittings. Previous examiner's reports can be found [here](#) and will give good, consistent guidance in what the examining team is looking for from well-prepared candidates on F7.

One of the keys to success in the F9 exam is question practice, attempting questions and reviewing the answer to see any areas you may have missed. This is particularly relevant on the analysis questions. Often on this question candidates feel comfortable, but reviewing the answers can show the depth of discussion that is being sought here. We strongly recommend that you use an up to date question and answer bank from one of our [Approved Content Providers](#) but if this is not possible then work through the most recent past exams on the ACCA website. However, please note if you are using the past exams that these are **not** updated for syllabus changes or changes to the exam format and so should be used with caution – so check the latest [syllabus and study guide](#) for changes.

Some of the more challenging areas of the F9 syllabus have specific articles describing them in more depth in the [technical articles](#) section and these should provide greater understanding. The [exam technique](#) section also provides guidance for approaching the analysis question, and further guidance for resit students.